



Habitat Management Plan
for
Anchor Point Cowlitz River Dredged Material Disposal Site
Kelso, Washington
Revised October 16, 2020

This document shall serve as the Habitat Management Plan for the Cowlitz River Dredged Material Disposal Site on Anchor Point as part of the Shoreline Substantial Development Permit renewal. Project activities have been ongoing since approximately 1980 and include placement and dewatering of dredged material removed from the Cowlitz and Columbia Rivers by the U.S. Army Corps of Engineers (Corps), placement and removal of temporary outfall structures below the ordinary high water mark (OHWM) and in the riparian habitat area of Carrolls Channel (a side channel of the Columbia River), and upland sand mining of dredged material. The approximately 300-acre industrial zoned site is located within Sections 11, 12, 13, and 14, Township 7N, Range 2W, W.M., in the city of Kelso, Cowlitz County, Washington and includes Cowlitz County Tax Parcels 24100 and 24393 (Sheet 1). The property can be accessed from a gravel road off of Old Pacific Highway 99, just north of Rose Valley Road in Kelso. ELS biologists conducted a site visit on March 20, 2020 to re-assess site conditions in preparation for this habitat assessment. Site conditions were also evaluated in 2016 as a component of another project that included the dredge disposal site within its study area (Sheets 1 through 4).

The above project activities have been occurring on the property since approximately 1980 and the Corps maintains permits to dredge 0.5 to 2.2 million cubic yards of sediment annually from the mouth of the Cowlitz River. Dredged material will be placed hydraulically and then dewatered. Suspended material is removed from discharge through infiltration and settlement, and clean water is returned to the river through a weir and outfall system. Following dewatering, the applicant contracts with a sand and gravel company, who holds a Department of Natural Resources (DNR) mining permit, to remove the dewatered material for sale. The proposed short-term discharge of clean water will not alter or degrade the bed, banks, or habitat in the river due to the use of best management practices. The proposed installation, use, and removal of a temporary outfall from existing permanent weirs will not cause adverse effects to endangered, threatened, or sensitive species in or near the river. No impacts to trees or other vegetation are anticipated in the riparian area and the temporary outfalls will not inhibit use of the riparian corridor by wildlife.

The *City of Kelso, Washington Shoreline Master Program (SMP 2016) Appendix C.3.5* states that a habitat management plan shall be required if a regulated activity is within two hundred fifty feet of a Classification 1 habitat area or identified within one thousand feet of a point location (nests, dens, etc.). *SMP Appendix C.5* lists the required information for habitat management plans. Items A through H are listed below in italics followed by a discussion demonstrating compliance with code in italics:

At a minimum, the habitat management plan shall typically contain the following information. Technical justification shall be provided where the qualified expert does not deem any information applicable.

- A. A description of state or federally designated endangered, threatened or sensitive fish or wildlife species, or species of local importance, onsite or adjacent to the subject property within a distance typical of the normal range of the species.

Table 1 below shows state and federally listed species, priority habitats, and habitats/species of local importance that are mapped on or near the site. The list was determined through a reconnaissance of habitat onsite, review of current and historic aerial photographs, and an assessment of species listing websites prepared by National Marine Fisheries Service (NMFS 2020), U.S. Fish and Wildlife Service (USFWS 2020), Washington Department of Fish and Wildlife (WDFW 2020), and Washington Department of Natural Resources (DNR 2020).

Table 1. Federal and State Listed Species, Priority Habitats, and Habitats/species of Local Importance Present on or Near the Site

Species/Priority Habitat/PHS Listing ¹	State Status	Federal Status	Critical Habitat In Vicinity?
<i>Fish</i>			
Chinook Salmon (<i>Onchorhynchus tshawytscha</i>)			
Lower Columbia River Chinook ESU ²	Candidate	Threatened	Yes
Upper Willamette River Chinook ESU	Candidate	Threatened	Yes
Upper Columbia River Spring-run Chinook ESU	Candidate	Endangered	Yes
Snake River Spring-run Chinook ESU	Candidate	Threatened	Yes
Snake River Fall-run Chinook ESU	Candidate	Threatened	Yes
Chum Salmon (<i>Onchorhynchus keta</i>)			
Columbia River Chum Salmon ESU	Candidate	Threatened	Yes
Coho Salmon (<i>Onchorhynchus kisutch</i>)			
Lower Columbia River Coho Salmon ESU	Candidate	Threatened	Yes
Pink Salmon Odd Year (<i>Onchorhynchus gorbuscha</i>)	PHS Listed	None	No
Sockeye Salmon (<i>Onchorhynchus nerka</i>)			
Snake River Sockeye DPS ³	Candidate	Endangered	No
Steelhead (<i>Onchorhynchus mykiss</i>)			
Lower Columbia River Steelhead DPS	Threatened	Threatened	Yes
Upper Willamette River Steelhead DPS	Threatened	Threatened	Yes
Middle Columbia River Steelhead DPS	Threatened	Threatened	Yes
Upper Columbia River Steelhead DPS	Threatened	Threatened	Yes
Snake River Basin Steelhead DPS	Threatened	Endangered	Yes
North American Green Sturgeon Southern DPS (<i>Acipenser medirostris</i>)			
	None	Threatened	No
Eulachon (Columbia River Smelt) Southern DPS (<i>Thaleichthys pacificus</i>)			
	Candidate	Threatened	No

Species/Priority Habitat/PHS Listing ¹	State Status	Federal Status	Critical Habitat In Vicinity?
Bull Trout – Columbia River DPS (<i>Salvelinus confluentus</i>)	Candidate	Threatened	No
River Lamprey (<i>Lampetra ayresi</i>)	Candidate	Candidate	No
<i>Birds</i>			
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Delisted	Species of Concern	No
Northern Goshawk (<i>Accipiter gentilis</i>)	Candidate	Species of Concern	No
Pileated Woodpecker (<i>Dryocopus pileatus</i>)	Candidate	None	No
Purple Martin (<i>Progne subis</i>)	Candidate	None	No
Slender-billed, White-breasted Nuthatch (<i>Sitta carolinensis</i>)	Candidate	Species of Concern	No
Streaked Horned Lark (<i>Eremophila alpestris strigata</i>)	Endangered	Threatened	No
Vaux's Swift (<i>Chaetura vauxi</i>)	Candidate	None	No
Western Grebe (<i>Aechmophorus occidentalis</i>)	Candidate	None	No
Yellow-billed Cuckoo – Western DPS² (<i>Coccyzus americanus</i>)	Endangered	Threatened	No
<i>Mammals</i>			
Townsend's Big-Eared Bat (<i>Corynorhinus townsendii</i>)	Candidate	Species of Concern	No
<i>Plants</i>			
Soft-leaved Willow (<i>Salix sessilifolia</i>)	Sensitive	None	No
<i>Priority Habitats/Habitats of Local Importance</i>			
Freshwater Wetlands			
Instream			
Riparian			
California Sea Lion (<i>Zalophus californicus</i>)			
Haul-out Area			
Waterfowl Concentrations			
¹ Washington State Priority Habitats and Species website listing ² Evolutionary significant unit ³ Distinct population segment.			

B. A description of the critical wildlife habitat for the identified species known or expected to be located onsite or immediately adjacent to the subject property.

The property is bordered by Carrolls Channel, a side channel of the Columbia River, to the west, by the Cowlitz River mouth to the north, and to the east and south by riparian lowlands, with the Burlington Northern Santa Fe (BNSF) Railroad and Interstate 5 (I-5) extending generally north to south just east of the project site. A Bonneville Power Association (BPA) powerline corridor extends from the northwest to the southeast through the eastern portion of the property. The interior of the property consists of sandy dredge spoils and currently operates as a sand quarry. The

property is primarily vacant aside from one structure; a weigh station in current use located in the southeast corner of Parcel 24100. A sand and/or gravel access road extends around the perimeter of the sand quarry area that also functions to contain the quarry and dewatering activities, protecting the surrounding riparian areas.

A narrow deciduous forested fringe extends along Carrolls Channel on the property. To the east and south of the project area are large, mostly undisturbed tracts of deciduous, lowland forest bounded by the BNSF Railroad and the Columbia and Cowlitz Rivers. The forested tract to the east of the quarry is a mosaic of lowland forest and depressional wetland (Wetland A). Wetland A1 is a depressional wetland separated from Wetland A by a gravel road and perched culvert. A depressional/riverine wetland (Wetland B) is located south of the outfall, and a riverine wetland (Wetland E) extends along Carrolls Channel just north of the outfall area. Wetlands are further discussed in the October 2020 critical areas report for the project.

The Columbia and Cowlitz Rivers are considered Classification 1 Fish and Wildlife Habitat Conservation Areas. Both rivers are also designated as shorelines of statewide significance and are designated critical habitat for multiple species of salmonids, providing a migratory corridor in the vicinity of the project area. There is also an active bald eagle nest within the riparian forest fringe along Carrolls Channel. An approximately 3-acre man-made pond is located south of the dredge spoil placement area and access road. The pond was constructed in 1990 for aesthetics and as a water hazard for a previously proposed development of a golf course.

Appendix C of the SMP *Shoreline Critical Areas Regulations Section 3.H Table 4*. lists the reach-specific shoreline buffers. The reach numbers of the Columbia and Cowlitz Rivers within the project area are designated as KS-02 and KS-03, respectively. According to Table 4, water-oriented uses along these shorelines have a 100-foot shoreline buffer extending from the OHWM of the adjacent rivers. Wetland buffers are listed in *Section 2.D* of the SMP and are based on the habitat score from the wetland rating form. Where more than one critical area buffer overlaps, the more stringent buffer applies. Table 2 below details the critical area setbacks on the project site. The critical area buffers extending onsite are essentially functionally isolated by the perimeter road. Landward of the road, vegetation is generally maintained and removed either by placement or removal of dredge spoils.

Table 2. Critical Area Summary

Wetland	Category ¹ /HGM Class ² /Cowardin Class ³ or Type/Classification	Habitat Score ⁴ /Reach ⁵	Buffer Width ⁶
A	II/Depressional/ Aquatic Bed, Emergent, Scrub-Shrub, Forested	8	225
A1	IV/Depressional/Emergent, Scrub-Shrub	4	40
B	III/Depressional and Riverine/ Emergent, Scrub-Shrub, Forested	8	240
E	III/Riverine/ Emergent, Scrub-Shrub, Forested	7	180
Man-Made Pond	Non-Jurisdictional	N/A	Exempt
Carrolls Channel (Columbia River)	Type S/Classification 1	KS-02	100
Cowlitz River	Type S/Classification 1	KS-03	100

¹ Hruby 2014
² NRCS 2008
³ Cowardin et al. 1979
⁴ Washington State Wetland Rating System for Western Washington: 2014 Update
⁵ City of Kelso SMP Appendix C Shoreline Critical Areas Regulations Section 3.H Table 4
⁶ City of Kelso SMP Shoreline Critical Areas Regulations Section 2.D Appendix C Table 1-A

C. A site plan that clearly identifies and delineates critical fish and wildlife habitats found in subsection (A)(2) of this section.

Sheet 2 is an aerial map of the overall project area showing rivers, wetlands, and habitat areas on and adjacent to the project site.

D. An evaluation of the project’s effects on critical fish and wildlife habitat both on and adjacent to the subject property.

Project activities are not likely to adversely affect fish and wildlife habitat on or adjacent to the site and have been occurring on the property since approximately 1980. With the use of best management practices, discharge of clean dewatering water through the outfalls will not detrimentally affect the habitat of fish and wildlife or impact shoreline ecological functions. A renewal of the Hydraulic Project Approval is also being sought, which will require standard best management practices to protect aquatic life and habitat.

Existing vegetation in the immediate vicinity of the outfall is sparse. Some species have recently established including Scot's broom (*Cytisus scoparius*), black cottonwood (*Populus balsamifera*) saplings, willows, and occasional grasses (Photoplate 1). If species that have established between removal and installation periods are damaged or removed, they will re-establish quickly resulting in temporary, self-mitigating riparian buffer impacts.

E. A summary of any federal, state, or local management recommendations that have been developed for the critical fish or wildlife species or habitats located at the site.

Recommendations for management of riparian areas from local, state, and federal agencies include avoidance and minimization. The project avoids and minimizes riparian impacts by operating machinery outside of the OHWM of Carrolls Channel, installing/removing the outfall during low tide, and conducting work during the in-water work window. The existing compacted gravel roads and dredge spoil placement areas will be utilized for site access and project work. No vegetation removal is anticipated; however, species may establish between outfall removal and installation periods. If these species are damaged or removed, they will re-establish quickly resulting in temporary, self-mitigating riparian and wetland buffer impacts. Permanent impacts to habitat have been avoided.

F. E. A statement of measures proposed to preserve existing habitats and restore area degraded as a result of proposed activities.

Project activities have occurred since the 1980s. The temporary outfall will be installed/removed by land-based equipment operating above the OHWM of the channel. Work will occur during the in-water work window and during low tide, within the permitted years. Existing compacted gravel roads and dredge spoil placement areas will be utilized for site access and project work. No vegetation removal is anticipated; however, species may establish between outfall removal and installation periods. If these species are damaged or removed, they will re-establish quickly resulting in temporary, self-mitigating riparian buffer impacts.

G. F. A description of proposed measures that mitigate the impacts of the project.

If species that have established between removal and installation periods are damaged or removed, they will re-establish quickly resulting in temporary, self-mitigating riparian buffer impacts; therefore, no mitigation is proposed.

H. G. An evaluation of ongoing management practices which will protect critical fish and wildlife habitat after the project site has been fully developed, including proposed monitoring and maintenance programs of the subject property. (Ord. 3509 § 14, 2003; Ord. 3373, 1997).

Use of the site for dredged material disposal and sand mining is anticipated to continue into the future. There is no vegetation removal anticipated during the installation and removal of the temporary outfalls; however, species may establish between outfall removal and installation periods. If these species are damaged or removed, they will re-establish quickly; therefore, no maintenance or monitoring is proposed. Best management practices as described above will be employed for the life of the project and additional permit renewals will be necessary, allowing the continued re-evaluation of the ongoing practices.

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.



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Attachments:

- Sheet 1 Vicinity Map
- Sheet 2 Site Map
- Sheet 3 Detail A
- Sheet 4 Typical Disposal Site and Shoreline Cross Section
- Photoplates 1-3

References

- City of Kelso. 2016. Kelso Municipal Code, *Title 17 Unified Development Code Chapter 17.26 Environmentally Sensitive Areas*.
- City of Kelso, 2016. Shoreline Master Plan Update, *Appendix C, Shorelines Critical Areas Regulations*.
- Hruby, T. 2014. *Washington State Wetland Rating System for Western Washington – 2014 Update*. Washington State Department of Ecology Publication #04-06-025.
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http://www.westcoast.fisheries.noaa.gov/publications/gis_maps/maps/salmon_steelhead/critical_habitat/wcr_salmonid_ch_esa_july2016.pdf. Accessed June 2020.
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- Washington Department of Natural Resources (DNR). 2020. *Washington Natural Heritage Information System List of Known Occurrences of Rare Plants in Washington*, April 2018. Cowlitz County. Natural Heritage Program. https://www.dnr.wa.gov/publications/amp_nh_trs.pdf?gxjb4s. Accessed June 2020.