9/16/2024 edoc

DEPARTMENT OF THE ARMY
U.S ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH BLDG 1202
SEATTLE, WA 98134-2388

September 16, 2024

Planning, Environmental, and Cultural Resources Branch

Loree' Randall
Aquatic Permitting and Protection
Washington Department of Ecology
P.O. Box 47600
Olympia, Washington 98504

RE: Coastal Zone Management Act Consistency Determination for Repair of Union Slough Levee in Everett, Snohomish County, Washington

Dear Ms. Randall:

The Seattle District, U.S. Army Corps of Engineers (USACE) is proposing to repair the Union Slough levee on Smith Island in the Snohomish River at Everett, Snohomish County, Washington. Repair of this levee is authorized by Public Law 84-99 (33 U.S.C. § 701n(a)(1), Emergency Response to Natural Disasters). Work under this authority is limited to the repair of flood control works damaged or destroyed by floods. The statute authorizes rehabilitation to the level of protection exhibited by the flood control work prior to the damaging event. The non-federal sponsor is the City of Everett.

In January 2021, an atmospheric river event brought large amounts of rain and warmer temperatures that increased snowmelt runoff. The resulting high flows damaged 480 feet of the Union Slough levee. Repairs will restore adequate and reliable flood protection to the same level of protection that the levee provided before the 2021 flood event. USACE plans to rehabilitate the levee by reestablishing rock armor with 18 inches of 4"-8" quarry spalls and restoring the 2H:1V slope within the pre-damage footprint. USACE proposes to complete this repair in 2025 within the approved in-water work window (June 1 to October 31).

Approximately 6,747 square feet of Category II estuarine wetland along the Snohomish River will be impacted by repair activities. Wetland impacts will be mitigated at a 1:1 ratio by debiting the Smith Island Restoration Project advanced mitigation site. A Section 401 WQC (Order #23187) was issued for this project on August 27, 2024.

The enclosed Consistency Determination (CD) documents consistency to the maximum extent practicable with the enforceable policies of the approved Washington State Coastal Zone Management Program. This letter and CD are being sent via e-mail to you and ecyreczmfedconsistency@ecy.wa.gov.

If you have any questions or need additional information, Mary Bacon is the Environmental Coordinator for this project and can be reached at (206) 536-0751 or mary.m.bacon@usace.army.mil; and Caren Crandell is the Coastal Zone Management Act Coordinator for USACE civil works projects and can be reached at 206-764-6761 or caren.j.crandell@usace.army.mil. I may also be contacted at (206) 741-3575 or vanessa.e.pepi@usace.army.mil.

Sincerely,

ZELL.CHRISTOPHER.CLAY.1626743940

Digitally signed by ZELL.CHRISTOPHER.CLAY.1626743940
Date: 2024.09.16 13:05:20 -07'00'

Vanessa Pepi
Chief, Planning, Environmental and
Cultural Resources Branch

Enclosure

U.S. ARMY

US Army Corps of Engineers®
Seattle District

FY24 Union Slough Levee Rehabilitation Project
Public Law 84-99
City of Everett, Snohomish County, Washington

Coastal Zone Management Act
Consistency Determination
September 2024

Blank page for duplex printing

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Acronyms

AO = Agreed Order
AQMD = Air Quality Management District
BHP = Brake Horsepower
BMP = Best Management Practice
CD = Consistency Determination
C.F.R. = Code of Federal Regulation
cfs = cubic feet per second
Coast Guard = The United States Coast Guard
CSO = Combined Sewer Overflows
CWA = Clean Water Act
cy = Cubic Yards
CZMA = Coastal Zone Management Act
CZMP = Coastal Zone Management Program
DMMP = Dredged Materials Management Program
Ecology = Washington State Department of Ecology
EPA = Environmental Protection Agency
ER = Engineering Regulation
FERC = The Federal Energy Regulatory Commission
HTL = High Tide Line
hp = Horsepower
ISU = Important, Sensitive, & Unique Area
lbs = pounds
LWM = Large Woody Material
MSP = Marine Spatial Plan for Washington's Pacific Coast
NHPA = National Historic Preservation Act
NIO = Notice of Intent to Operate
NOAA = National Oceanic & Atmospheric Administration
NOI = Notice of Intent
NPDES = National Pollutant Discharge Elimination System
NWP = Nationwide Permit
OHWM = Ordinary High Water Mark
ORMA = Ocean Resources Management Act
PL = Public Law
PM = Particulate Matter
PSCAA = Puget Sound Clean Air Agency
PSET = Portland Sediment Evaluation Team
PQL = Practical Quantification Unit
RCW = Revised Code of Washington
RM = River Mile
SEPA = State Environmental Protection Act

SMA = Shoreline Management Act
SMP = Shoreline Master Program
UIC = Underground Injection Control wells
USACE = United States Army Corps of Engineers
U.S.C. = United States Code
USGS = United States Geological Survey
WAC = Washington Administrative Code
WCAA = Washington Clean Air Act
WPCA = Water Pollution Control Act
WQC = Water Quality Certification

A. Introduction

Congress enacted the Coastal Zone Management Act (CZMA; 16 U.S. Code [U.S.C.] § 1451 et. seq.) in 1972 to create a voluntary program to encourage states to develop comprehensive management programs for their coastal zones. Federal consistency requirements of the CZMA aim to strike a balance between the need to ensure consistency for Federal actions affecting any coastal use or resource with the enforceable policies of approved management programs and the importance of Federal activities.15 CFR 930.1(b). The CZMA applies to Federal agency activity that has a "reasonably foreseeable effect" on any coastal use or resource. How coastal effects are determined and whether and how Federal consistency applies to a proposed Federal action are described in the National Oceanic and Atmospheric Administration's (NOAA) Federal Consistency regulations, which can be found at 15 C.F.R. part 930. According to 15 C.F.R. § 930.30, the Federal Government is directed to ensure "that all Federal agency activities including development projects affecting any coastal use or resource would be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of approved management programs."

For Federal agency activities under 15 C.F.R. part 930, subpart C, the Federal Agency makes a determination of coastal effects. Federal Consistency regulations define coastal effects as both environmental effects (e.g. impacts to air, wetlands, water bodies, aquifers, plants, animals) and effects on coastal uses (e.g. fishing, recreation, tourism, public access, historic or cultural preservation, marinas.). Effects include both direct effects resulting from the proposed Federal action that occur at the same time and place, and indirect (cumulative and secondary) effects resulting from the Federal action that occur later in time or are farther removed in distance but are still reasonably foreseeable.

Washington's coastal zone is comprised of the 15 coastal counties that border salt water. The Union Slough Levee Rehabilitation Project occurs within Snohomish County which is one of these coastal counties. The U.S. Army Corps of Engineers (USACE) has determined that the proposed Union Slough Levee Rehabilitation Project undertaken in accordance with Public Law 89-44 (33 U.S.C. § 701n(a)(1)) is an activity undertaken by a Federal agency that is reasonably anticipated to have effects on some resources and uses listed above in Washington State's coastal zone. 15 C.F.R. § 930.31(a).

Federal agencies, such as USACE, must consider all federal development projects[1] within the coastal zone, as defined at 15 C.F.R. § 930.31(b), to be activities affecting any coastal use or resource. The Union Slough Levee Rehabilitation Project is considered a development project.

The following constitutes USACE's determination of Federal consistency with the enforceable policies of the Washington CZM Program for the Union Slough Levee Rehabilitation Project.

[1] "Development projects" are defined as a federal agency activity involving the planning, construction, modification, or removal of public works, facilities, or other structures, and includes the acquisition, use, or disposal of any coastal use or resource.

A.1 Proposed Action

A.1.1 Project Authority

The Union Slough Levee is a non-federal levee constructed by local interests in the 1930s and is located between river mile (RM) 1.2 to 4.0 on the Snohomish River in Snohomish County, WA. The City of Everett is the non-federal sponsor and is responsible for operation and maintenance of the levee. The proposed federal repairs to the Union Slough Levee are authorized by Public Law (PL) 84-99 (33 U.S.C. § 701n(a)(1)).

PL 84-99 provides USACE with the authority for "the repair or restoration of any flood control work threatened or destroyed by flood, including the strengthening, raising, extending, realigning, or other modification thereof as may be necessary in the discretion of the Chief of Engineers for the adequate functioning of the work for flood control and subject to the condition that the Chief of Engineers may include modifications to the structure or project, or in implementation of nonstructural alternatives to the repair or restoration of such flood control work if requested by the non-federal sponsor."

USACE's repair work under PL 84-99 is limited to the repair of flood control works damaged or destroyed by floods. The statute authorizes federal rehabilitation of a damaged flood control structure to the level of protection exhibited by the flood control work prior to the damaging event (33 U.S.C. § 701n(a)(1)). The City of Everett requested federal assistance to repair the levee in 2021 following a flooding event in January 2021 (Everett 2021). Further details of the flood event are described in Section A.1.2.

A.1.2 Flooding Incidents and 2021 Damages

In January 2021, an atmospheric river event occurred in the Pacific Northwest. Flood waters breached the levee at Station 0+00. The area is tidal, and the high rainfall coincided with a high tide and westerly winds. On January 13, the upstream river USGS Gage at Monroe (Gage 12150800) recorded a river flow of 54,300 cfs on the Snohomish River (Figure 1).

Concurrently, the tidally influenced USGS Gage at Snohomish (Gage 1215500) recorded a peak water surface elevation of 25.7 feet, which is higher than the established flood stage of 25.0 feet. This water elevation did not overtop the levee. Based on a flow analysis at the Monroe gage (Table 1), this event had a 70 percent AEP based on a Bulletin 17C analysis and data from the USGS Scientific Investigations Report 2016-5118 (USACE 2021).

The high flow caused damage to a portion of the Snohomish River section of the Union Slough levee near RM 1.0 at Station 0+00 (Appendix A – Site Photos). Damage to the levee segment included the loss of rock armoring on the riverward slope and toe as well as the scouring of the embankment and underlying foundation soils. No rock armor is currently present at the levee. Due to this loss of armor material, the flood control structure is more vulnerable to atmospheric weather events and the levee's level of protection is reduced.

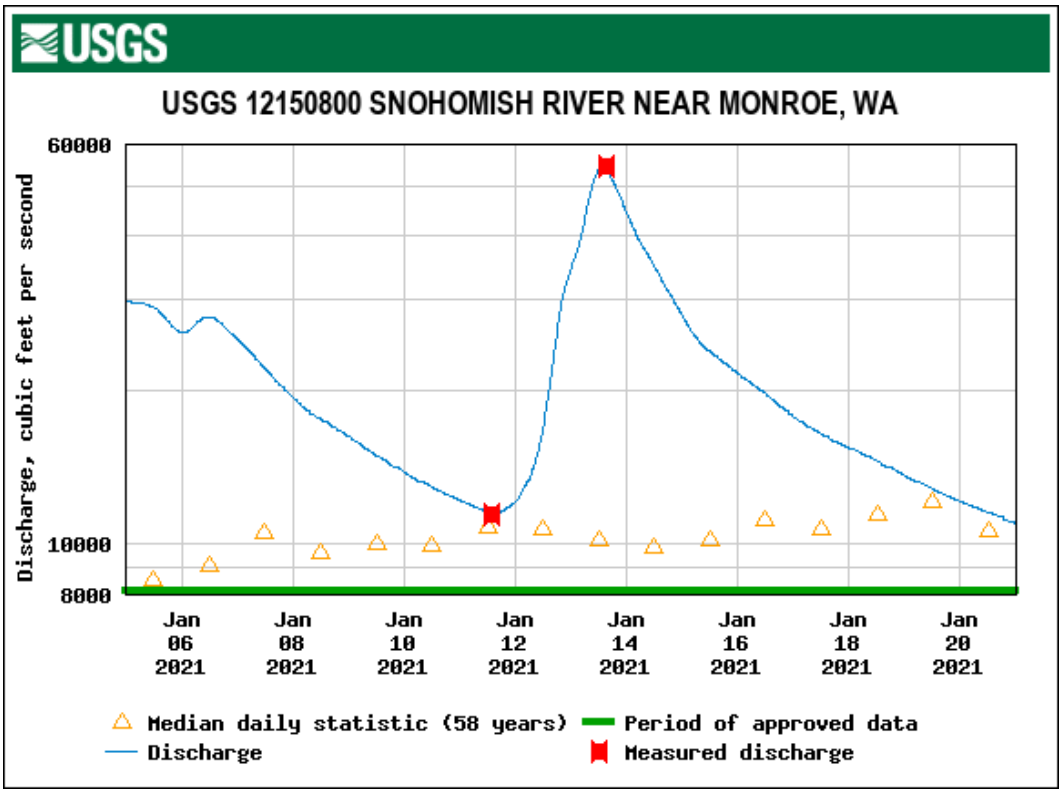


Figure 1. Flow hydrograph at the Snohomish River near the Monroe gage.

Table 1. Flood frequency analysis of the Snohomish River near the Monroe gage (Bulletin 17 – HEC-SSP V. 2.2)

Percent Chance Exceedance	Computed Curve Flow (cfs)	Confidence Limits Flow (cfs)	
		0.05	0.95
0.2	182,114.6	264,930.8	147,836.4
0.5	161,161.9	220,269.6	134,679.3
1.0	145,899.7	190,494.3	124,503.8
2.0	131,055.6	163,747.9	114,063.9
5.0	111,879.5	132,437.2	99,686.9
10.0	97,476.4	111,347.1	88,167.6
20.0	82,778.3	91,917.4	75,758.9
50.0	61,182.5	66,474.2	56,407.5
80.0	45,832.6	49,796.1	41,763.1
90.0	39,617.4	43,337.5	35,373.1
95.0	35,220.3	38,930.5	30,619.6
99.0	28,429.9	32,539.1	22,995.6

A.1.3 Project Purpose and Need

USACE and City of Everett propose rehabilitating the Union Slough levee to the level of protection the levee provided prior to a 2021 damaging flood event. Restoring the levee to a

pre-damage level of flood protection is essential to protect lives, property, and infrastructure from subsequent flooding. An assessment of the levee in its damaged condition indicates that there is an increased likelihood of further damage or breaching of the levee in its current condition if repairs and rehabilitation do not occur prior to the next flood season (USACE 2021). The severity of this risk does not decrease over time, as each flood event presents its own unique risks to the levee system.

In an undamaged state, the Union Slough levee provides a 37-year level of protection against the flooding of commercial and public infrastructure. In its damaged state, the levee provides a one-year flood (99 percent annual exceedance probability [AEP]) level of protection (USACE 2021). If the Union Slough levee were to be overtopped or breached, an industrial area with an estimated 21 buildings, to include the City of Everett Water Pollution Control Facility, and an approximate day time population of 341 would be at risk. Rehabilitation of the levee is needed to restore the authorized flood protection of this non-federal flood control structure.

A.1.4 Project Location

The project area is located near RM 1.0 on the Snohomish River in Everett, Washington (Figure 2). USACE will remove sloughed material from the levee and rehabilitate the riverward slope to prevent further erosion damage along 480 linear feet along the right bank of the river between Stations 0+00 and 5+00. The riverward repair of the levee will impact approximately 0.15 acres of a Category II estuarine wetland. Project activities and acreages are summarized in Table 2. Overall, the project area is less than one (1) acre (Table 2).

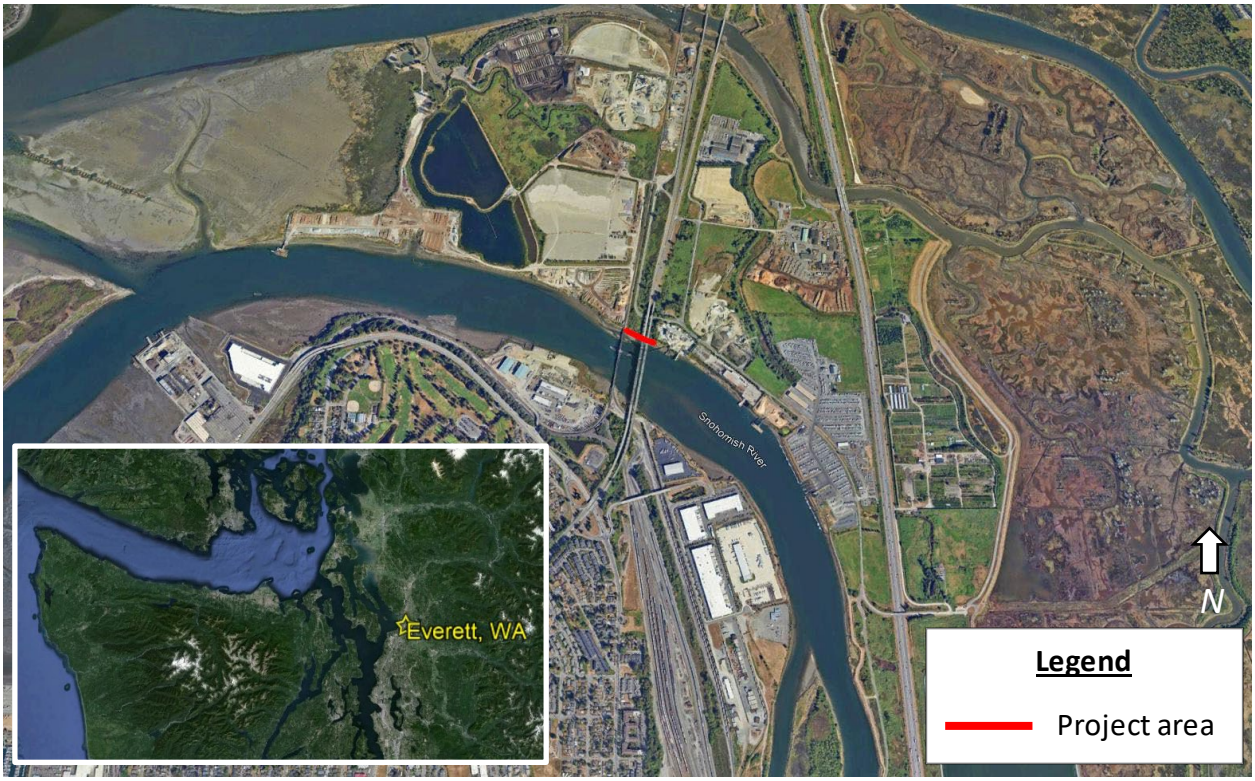


Figure 2. Project area map of the Union Slough Levee on the Snohomish River in the City of Everett, Snohomish County, Washington.

Table 2. Total area (acres) of project action as well as the total project footprint.

Action	Area (acres)	Length (feet)
Construction Activities		
Repairs	0.5	480
Staging	0.1	-
Wetland Impacts		
Estuarine wetland	0.15	-
Disturbed Area Total	**0.8**	-

A.1.3 Construction Details

Modifications to the Union Slough levee will be made to restore the pre-damage level of protection (Appendix B). The as-built condition as it existed just prior to the flood damage in 2021 will serve as the benchmark (pre-damage condition) for evaluating potential impacts arising from any alterations in the physical characteristics of this structure as part of this rehabilitation project. The repair will be performed during the established in-water work window of June 1 through October 31 and is scheduled to begin June 1, 2025 with a six-week construction period. Construction access and staging will be on existing roads and identified staging areas. Riverbank impacted by construction activities will be restricted to the damaged section of the levee, the transition to the undamaged upstream and downstream sections of

the levee, and nearshore swards of sedge. No additional fill material will be added to the riverward levee slope below the high tide line (HTL) or beyond the existing levee footprint. Unavoidable impacts will occur during the repair, to include the loss of approximately 0.15 acres of sedge wetland.

USACE will begin this levee rehabilitation by removing invasive vegetation within the project footprint following guidelines outlined by the best management practices (Appendix C). The proposed levee repair will include the removal of sloughed material from the scoured riverward toe, ex. loose embankment material and rehabilitation of the riverward slope to prevent further erosion damage. Suitable salvaged material will be staged within the riverward levee footprint for reuse. The repair will reestablish rock armor and restore the 2H:1V slope. The armor will consist of 18 inches of 4" – 8" quarry spalls and a 6-inch layer of topsoil (Table 3). The levee slope will be restored with a skid loader and excavators *(Table 3)*

Table 3. Estimated Materials and Quantities for repair.

Material	**Quantity (cubic yards)**	**Location**	**Use**
4" – 8" quarry spall rock	600	Levee slope	Levee armor
Topsoil	100	Levee slope	Soil medium for seed mix
Native hydroseed mix	580	Levee crown and riverward	Erosion control and riparian habitat

On-site material suitable for reuse will be incorporated into the repair. Material that is not suitable for reuse will be disposed of off-site at an appropriately permitted location. Topsoil and hydroseed will be placed to minimize invasive species recruitment in the disturbed area (A.2 Impact Avoidance and Minimization Measures Plan, Appendix B – Design Plans, Appendix C - Best Management Practices).

Table 4. Estimated materials and quantities for the proposed rehabilitation.

Material	Quantity (cubic yards)	Location	Use
4" – 8" quarry spall rock	600	Levee slope	Levee armor
Topsoil	100	Levee slope	Soil medium for seed mix
Native hydroseed mix	580	Levee crown and riverward	Erosion control and riparian habitat

Table 5. Anticipated equipment utilized in the proposed rehabilitation work.

Equipment	Equipment Notes	Number	Location	Activities	General Description	In-water?
Skid Loader	Blade length 8 ft	1	Throughout the repair footprint	Manipulates materials. Move and place rock, vegetation, and other materials	Move and place material	No
Excavator	Track-mounted hydraulic excavator w/hydraulic thumb, similar to 300 series, min hp 200, min lbs 70,000, min reach 30 ft	2	Throughout the repair footprint	Workhorse of the repair. Manipulates materials. Move and place rock, vegetation, and other materials.	Move and place material	Only bucket and thumb attachment
Dump truck	10-12 CY Solo Dump truck, haul up to Class V riprap	Dependent on delivery	Haul route, Existing roads	Transport of materials to and from the project	Material transport	No

A.2 Impact Avoidance and Minimization Measures Plan

There are 3 major components of the Impact Avoidance and Minimization Measures Plan: removal of invasive species, salvage estuarine plants, and placement of large woody material (LWM) above the high tide line (HTL). Details of each are outlined below and BMPs are also included in Appendix C

A.2.1 Removal of Invasive Species

Himalayan blackberry (*Rubus armeniacus)* and Japanese knotweed (*Fallopia japonica)* will be removed within the project footprint. The City of Everett will remove Himalayan blackberry and

Japanese knotweed according to the operations and maintenance requirements in the Cooperation Agreement.

A.2.2 Salvage Estuarine Plants

Prior to the levee toe work, sedge plants in the immediate repair area will be salvaged from the mudflat between the levee and the Snohomish River, staged on the riverward slope of the levee or on the tidal bench during the repair, and replaced once the levee toe has been repaired.

A.2.3 Placement of Large Woody Material

Large woody material (LWM) recovered on-site will be placed by excavator along the levee toe, above the HTL. The excavator will utilize the thumb attachment to recover LWM in the project area and placement may occur after the section of levee has been repaired or at the conclusion of the repair. No live trees will be removed in the repair.

B. Jurisdiction & Consistency Requirements

The Washington State Department of Ecology (Ecology) administers Washington's federally-approved Coastal Zone Management Program (CZMP). Under Washington's CZMP, proposed Federal agency actions that may have reasonably foreseeable effects on Washington's coastal uses or resources are reviewed for consistency with four state laws and their implementing regulations as well as the state Marine Spatial Plan.

- State Shoreline Management Act [RCW 90.58]
    - Implementing Regulations at WACs 173-15 18, 20, 22, and 26
- State Water Pollution Control Act [RCW 90.48]
    - Implementing Regulations at WACs 173-40 to 270, 372-52 to 68
- Washington Clean Air Act [RCW 70.94]
    - Implementing Regulations at WACs 173-400 to 495
- State Ocean Resources Management Act [RCW 43.143]
    - Ocean Management Guidelines at WAC 173-26-360
- The Marine Spatial Plan for Washington's Pacific Coast
    - Important, Sensitive and Unique (ISU) Areas
    - Fisheries Protection Standards

Pursuant to the CZMA Federal Consistency regulations at 15 C.F.R. § 930.36, if a federal agency determines that a proposed activity will have reasonably foreseeable effects on coastal uses or resources of the state, the federal agency must prepare a Consistency Determination (CD) and submit it to Ecology for review. The CD reflects how the federal agency is "consistent to the maximum extent practicable" with the enforceable policies and are to be provided when there is "sufficient information to reasonably determine the consistency of the activity with the management program." 15 C.F.R. 930.36(b)(1).

The federal agency may submit the CD to Ecology in any manner it chooses as long as it provides the information contained at 15 C.F.R. § 930.39. The amount of detail in the description of the activity and the evaluation of coastal effects, the applicable enforceable policies, and supporting information should be commensurate to the expected coastal effects of the proposed federal activity. The contents of a CD are specified at 15 C.F.R. § 930.39(a).

B.1 Washington Clean Air Act

The Washington Clean Air Act (WCAA) regulates outdoor air pollution and establishes a system of regional air pollution control authorities to implement federal and state air pollution control regulations. Air pollution control regulations cover the emission of air contaminants that are injurious to health or that unreasonably interfere with the enjoyment of life and property.

Determine the applicability of the WCAA to the proposed activity:

1. Does this proposed action and any associated emissions occur entirely on tribal lands?

USACE response: No, the proposed action and any associated emissions do not occur on tribal lands. The landowner involved in the Union Slough Levee Rehabilitation project is the City of Everett, and the project area includes easements from Burlington Northern Sante Fe Railways and the Washington State Department of Transportation (Appendix B). Therefore, the WCAA does apply to the proposed action.

2. Using the Washington clean air agencies map, note which air agencies apply to this proposed action based on location.

USACE response: The Puget Sound Clean Air Agency (PSCAA) regulates areas within Snohomish, Kitsap, Pierce, and King County. Since this project takes place in Snohomish County, PSCAA regulations apply.

B.2 State Water Pollution Control Act

Adopted in 1972, the Federal Clean Water Act (CWA) broadly regulates the discharge of pollutants into the nation's surface waters, including lakes, rivers, streams, wetlands, and coastal areas. Ecology is responsible for participating fully in, and meeting the requirements of, the Federal CWA through the Washington State Water Pollution Control Act (WPCA) (RCW 90.48) and the implementing regulations (WACs).

Determine the applicability of the WPCA to the proposed activity:

1. Is the proposed action within a wetland or waterbody; or will the proposed activity have a discharge into a wetland or waterbody?

USACE response: Yes, the proposed action's footprint is within a wetland or waterbody. This PL84-99 repair has been documented as functionally analogous to a Nationwide Permit 3

when compared to repairs of previously permitted structures. An Individual Section 401 Water Quality Certificate has been issued, WQC Order #23187.

2. Describe which water(s) the proposed action is located in. Describe the waters that may be impacted by the proposed action, including both the broader classification(s) and localized description(s).

USACE response: The proposed action will occur on the right bank of the of the mainstem Snohomish River during the in-water work window of 1 June to 31 October. A 0.15-acre Category II estuarine wetland is between the levee's riverward slope and the Snohomish River. A 2.3 acre freshwater emergent/scrub-shrub wetland is present on the landward side of the levee and will be avoided because no work will occur on the landward slope of the levee.

B.3 Shoreline Management Act

Enacted in 1971, the Shoreline Management Act (SMA) [RCW 90.58], provides a statewide framework for managing, accessing, and protecting shorelines. Coverage extends to shorelines of the state[2] and shorelines of statewide significance[3], both of which include coastal marine waters, wetlands, aquatic areas, lakes, and streams. The law provides for the management of the shorelines of the state "by planning for and fostering all reasonable and appropriate uses." The law is aimed at "protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto" [RCW 90.58.020].

The SMA applies to major water bodies and their adjacent shorelands throughout Washington State. The shorelines of the state include:

- Marine waters
- Streams over 20 cubic feet per second mean annual flow
- Water areas and reservoirs 20 acres and greater
- Upland areas called shorelands that are 200 feet landward of the Ordinary High Water Mark
- All associated wetlands

Determine the applicability of the SMA to the proposed activity:

1. Is the proposed action within SMA jurisdiction?

USACE response: Yes, proposed action occurs within the SMA jurisdiction.

1.1 Explain your response to Question 1.

USACE response: The proposed action is located within 200 feet of the OHWM/HTL of the Snohomish River, which has a mean annual flow greater than 20 cubic feet per second. The

[2] Defined at RCW 90.58.030(2)(e) and further specified at WAC 173-18.

[3] Defined at RCW 90.58.030(2)(f).

proposed action is also adjacent to wetlands. Based on these criteria, the proposed action is within SMA jurisdiction.

B.4 Ocean Resources Management Act

Passed in 1989, the Ocean Resources Management Act (ORMA) (RCW 43.143) is an important tool for state and local governments to use in ensuring that proposed ocean and coastal activities do not adversely affect existing uses and resources in Washington's coastal areas and waters.

The core regulations of ORMA are as follows:

> "Uses or activities that require federal, state, or local government permits or other approvals and that will adversely impact renewable resources, marine life, fishing, aquaculture, recreation, navigation, air or water quality, or other existing ocean or coastal uses, may be permitted only if the criteria below are met or exceeded:
> (a) There is a demonstrated significant local, state, or national need for the proposed use or activity;
> (b) There is no reasonable alternative to meet the public need for the proposed use or activity;
> (c) There will be no likely long-term significant adverse impacts to coastal or marine resources or uses;
> (d) All reasonable steps are taken to avoid and minimize adverse environmental impacts, with special protection provided for the marine life and resources of the Columbia river, Willapa Bay and Grays Harbor estuaries, and Olympic national park;
> (e) All reasonable steps are taken to avoid and minimize adverse social and economic impacts, including impacts on aquaculture, recreation, tourism, navigation, air quality, and recreational, commercial, and tribal fishing;
> (f) Compensation is provided to mitigate adverse impacts to coastal resources or uses;
> (g) Plans and sufficient performance bonding are provided to ensure that the site will be rehabilitated after the use or activity is completed; and
> (h) The use or activity complies with all applicable local, state, and Federal laws and regulations." (RCW 43.143.030(2))

ORMA requires its implementing regulations – the Ocean Management Guidelines (WAC 173-26-360) – to further detail the requirements of ORMA.

B.4.1 Determine the applicability of ORMA to the proposed activity:

1. Do proposed activities take place in, under, over, or adjacent to the water?

USACE response: Yes, this proposed action takes place adjacent to the water, in the floodplain of the Snohomish River in Snohomish County.

2. Is the proposed action located in Washington's "coastal waters", which are defined as the waters of the Pacific Ocean seaward from Cape Flattery south to Cape

Disappointment, from mean high tide seaward two hundred miles (and including the Willapa Bay and Grays Harbor estuaries) [RCW 43.143.020(2)]?

USACE Response: No, the proposed action is not located in Washington's "coastal waters" as defined in RCW 43.143.020 and therefore, the ORMA does not apply to this federal action.

3. Is a federal/state/local permit or other government approval required for the proposal?

USACE response: Yes, as this is a federal project, government approval is required and the project will comply with applicable federal legal requirements, such as but not necessarily limited to the Endangered Species Act, National Historic Preservation Act, Clean Water Act, and National Environmental Policy Act. Because this is a Federal project, state and local permits are not required, although coordination may be required as a matter of federal law pursuant to each regime's waiver of Federal sovereign immunity. For example, an Individual Section 401 Water Quality Certificate has been issued, WQC Order #23187, due to wetland impacts greater than 0.1 acres.

4. Does the proposed action contain uses or activities that will adversely impact renewable resources or existing coastal or ocean uses?[4]

USACE response: No, the proposed action does not contain uses or activities that will adversely impact renewable resources or existing coastal or ocean uses.

B.5 Marine Spatial Plan for Washington's Pacific Coast

Does not apply, as the proposed action is not within the MSP study area, does not trigger ORMA, and does not involve any activities that would be considered to be a "new use" as it is a repair to an existing structure.

C. Consistency Determination

The following subsections describe how the project is consistent with all applicable enforceable policies of Washington's CZMP.

C.1 Washington Clean Air Act

Analysis of potential air pollutant emissions:

USACE has determined that this project does not exceed the General Standards for Maximum Emissions and is consistent to the maximum extent practicable with WAC 173-400-040. For the Union Slough Levee Repair project, potential sources of air quality impacts are emissions from construction equipment and dust associated with earthwork and handling of construction materials. Pursuant to WAC 173-400-035(2), nonroad engines (which include construction

[4] Note that for this question, adverse impacts are determined before mitigation is proposed. Hence the question is asking, will the proposed action require mitigation (avoidance minimization, or compensation) to offset adverse impacts to renewable resources or existing coastal or ocean uses?

equipment) are not subject to a) new source review, b) control technology determinations, c) emissions limits set by the SIP [State Implementation Plans required by EPA], or d) Chapter 173-460 WAC [Controls for New Sources of Toxic Air Pollutants].

To further support the analysis of air quality impacts associated with this proposed project, USACE calculated emissions with equipment-specific emission rates from the California Air Resources Board OFFROAD2007 model-based database (CARB 2007) and compared project emissions to the Federal Clean Air Act *de minimis* thresholds (40 C.F.R. 93.153(b)(1) and (2)), WA State's exemption levels ((WAC 173-400-040) and insignificant emissions levels (WAC 173-401-530), and Puget Sound Clean Air Agency's (PSCAA) (regional agency for Snohomish County) threshold levels for registration and reporting (https://pscleanair.gov/219/PSCAA-Regulations). *De minimis* levels are "the minimum threshold for which a conformity determination must be performed for criteria pollutants" (40 C.F.R. 93.153). A conformity determination ensures that a Federal action does not interfere with a state's plan to attain or maintain national ambient air quality standards. Emissions below *de minimis* levels are "trivial levels of emissions that do not pose a threat to human health or the environment" (WAC 173-400-020(4)). "Insignificant emissions" do not require testing, monitoring, record keeping and reporting unless the permitting authority determines that to be necessary (WAC 173-401-530(2)(c).

We used a conservative approach to the calculation of emissions. The calculation was based on the maximum number of pieces of construction equipment expected to be used, an average fleet age of 9 years (i.e., high end of the HP range for the equipment for the work) and maximum expected duration of the project. Assumptions are further detailed in Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting.

As detailed in the following responses, USACE has determined that this project does not exceed the General Standards for Maximum Emissions and is consistent to the maximum extent practicable with WAC 173-400-040.

1. Does the WCAA apply to the proposed activity, as identified in Section B.1?

USACE response: Yes, the WCAA applies to this proposed activity.

2. Using the Washington clean air agencies map, note which air agencies apply to the proposed action based on location.

USACE Response: Puget Sound Clean Air Agency.

3. Describe conversations and correspondence with state or local clean air staff regarding the applicability of the WCAA to this proposed activity.

USACE response: USACE has not had any conversations or correspondence with the Puget Sound Clean Air Agency.

4. List and describe any air quality permits (e.g., operating or notice construction permit) that are required for this proposal. If not applicable, please explain. Describe whether this proposed activity contains any permanent stationary sources and whether those sources need to be registered per WAC 173-400-099. Be sure to cite conversations with state or local clean air staff in your response.

USACE response: Not applicable. WAC 173-400-099 outlines the registration program requirements for air contaminant sources, which apply to permanent stationary sources (WAC 173-400-099 (2)(a)). Therefore, USACE does not have to register our equipment since only mobile sources of emissions will be used during a period of 6 weeks for this proposed action.

General Regulations for Air Pollution Sources

Nonroad Engines

5. Does the proposal include activities that involve any **nonroad engines**, as defined in WAC 173-400-030(59)?

USACE response: Yes. WAC 173-400-030(59)(a) states that a nonroad engine is "any internal combustion engine in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers)". The proposed action will include activities that involve nonroad engines such as excavators and skid loaders (*Table 5*).

5.1. Demonstrate how the proposal is consistent with the fuel standards in WAC 173-400-035(3).

USACE response: WAC 173-400-035(3) outlines fuel standards for nonroad engines. These standards are that all nonroad engines must use low sulfur diesel or ultra low sulfur biodiesel, among other fuels. Use of ultra-low sulfur fuel is required by EPA, WAC 173-400-035(3), and PSCAA's emission standards (Regulation I, Section 15.05 Emission standards, (a)). Ultra low sulfur fuel is essentially the only kind of diesel fuel available (40 C.F.R. 1090.300 and 1090.305). USACE included a BMP that requires low sulfur diesel be used for this proposed action (Appendix C).

5.2. Does the proposal require the installation and operation of nonroad engines with a cumulative maximum rated brake horsepower (BHP) greater than 500 BHP and less than or equal to 2000 BHP?

USACE response: No. The proposed action does not require the installation and operation of nonroad engines with a cumulative maximum rated BHP greater than 500 BHP. The total horsepower of the fleet is approximately 400 HP and the calculation for total BHP is slightly less than the total HP of the fleet. Therefore, the total BHP is less than 500 BHP, and the USACE does not have to apply for a NIO.

5.3. Does the proposal require the installation and operation of nonroad engines with a cumulative maximum rated brake horsepower greater than 2000 BHP?

USACE response: No. The proposed action will not require nonroad engines with a cumulative BHP greater than 2000 BHP.

General Standards for Maximum Emissions

6. Does the proposal include any activities that include **sources or emission units**, as defined by WAC 173-400-030 (84) and (31), respectively?

USACE response: Yes. The proposed construction activity includes several pieces of equipment that are emissions units which emit pollutants subject to regulation under the Federal Clean Air Act (**Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*****). In aggregate, the construction equipment constitutes a source of emissions since the equipment is located on the project site and is under control of persons under common control whose actions concern the rehabilitation of the Union Slough Levee.***

6.1. Describe how the proposal is consistent with the **visible emissions standards** in WAC 173-400-040(2).

USACE response: This standard is not applicable to this project. Method 9A is applicable to stationary sources. Construction equipment is mobile and not a stationary source (Washington Department of Ecology 1990). Further, particulate matter makes up the non-water portion of visible emissions. For this project, PM 2.5 and PM 10 and VOCs emissions are below de minimis and insignificant levels, as well as the level for exemption from new source review (**Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*****).***

6.2. Describe how the proposal is consistent with the **fallout standards** in WAC 173-400-040(3).

USACE response: Fallout refers to airborne materials that might fall on neighboring properties. A conservative estimate of PM emissions at this project indicates that they are below Federal de minimis levels and state thresholds for insignificant emissions and exemption from new source review (**Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*****). Therefore, deposition would not interfere with the use and enjoyment of property on which the material may be deposited.***

6.3. Does the proposed activity produce **fugitive emissions**, as defined in WAC 173-400-030(41)?

USACE Response: The proposed work may involve fugitive emissions including dust blown by the wind during construction.

6.3.1 Describe how the proposal is consistent with the requirements in WAC 173-400-040(4).

USACE Response: All known emissions at the site will be from engines in construction equipment, handling of material (e.g., rock, quarry spalls, topsoil), and earthwork. Conservatively estimated equipment emissions fall below the Federal de minimis threshold and state threshold for insignificant emissions (*Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*). In addition, USACE will take reasonable precautions, such as spraying water in disturbed areas and hydroseeding all disturbed soil, to control dust and prevent its release from the project site.

6.4. Describe how the proposal is consistent with the **odor requirements** in WAC 173-400-040(5).

USACE response: A conservative estimate of gaseous emissions at this project indicates that they are below federal de minimis and state thresholds for insignificant emissions and those exempted from new source review (*Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*). Reasonable measures will be implemented at this site to minimize gaseous emissions; these measures include limiting work to a maximum of 10 hours/day during daylight hours and using ultra low-sulfur diesel fuel, as required by EPA (40 C.F.R. 1090.300 and 1090.305). The proposed work is therefore consistent with the requirement not to unreasonably interfere with other property owner's use and enjoyment of her or his property.

6.5. Describe how the proposal does not cause or allow that emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business, as required in WAC 173-400-040(6).

USACE response: The Union Slough Levee rehabilitation is in a portion of the Snohomish River watershed in Snohomish County that is maintenance area for EPA's ambient air quality standards (*https://www3.epa.gov/airquality/greenbook/anayo_wa.html****). A maintenance area has exceeded air quality standards in the past but is currently meeting them (attainment) and maintaining that status. Washington State air quality standards at WAC 173-476 are the same as EPA's national standards (https://www.epa.gov/criteria-air-pollutants/naaqs-table). According to the Puget Sound Clean Air Agency (PSCAA) regulations, "Air pollution means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property" (Article 1, Section 1.07). The proposed work will be limited to 10 hours/day during daylight hours for a maximum of 20 days (5 days/week for 4 weeks). Estimated emissions***

from this project will be below Federal de minimis levels, state thresholds for insignificant emissions and those that are exempt from new source registration, and PSCAA's registration and reporting thresholds (**Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*****). The proposed work will therefore not degrade air quality or be detrimental to health, safety or welfare of any person or cause damage to property or business.***

6.6. Describe how the proposal is consistent with the **sulfur dioxide requirements** in WAC 173-400-040(7).

USACE response: In accordance with EPA's regulation 40 C.F.R. 1090.300 and 1090.305, ultra-low sulfur diesel fuel will be used in all construction equipment. Ultra-low sulfur diesel is the only fuel used and available for commercial diesel equipment operating in the United States (40 C.F.R. 1039). Potential sources of sulfur pollution will thereby be minimized at these sites. Estimated emissions of sulfur dioxide fall below Federal de minimis levels and state thresholds for insignificant emissions and levels that are exempt from new source review.

6.7. Describe how the proposal does not cause or allow the installation or use of any means which **conceals or masks** – as defined in WAC 173-400-030 (21) and (49), respectively – an emission of an air contaminant which would otherwise violate the general standards for maximum emissions, as required in WAC 173-400-040(8).

USACE response: For this project, USACE will require its contractor to comply with State law and to not take any action to conceal pollutants or to mask odors, nor will it allow installation or use of such methods, devices, or techniques.

6.8. Does the proposal include any activities that involve **fugitive dust**, as defined in WAC 173-400-030(40)?

USACE response: The proposed project will include the following activities that could produce fugitive dust: earthwork, stockpiling and handling material (quarry spalls, topsoil), and transit across the construction site.

5.8.1. Demonstrate how the proposal is consistent with the requirements in WAC 173-400-040(9).

USACE response: USACE will ensure the contractor takes reasonable precautions to control dust including spraying water and hydroseeding. As is the general practice, a water truck will be positioned at the construction site to spray water on material piles (e.g., topsoil, quarry spalls) or activities (e.g., grading) to prevent airborne dust. At the completion of the project, all disturbed or exposed soil will be hydroseeded to limit potential erosion by wind.

For this project, estimates of particulate matter (PM) emissions are below Federal de minimis thresholds and state insignificant emissions levels and those that are exempt from new source

review (*Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting*). In addition, the Union Slough Levee repair project is in a portion of the Snohomish River watershed in Snohomish County that is a maintenance area for air quality standards (see response to question 6.5), including ozone and carbon monoxide, so use of control technology is not required.

Burning

7. Does the proposal involve any **indoor or residential burning**?

USACE response: No. The proposed action requires only outdoor construction activities. No indoor or residential burning of solid fuel or any materials listed in RCW 70A.15.3600 will occur in association with this proposal.

C.2 State Water Pollution Control Act

1. Does the WPCA apply to the proposed activity, as identified in Section B.2?

USACE response: The WPCA does apply to the proposed activity, as identified in Section B.2.

2. Does your proposal require a Federal license/permit from one or more of the following federal agencies?
    - ☐ The United Stated Army Corps of Engineers (Corps)
        - ☐ Section 404
        - ☐ Section 10
    - ☐ The United States Coast Guard (Coast Guard)
    - ☐ The Federal Energy Regulatory Commission (FERC)

USACE response: No. USACE does not issue itself permits but complies with the substantive requirements of the CWA. The proposed action does involve work that is jurisdictional under Section 404 of the Federal CWA.

3. Does the Corps plan to issue a Nationwide Permit (NWP)?[5]

USACE response: USACE does not issue itself permits but complies with the substantive requirements of the CWA. This proposed repair has been documented as functionally analogous to Nationwide Permit 3 when compared to repairs of previously permitted structures.

4. Is an individual Section 401 WQC required for the proposal?

[5] Note that the programmatic CZMA decision for the NWPs are not applicable to a federal agency, as they must follow the federal consistency requirements outlined in 15 C.F.R. Part 930 Subpart C.

USACE response: Due to wetland impacts greater than 0.1 acres, an Individual Section 401 Water Quality Certificate has been issued, WQC Order #23187.

5. Does the proposal include any activities that involve the discharge of waste materials from construction, industrial, commercial, and municipal operations into ground and surface waters of the state or municipal sewerage systems, that would require a National Pollutant Discharge Elimination System (NPDES) and/or State Waste Discharge Permit?

USACE response: No. A Section 402 National Pollution Discharge Elimination Permit is not required since the total project footprint is less than 1 acre (Table 2).

5.4 Describe why a permit is not required.

USACE response: The ground disturbance (earthwork, staging, access, planting, LWM placement) is less than 1 acre. Therefore, no permits outlined above are relevant to this project.

5.4.1. Describe how the proposal is consistent with RCW 90.48.080, which prohibits the discharge of polluting matters in any waters of the state.

USACE response: During construction, BMPs such as temporary erosion control measures and hydroseeding will be implemented to prevent exposed material from being transported to the river (Appendix C). If suitable for construction, material recovered from the existing levee prism will be incorporated into the new riverward slope of the levee. Any material that cannot be reused in construction will be transported to an approved disposal site.

Surface Water Impacts

USACE Response: USACE has been issued a Section 401 Water Quality Certificate, WQC Order #23187.

Marine Sediment Impacts

USACE Response: USACE has been issued a Section 401 Water Quality Certificate, WQC Order #23187.

Groundwater Impacts

USACE Response: USACE has been issued a Section 401 Water Quality Certificate, WQC Order #23187.

Water Quality Discharges

USACE Response: USACE has been issued a Section 401 Water Quality Certificate, WQC Order #23187.

Miscellaneous

6. Does the proposal include activities that involve the application of **barley straw** to waters of the state for the purposes of water clarification?

USACE Response: No, the proposed action does not involve the application of barley straw to waters for the purpose of water clarification.

7. Does the proposal include activities that involve **aquatic noxious weed control**?

USACE Response: No, the project does not involve control of aquatic noxious weeds.

8. Does the proposal include activities that involve the control of **Eurasian water milfoil**?

USACE Response: No, the project does not involve control of Eurasian water milfoil.

C.3 Shoreline Management Act

1. Does the SMA apply to the proposed activity, as identified in Section B.3?

USACE response: Yes, the project is adjacent to the Snohomish River in Snohomish County as identified in Section B.3. Therefore, the project is within SMA jurisdiction.

2. Which shoreline of the state is the proposed activity associated with?

USACE response: The proposed action is located within 200 feet of the OHWM/HTL of the Snohomish River, which has a mean annual flow greater than 20 cubic feet per second (see Section B.3).

3. Is the waterbody or associated waterbody a **"shoreline",** as defined in RCW 90.58.030(2)(e) or a **"shoreline of statewide significance"**, as defined in RCW 90.58.030(2)(f)?

USACE response: The Snohomish River is defined as a "shoreline of statewide significance" under RCW 90.58.030(2)(f)(v)(A). The proposed action takes place west of the crest of the Cascade Range downstream of a point where the mean annual flow is measured at one thousand (1,000) cubic feet per second or more as measured at USGS Gage 12150800 near Monroe, WA, which is the closest USGS gage (Figure 1).

4. Is there a component of the proposed activity occurring upland within the **"shorelands"**, as defined in RCW 90.58.030(2)(d)?

USACE response: Yes. The proposed action occurs within two hundred (200) feet from the OHWM/HTL of the Snohomish River (**Appendix B – Design Plans*****). Work occurring above the OHWM/HTL includes reconstruction of the levee riverward slope and hydroseeding disturbed areas above the HTL.***

5. Is there a component of the proposed activity occurring within water?

USACE response: There are components of this proposed action that will be occurring within water. Questions 6 – 33 are addressed below, to demonstrate consistency through an SMA Policy analysis.

General Provisions

SMA Policy

The shorelines of the state are among the most valuable and fragile of its natural resources and there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition, ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state. Much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. ***There is, therefore, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.*** *[RCW 90.58.020]*

The SMA is designed to be liberally construed to give full effect to the objectives and purposes for which it was enacted [RCW 90.58.920] and shall not affect any treaty rights to which the United States is party [RCW 90.58.350]. The burden is on the proponent to demonstrate that a proposed use or development is consistent with the SMA [RCW 90.58.140(7)].

Activities included under the SMA regulations but deemed uncommon in relation to direct Federal agency actions were omitted from this template. This includes agricultural activities [RCW 90.58.065], commercial timber cutting [RCW 90.58.150], floating homes [RCW 90.58.270], and oil or natural gas exploration in marine waters [RCW 90.58.550]. If the proposed activity includes any of these activities, please refer to the relevant regulations and demonstrate consistency accordingly. Additionally, if seeking relief from shoreline master program development standards and use regulations for shoreline restoration project under RCW 90.58.580, please also include a discussion of this in the CD.

6. If the proposed activity is within a **"shoreline of statewide significance"** (see Question 3), demonstrate how the project furthers any of the following **preferred uses** and outcomes of the SMA [RCW 90.58.020]:
   (1) Recognize and protect the statewide interest over local interest.
   (2) Preserve the natural character of the shoreline.
   (3) Result in long term over short term benefit.
   (4) Protect the resources and ecology of the shoreline.
   (5) Increase public access to publicly owned areas of the shorelines.
   (6) Increase recreational opportunities for the public in the shoreline.
   (7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

USACE response: The proposed project is consistent to the maximum extent practicable with uses outlined in RCW 90.58.020(1) and RCW 90.58.100(2)(h), the latter of which "gives consideration to the statewide interest in the prevention and minimization of flood damages." Rehabilitation of the existing levee provides continued protection to the infrastructure and community interests currently at risk. The levee rehabilitation will manage

flood risk to public infrastructure, notably this includes the City of Everett Wastewater Treatment Plant. Flooding of this area could be costly and have cascading effects to the State and surrounding community if repairs to infrastructure are required. This action will continue to protect that infrastructure and community interests currently at risk.

7. Describe how the proposal will result in **"no net loss"** of shoreline ecological functions, as outlined in WAC 173-26-186(8).

USACE response: The proposed project restores a levee that has existed along the riverbank at this site for decades. The modification will restore flood protection for infrastructure on and near the site, including a BNSF railroad trestle and the state HWY 529 overpasses. Overall, the proposed action will be consistent to the maximum extent practicable with WAC 173-26-186(8) because this project will mitigate for 0.15 acres of estuarine wetland impacts by credit withdrawals from the advanced mitigation site "Smith Island Restoration Project" (SIRP). Mitigation at the SIRP will result in no net loss of shoreline area and function.

Mitigation

8. Does the proposed activity include any **new or expanded building or structure** of more than 35ft above average grade level [RCW 90.58.320]?

USACE response: No new or expanded building or structure is proposed for this project. This proposed action is consistent with RCW 90.58.320.

9. Is the proposed activity near a **"critical area"**, according to WAC 173-26-221(2)?

USACE response: Yes. This project is within 200 feet of the Snohomish River, includes an area with wetlands, and is being rehabilitated because of flood damages in January 2021 (**Appendix B – Design Plans*****). Therefore, the proposed activity is near a critical area.***

9.1. Specify the types(s) of critical areas.

USACE response: Critical areas in and near the project site are a 0.15 acre estuarine wetland (type: wetland), a 2.3 acre freshwater emergent/scrub-shrub wetland (type: wetland), the Snohomish River and flood plains (type: critical freshwater habitat).

9.2. For each critical area identified in Question 9.1, describe how the proposal is consistent with the applicable standards in WAC 173-26-221(2)(c).

USACE response: Wetland: A 2.3-acre freshwater emergent/scrub-shrub wetland is landward of the levee, bound by access roads, a railroad line, state highway overpasses, and the levee, and will be completely avoided because no work will occur on the landward slope of the levee. Due to limited access to the repair area, a buffer cannot be established for the landward freshwater emergent/scrub-shrub wetland. USACE will clearly mark the freshwater emergent/scrub-shrub wetland on the landward side of the levee using stakes and flagging, and a pre-construction meeting to confirm project limits will avoid impacts to the freshwater wetland. A 0.15-acre Category II estuarine wetland is riverward of the levee and will be impacted by the levee repair.

Construction and staging will be limited to the original footprint of the levee. Estuarine plants on the riverward side will be salvaged during the repair and restored, where practicable. Due to estuarine wetland impacts, compensation for unavoidable impacts will be provided through the withdrawal of 0.15 credits, a mitigation ratio of 1:1 for Category II emergent wetlands, from the Smith Island Restoration Project (SIRP) advanced mitigation site.

Critical freshwater habitat: The ecological functions impacted by the Union Slough repair will be mitigated by the withdrawal of credits from the SIRP. Both the repair and the mitigation area are co-located on Smith Island in the Lower Snohomish River. The SIRP achieved its ecological goals in 2017, so there is no loss of ecological function.

10. Describe how the proposal is consistent with the **archaeological and historic resources** standards in WAC 173-26-221(1)(c).

USACE response: USACE is a Federal agency subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) for historic preservation. USACE has determined that the proposed work complies with Section 106 of the NHPA. This includes USACE conducting a pedestrian survey of Area of Potential Effects (APE), consultation with the Washington State Historic Preservation Office and interested Tribes, and development of an archaeological monitoring and inadvertent discovery plan. Literature reviews of the project area located no archaeological or historic archaeological sites within the project footprint. Tribal consultation was initiated February 2024, and the following Tribes were contacted: Lummi Tribe of the Lummi Reservation, Sauk-Suiattle Indian Tribe, Snohomish Tribe of Indians, Snoqualmie Indian Tribe, Swinomish Indian Tribal Community, Stillaguamish Tribe of Indians of Washington, Suquamish Indian Tribe of the Port Madison Reservation, Tulalip Tribes of Washington, and the Confederated Tribes and Bands of the Yakama Nation.

11. Describe how the proposal is consistent with the **flood hazard reduction** standards in WAC 173-26-221(3)(c).

USACE response: The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code §701n). USACE rehabilitation work under this authority is limited to flood control works damaged or destroyed by floods. The statute authorizes federal rehabilitation of a damaged non-federal flood control structure to the level of protection exhibited by the flood control work prior to the damaging event. Repair of the non-federal Union Slough levee will reduce flood hazard for critical infrastructure in the area and is not considered a new structural flood hazard reduction measure.

12. Describe how the proposal is consistent with the **public access** standards in WAC 173-26-221(4)(c).

USACE response: There is no public access to this location as it is maintained by the City of Everett with easements for Burlington Northern Sante Fe railways and the Washington state Department of Transportation.

13. Describe how the proposal is consistent with the **shoreline vegetation conservation** standards in WAC 173-26-221(5)(c).

USACE response: USACE has developed BMPs to address vegetation conservation and invasive plant species (*Appendix C - Best Management Practices*). During the repair, USACE intends to salvage marsh plants, e.g. sedge spp., from the estuarine wetland, where practicable. Prior to levee toe work, sedge within the construction footprint and in reach of the excavator will be recovered from between the levee and the Snohomish River, staged on the riverward slope or tidal bench, and replaced once the levee toe has been repaired. Invasive Himalayan blackberry and Japanese knotweed will be removed from the footprint of the levee repair. The proposed project will restore flood risk reduction for critical infrastructure (i.e., City of Everett Water Pollution Control Facility) at this site by restoring the levee's previous level of protection. The ecological functions impacted by the loss of 0.2 acres of estuarine wetland will be compensated by in-kind mitigation from the SIRP.

14. Describe how the proposal is consistent with the **water quality, stormwater, and nonpoint pollution** standards in WAC 173-26-221(6)(c).

USACE response: This project will involve in-water work, work below the HTL, and work in an area that exhibits wetland characteristics. A Section 401 Water Quality Certificate has been issued, WQC #23187and BMPs will be implemented to prevent sedimentation in the water or landward wetland. All exposed soil will be hydroseeded with a mix recommended by the Dept of Ecology's Western Washington Stormwater Management Manual for areas where the establishment of native plants is desired (see section A.2 above).

15. Which **general environment designation(s)** does this project fall under, according to WAC 173-26-211(5) (a)(iii), (b)(iii), (c)(iii), (d)(iii), (e)(iii) and (f)(iii)? Be specific and detailed.

USACE response: According to Everett's October 2019 Shoreline Master Program, the environmental designation for the Union Slough levee site is Urban Mixed Use Industrial.

15.1 For each of the environmental designations that apply to the project, describe how the proposal is consistent with the applicable purposes and management policies of WAC 173-26-211(5) (a)(i-ii), (b)(i-ii), (c)(i-ii), (d)(i-ii), (e)(i-ii) and (f)(i-ii).

USACE response: Short excerpts of the relevant WACs are presented in this response; more complete excerpts are presented in footnotes.

WAC 173-26-211(5)(e) "Urban conservancy" environment.

(i) Purpose. The purpose of the "urban conservancy" environment is to protect and restore ecological functions of open space, flood plain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.[6]

[6] WAC 173-26-211(5)(e) "Urban conservancy" environment.

The proposed project is located along the right bank of the Snohomish River, a viable commercial waterway and federally maintained navigation channel. Large woody material recovered in the repair area will be placed above the HTL and provide habitat to terrestrial species during low flows and aquatic species during higher flows. The ecological functions impacted by the loss of 0.15 acres of estuarine wetland will be compensated by in-kind mitigation from the SIRP.

16. Does the proposed activity include **agriculture** as defined by WAC 173-26-020(3)?

USACE response: No. The proposed levee rehabilitation does not involve any agricultural activities as defined by WAC 173-26-020(3).

17. Does the proposed activity include **aquaculture**, as defined by WAC 173-26-020(6)?

USACE response: No. The proposed action does not involve any activity related to aquaculture.

18. Does the proposed activity include any **boating facilities**, as defined by WAC 173-26-241(3)(c)?

USACE Response: No, the proposed action does not include any boating facilities, as defined by WAC 173-26-241(3)(c).

19. Does the proposed activity include any **commercial development**?

USACE Response: No, the proposed activity does not include any commercial development. USACE will be conducting levee rehabilitation work authorized under PL 84-99.

20. Does the proposed activity include **forest practice** conversions or other Class IV-General Forest practices where there is a likelihood of conversion to non-forest uses?

(i) Purpose. The purpose of the "urban conservancy" environment is to protect and restore ecological functions of open space, flood plain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.

(ii) Management policies.

(A) Uses that preserve the natural character of the area or promote preservation of open space, flood plain or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.

(B) Standards should be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications within the "urban conservancy" designation. These standards shall ensure that new development does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.

(C) Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.

(D) Water-oriented uses should be given priority over nonwater-oriented uses. For shoreline areas adjacent to commercially navigable waters, water-dependent uses should be given highest priority.

USACE Response: No. The activity does not involve converting forestry uses to non-forestry uses.

21. Does the proposed activity include **industrial development**?

USACE Response: No, the proposed action does not include industrial development.

22. Does the proposed activity include **in-stream structures**, as defined by WAC 173-26-241(3)(g)?

USACE response: The Union Slough levee is a part of a flood control system that surrounds Smith Island. The repair of a damaged flood control works is consistent with WAC 173-26-241(3)(g). The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code §701n). USACE rehabilitation work under this authority is focused on repairing flood control works damaged or destroyed by floods. The statute authorizes federal rehabilitation of non-federal flood control structures to the level of protection exhibited by the flood control work prior to the damaging event. No new in-stream structures will be created.

23. Does the proposal include **mining** activities, as defined by WAC 173-26-241(3)(h)?

USACE Response: No, the proposed action does not include mining activities.

24. Does the proposed activity include **recreational development**, as defined by WAC 173-26-241(3)(i)?

USACE Response: No, the proposed action does not include recreational development.

25. Does the proposed activity include **residential development**?

USACE Response: No, the proposed action does not include residential development.

26. Does the proposed activity include **transportation and parking**?

USACE Response: No, the proposed action does not include transportation and parking.

27. Does the proposed activity include **utilities**, as defined by WAC 173-26-241(3)(l)?

USACE Response: No, the proposed action does not include utilities.

Shoreline Modification Standards

28. Does the proposed activity include **shoreline stabilization**, as defined in WAC 173-26-231(3)(a)(i)?

USACE Response: No, the main purpose of this proposed levee rehabilitation project is flood risk reduction, not bank stabilization.

29. Does the proposed activity include **beaches and dune management**?

USACE Response: No, the proposed action does not include beaches and dune management.

30. Does the proposed activity include **piers and docks**?

USACE Response: No, the proposed action does not include piers and docks.

31. Does the proposed activity include **breakwaters, jetties, groins, or weirs**?

USACE Response: No, the proposed action does not include breakwaters, jetties, groins, or weirs.

32. Does the proposed activity include **dredging and/or dredge material disposal**?

USACE Response: No, the proposed action does not include dredging or disposal of dredged material.

33. Does the proposed activity include **shoreline habitat and natural systems enhancement projects**?

USACE Response: No, the project is a levee repair project conducted under the PL 84-99 authority and not "specifically for the purpose of establishing, restoring or enhancing habitat for priority species in shorelines" (per WAC 173-26-231(3)(g)).

C.4 Ocean Resources Management

1. Does the ORMA apply to the proposed activity, as identified in Section B.4?

USACE Response: No, the ORMA does not apply as identified in Section B. 4

C.5 Marine Spatial Plan for Washington's Pacific Coast

1. Does the MSP apply to the proposed activity, as identified in Section B.5?

USACE Response: The MSP does not apply.

A. Statement of Consistency

Based on the above evaluation, ***USACE*** has determined that the proposed Union Slough levee rehabilitation project is consistent with the applicable policies and regulations specified above. Thus, ***USACE*** considers the proposed action to be consistent to the maximum extent practicable with the enforceable policies of the approved State of Washington CZM Program.

References

CARB. (2007). CARB (California Air Resources Board). OFFROAD2007 Model—Mobile Source Emissions Inventory. Https://ww2.arb.ca.gov/our-work/programs/msei/offroad-models.

City of Everett. 2021. Rehabilitation Request Form. Prepared by: City of Everett, Public Works Department, January 15, 2021.

U.S. Army Corps of Engineers (USACE). 2021. Project Information Report, Rehabilitation Of Flood Control Works, Union Slough Levee, SNO-01-21. 36 pp.

Washington State Department of Ecology. 1990. Source Test Method 9A: Visual Determination of Opacity for a Three Minute Standard. 2 PP.

Appendix A – Site Photos

Figure 3. February 2021 documentation of flood-damaged levee.

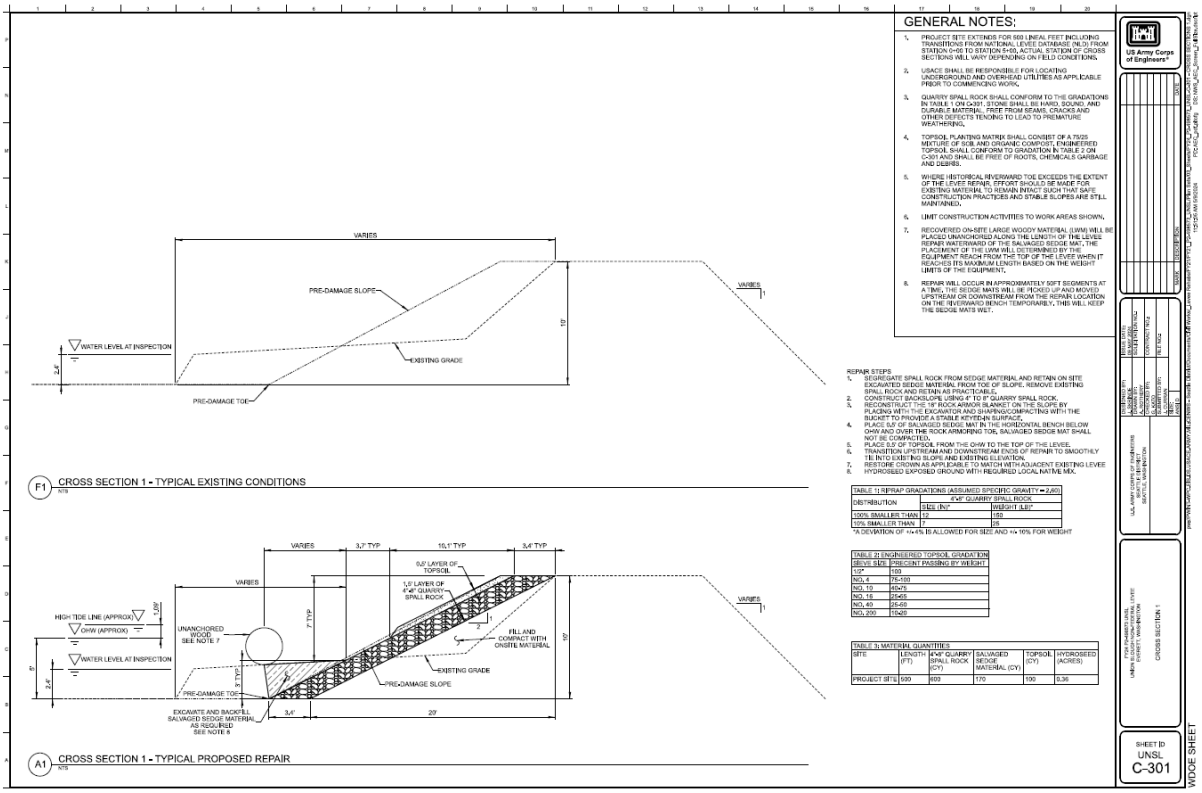
Figure 4. City of Everett temporary repair post-flood.

Figure 5. February 2021 damaged section of the levee between the state highway 529 overpasses.

Figure 6. February 2021 flood damage (outlined in red)

Appendix B – Design Plans


GENERAL NOTES:
1. PROPOSED LEVEE REPAIR SHOWN IN GRAYSCALE.
2. TOTAL AREA OF TIDAL WETLAND OUTLINED IN BRIGHT GREEN IS 9,794 SF.
3. TOTAL AREA OF TIDAL WETLAND LOST DUE TO THE LEVEE REPAIR IS 6,747 SF.
4. THE LOCATION OF THE TIDAL WETLAND UPSLOPE EXTENT COINCIDES WITH THE LOWER ELEVATION OF THE LEVEE SLOPE REPAIR.
SWING GATE
ACCESS ROUTE
WETLAND
LANDWARD WETLAND BOUNDARY
FENCE LINE
STAGING AREA
CULVERT OUTFALL
BRIDGE PIER
UNANCHORED WOODY MATERIAL
CADMAN HEIDELBERG CEMENT GROUP
EXISTING EDGE OF TIDAL WETLAND
A1 PROPOSED SITE PLAN WITH WETLAND BOUNDARIES
PROPOSED SITE PLAN
SHEET ID UNSL CS101
WDOE SHEET


GENERAL NOTES:
1. PROJECT SITE EXTENDS FOR 669 LINEAL FEET INCLUDING TRANSITIONS FROM NATIONAL LEVEE DATABASE (NLD) FROM STATION 0+00 TO STATION 5+00, ACTUAL STATION OF CROSS SECTIONS WILL VARY DEPENDING ON FIELD CONDITIONS.
2. USACE SHALL BE RESPONSIBLE FOR LOCATING UNDERGROUND AND OVERHEAD UTILITIES AS APPLICABLE PRIOR TO COMMENCING WORK.
3. QUARRY SPALL ROCK SHALL CONFORM TO THE GRADATIONS IN TABLE 1 ON C-301. STONE SHALL BE HARD, SOUND, AND DURABLE MATERIAL, FREE FROM SEAMS, CRACKS AND OTHER DEFECTS TENDING TO LEAD TO PREMATURE WEATHERING.
4. TOPSOIL PLANTING MATRIX SHALL CONSIST OF A 75/25 MIXTURE OF SCB AND ORGANIC COMPOST. ENGINEERED TOPSOIL SHALL CONFORM TO GRADATION IN TABLE 2 ON C-301 AND SHALL BE FREE OF ROOTS, CHEMICALS GARBAGE AND DEBRIS.
5. WHERE HISTORICAL RIVERWARD TOE EXCEEDS THE EXTENT OF THE LEVEE REPAIR, EFFORT SHOULD BE MADE FOR EXISTING MATERIAL TO REMAIN INTACT SUCH THAT SAFE CONSTRUCTION PRACTICES AND STABLE SLOPES ARE STILL MAINTAINED.
6. LIMIT CONSTRUCTION ACTIVITIES TO WORK AREAS SHOWN.
7. RECOVERED ON-SITE LARGE WOODY MATERIAL (LWM) WILL BE PLACED UNANCHORED ALONG THE LENGTH OF THE LEVEE REPAIR WATERWARD OF THE SALVAGED SEDGE MAT. ASSEMBLY OF LWM SHALL BE COMPLETED FROM EQUIPMENT REACH FROM THE TOP OF THE LEVEE WHEN IT REACHES ITS MAXIMUM LENGTH BASED ON THE WEIGHT LIMITS OF THE EQUIPMENT.
8. REPAIR WILL OCCUR IN APPROXIMATELY 50FT SEGMENTS AT A TIME, THE SEDGE MATS WILL BE PICKED UP AND MOVED UPSTREAM OR DOWNSTREAM FROM THE REPAIR LOCATION ON THE RIVERWARD BENCH TEMPORARILY, THIS WILL KEEP THE SEDGE MATS WET.
VARIES
PRE-DAMAGE SLOPE
WATER LEVEL AT INSPECTION
EXISTING GRADE
PRE-DAMAGE TOE
F1 CROSS SECTION 1 - TYPICAL EXISTING CONDITIONS
REPAIR STEPS
1. SEGREGATE SPALL ROCK FROM SEDGE MATERIAL AND RETAIN ON SITE EXCAVATED SEDGE MATERIAL FROM TOE OF SLOPE. REMOVE EXISTING SPALL ROCK AND RETAIN AS PRACTICABLE.
2. CONSTRUCT BACKSLOPE USING 4" TO 6" QUARRY SPALL ROCK.
3. RECONSTRUCT THE 18" ROCK ARMOR BLANKET ON THE SLOPE BY PLACING WATERWARD OF THE SALVAGED SEDGE MAT, BLEND TO PROVIDE A STABLE APPROACH SURFACE.
4. PLACE SIX OF SALVAGED SEDGE MAT IN THE HORIZONTAL BENCH BELOW OHW AND OVER THE ROCK ARMORING TOE, SALVAGED SEDGE MAT SHALL NOT BE COMPACTED.
5. PLACE 6.5' OF TOPSOIL FROM THE OHW TO THE TOP OF THE LEVEE.
6. TRANSITION UPSTREAM AND DOWNSTREAM ENDS OF REPAIR TO SMOOTHLY TIE INTO EXISTING SLOPE AND EXISTING ELEVATION.
7. RESTORE CROWN AS APPLICABLE TO MATCH WITH ADJACENT EXISTING LEVEE
8. HYDROSEED EXPOSED GROUND WITH REQUIRED LOCAL NATIVE MIX.
TABLE 1) RIPRAP GRADATIONS (ASSUMED SPECIFIC GRAVITY = 2.60)
DISTRIBUTION | 6"-9" QUARRY SPALL ROCK
SIEVE (IN)* | WEIGHT (LB)*
100% SMALLER THAN 12 | 150
10% SMALLER THAN 7 | 28
*A DEVIATION OF +/-4% IS ALLOWED FOR SIZE AND +/- 10% FOR WEIGHT
TABLE 2: ENGINEERED TOPSOIL GRADATION
SIEVE SIZE | PRECENT PASSING BY WEIGHT
1.0" | 100
NO. 4 | 75-100
NO. 10 | 40-75
NO. 16 | 25-60
NO. 40 | 25-60
NO. 200 | 10-20
TABLE 3: MATERIAL QUANTITIES
SITE | LENGTH (FT) | 6"-9" QUARRY SPALL ROCK (CY) | SALVAGED SEDGE MATERIAL (CY) | TOPSOIL (CY) | HYDROSEED (ACRES)
PROJECT SITE | 669 | 403 | 170 | 100 | 0.36
VARIES
3.7' TYP
15.1' TYP
3.4' TYP
0.2' LAYER OF TOPSOIL
1.6' LAYER OF 4"-6" QUARRY SPALL ROCK
HIGH TIDE LINE (APPROX)
OHW (APPROX)
1.58'
UNANCHORED WOOD SEE NOTE 7
7' TYP
FILL AND COMPACT WITH ONSITE MATERIAL
EXISTING GRADE
PRE-DAMAGE SLOPE
PRE-DAMAGE TOE
EXCAVATE AND BACKFILL SALVAGED SEDGE MATERIAL AS REQUIRED SEE NOTE 6
20'
A1 CROSS SECTION 1 - TYPICAL PROPOSED REPAIR
CROSS SECTION 1
SHEET ID UNSL C-301
WDOE SHEET

Appendix C - Best Management Practices

To minimize environmental impacts during construction activities, USACE will incorporate the following best management practices (BMPs) into the action:

1. All construction activities will occur during daylight hours to minimize noise impacts to the surrounding community.
2. In-water work will be limited to the in-water work window (June 1 to October 31) and minimized to the extent possible.
3. Temporary erosion control measures will be installed for all phases of work as required to prevent the discharge or accumulation of sediment into the river, the wetland, or off-site. These may include silt fencing, mats, blankets, bonded fiber matrix, and straw. Accumulation of sediment in any adjacent swales or storm drains will be monitored daily and cleared to ensure continued service throughout construction.
4. Water quality monitoring for turbidity will be performed as outlined in the Water Quality Monitoring Plan (Union Slough Biological Assessment, Appendix B). If a potential exceedance is detected at the point of compliance locations, on-site personnel would stop work, assess sediment generating activities, and develop corrective measures. Examples may include slowing down a specific in-water activity and changing the amount of material that is moved below the waterline.
5. Vegetation removal will be limited to the repair site.
6. Noxious weeds will be disposed of separately from other organic materials at an off-site location approved for disposing noxious weeds. Himalayan blackberry and Japanese knotweed, including the root system, will be removed and disposed of appropriately. Because knotweed can regrow from small pieces, care will be taken to prevent fragments from falling into the river. Removed Himalayan blackberry and Japanese knotweed will not be placed in a compost pile or left to rot on-site.
7. Construction equipment will be cleaned prior to site delivery.
8. Low sulfur fuel will be used..
9. Drive trains will not operate in the water. Only the excavator bucket with thumb attachment will extend into the water.
10. Refueling of equipment and vehicles will take place in only designated staging areas.
11. Biodegradable hydraulic fluids will be used as appropriate in any portion of the equipment that will work in the water.
12. Construction equipment will be regularly checked for drips or leaks and immediately removed from service until corrected.
13. At least one fuel spill kit with absorbent pads will be on site at all times.
14. Material placement into the water will be done in a controlled manner to reduce turbidity and in-water noise generation. No end dumping of rock into the water will occur.
15. Rock placement will occur only within the authorized project footprint.
16. Rock placement and underwater excavation will occur from the upstream end of the project to the downstream end. Rock is placed shortly after excavation so it will act as a localized flow deflector and help manage flows in the installation areas.

17. A water truck will be positioned at the construction site to spray water on material or activities to prevent airborne dust.
18. All disturbed soils will be topped with topsoil and hydroseeded with a native grass mix. This includes the staging areas and access paths that are not graveled or paved.
19. Should any large woody material (LWM) be generated or found on site during repairs, it will be salvaged and placed above the MHW along the completed toe of the repaired levee where it can continue to provide habitat function. This includes any tree trunks or large shrubs at the Union Slough levee repair site. The LWM may be placed after a section of levee is completed or after the entire repair is completed. Root wads will be oriented to face upstream.
20. All trash and unauthorized fill (including concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, floating debris, and paper) generated during the repair will be removed from the project and staging areas after work is complete.
21. A pre-construction meeting will be conducted to look at existing conditions and any possible fine-tuning that could be done for BMPs or environmental requirements. The pre-construction meeting may include outside resource agencies like USFWS or NMFS.

Appendix D - Comparison of conservative estimate of pollutant emissions for the Union Slough Levee Repair Project to EPA and Washington State de minimis, insignificant, and exemption levels and Puget Sound Clean Air Agency's thresholds for registration and emissions reporting

Pollutant	EPA's *de minimis* Threshold * (maintenance area) (tons/yr) (40 C.F.R. 93.153(b)(2))	EPA's *de minimis* Threshold * (non-attainment area (NAA)) (tons/yr) (40 C.F.R. 93.153(b)(1))	WA State's "Exemption levels" for exemption from New Source Review (WAC 173-400-110, Table 110(5)) (tons/yr)	WA State's "Insignificant Emission Thresholds" + (tons/yr) (WAC 173-401-530)	Puget Sound Clean Air Agency's "Registration and Reporting Threshold Levels" ^ (tons/yr)	AQMD model output for Union Slough Levee Repair Project (tons/yr) #
Carbon monoxide (CO)	100	100	5	5	25	0.21
Lead (Pb)	25	25	0.005	0.005	0.5	-
NO_2	100	100	[see NO^x]	[see NO^x]	[see NO^x]	[see NO^x]
Nitrogen oxide (as NO^x)	100	Inside O_3 transport region: 100 Outside an O_3 transport region: 10-50 (extreme to serious NAA) or 100 (other NAAs)	2	2	25	0.33
Ozone/Volatile Organic Compounds, total	Inside O_3 transport region: 50 Outside O_3 transport region: 100	Inside O_3 transport region: 50 Outside an O_3 transport region: 10-50 (extreme	2	2	25	-

		to serious NAA) or 100 (other NAAs)				
Ozone-depleting substances, total			1	2		-
PM (total)			1.25 [total suspended particulates]			0.014
Particle pollution PM2.5	Direct emissions, SO2, NOx, VOC, Ammonia: 100	100 (moderate NAA) 70 (serious NAA)	0.5		25	-
Particle pollution PM10	100	100 (moderate NAA) 70 (serious NAA)	0.75	0.75	25	-
Sulfur dioxide (SO_2)	100	100	2	2	25	0.001 (as SO^x) ^^
Carbon dioxide (CO_2)						52.9
Methane (CH_4)						0.004
Fluorides				0.15		-
Hydrogen sulfide (H_2S)				0.5		-
Sulfuric acid mist				0.35		-
Total reduced sulfur (incl H_2S)				0.5		-

Toxic air pollutants (TAP)			The *de minimis* emission rate specified for each TAP in WAC 173-460-150++.		2-2.5 of any single hazardous air pollutant (HAP) or 6-6.25 of total HAPs	-

* EPA's de minimis emissions levels: 40 C.F.R. 93 § 153 defines *de minimis* levels, i.e., the minimum threshold for which a conformity determination must be performed, for various criteria pollutants in various areas (https://www.epa.gov/general-conformity/de-minimis-emission-levels and https://www.epa.gov/general-conformity/de-minimis-tables). General conformity ensures that the actions taken by Federal agencies, such as airport construction, do not interfere with a state's plans to attain and maintain national standards for air quality. "For Federal [non-transportation] actions . . . , a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(1) [table of *de minimis* levels for nonattainment areas] or (2) [table of *de minimis* levels maintenance areas] of this section" (40 C.F.R. 93.153(b)).

+ Insignificant emission thresholds: WAC 173-401-530(4) lists "criteria for identifying insignificant emission units or activities for purposes of the operating permit program." (WAC 173-401-530(1)) "Testing, monitoring, recordkeeping and reporting are not required for insignificant emissions units and activities unless determined by the permitting authority to be necessary . . ." (WAC 173-401-530(2)(c)). "An emission unit or activity shall be considered insignificant if it qualifies under subsection (1)(b), (c) or (d) of this section, or if its actual emissions, based on methods approved by the permitting authority, are below the practical quantification limit (PQL), or are less than or equal to all of the following threshold levels: [see column above] (WAC 173-401-530(4)).

++ WAC 173-460-150 is a table of hundreds of pollutants and their small quantity emission rates and *de minimis* levels.

^ PSCAA Regulations (https://pscleanair.gov/219/PSCAA-Regulations):

Regulation I: Article 5: Registration, Section 5.03 Applicability of Registration Program, (a) (3) Sources with annual emissions: (A)-(C); and Section 5.05 Registration Requirements (b) The owner or operation . . . shall submit a report . . . listing the emissions of those air contaminants emitted during the previous calendar year that equaled or exceeded: (1)-(3).

Regulation I: Article 7: Operating Permits, Section 7.09 General Reporting Requirements for Operating Permits, (a) Emission Reporting.

^^ Use of ultra-low sulfur fuel is required by EPA, WAC 173-400-035(3), and PSCAA's emission standards (Regulation I, Section 15.05 Emission standards, (a)).

Assumptions for conservative calculation of emissions for Union Slough Levee repair using California's South Coast Air Quality Management District calculator for non-road engines (http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/off-road-engines): 1) maximum duration of 20 days (5 days/week for 4 weeks); 2) operation 10 hrs/day; 3) equipment type with

maximum likely horsepower (HP) (equivalent of full-time operation of 2 excavators (175 HP), 1 skid steer (50 HP), and 2 dump trucks (500 HP)), and 4) average age of equipment in fleet of 9 years (average model year of 2015).

No sources of fluorides (e.g., coal burning, fertilizer manufacturing from phosphate rock, aluminum production, oil drilling and refining) are associated with this project. (Fluoride is listed as an air contaminant in the definition of "emission threshold" at WAC 173-400-030(30).)