

FINDING OF NO SIGNIFICANT IMPACT
2012 Union Slough Levee Rehabilitation
Snohomish County, Washington

1. Background. Flooding occurred on the Snohomish River in January 2009 with a peak stage of 24.12 feet at the Monroe gage (flood stage of 15 feet) resulting in damage to the Union Slough levee system at two sites. River flows damaged the right bank levee (site 1) of the Snohomish River at the south end of Smith Island and the left bank levee on Union Slough at the north end of the island. Loss of embankment material occurred at both sites. Site 1, along the Snohomish River, is 650 feet long, within this length 460 feet of in-water work is anticipated. Site 2, along Union Slough, consists of two areas of damage, 830 and 480 feet long. In the current condition, the levee offers a 5-year level of flood protection. While the level of protection can be difficult to determine in tidally influenced areas and previous reports have used various protection levels, the levee did not overtop during the 15-year flood event in 2009, therefore the levee is estimated to offer a 20-year level of protection in its undamaged pre-2009 flood condition.

Before repairs could be completed, another high water event occurred with a peak of 13.32 feet at the Monroe gage on 22 February 2012. During the high water event the Corps, along with Diking District #5, determined that immediate repairs were required to protect the integrity of the levee. This emergency construction occurred 21 February through 23 February on the left bank of Union Slough. Eighty-eight feet of Class II/III riprap was placed on the riverward face of the levee at site 2. Emergency repairs were hampered by accessibility and roughly 1,875 feet of temporary access road was improved, resulting in 0.73 acres of wetland impacts. In addition, 735 feet of the levee crown was reinforced with crushed gravel to allow truck access. While the flood fight repair increased stability of a small portion of the levee through the ongoing event, more repairs are needed to fully restore the flood protection capability of this system.

The Union Slough levee project is located near the City of Everett in Snohomish County, Washington, Diking District 5. The levee system is approximately 45,000 feet in length and protects much of Smith Island. Approximately 13 public facilities and businesses exist on Smith Island, including the City of Everett Water Pollution Control Facility, Dagmar's Marina, Buse Timber Sales Hima Farm and the City of Everett's Humane Society. Interstate 5 also traverses the island, but the highway is higher than the levee system throughout this area.

The purpose of the proposed construction is to repair and restore the damaged levee system to the 20-year level of flood protection as found prior to the January 2009 flood event in order to protect lives and property from subsequent flooding. In the current condition, the levee offers only a five year level of protection and any flows greater could result in levee failure and resulting overbank flooding.

2. Proposed Action. The project includes proposed repairs to two non-contiguous sites and one emergency repair constructed during the 2012 flood season. Site 1 has discontinuous damage along 650 feet of levee. The removal of vegetation along the 650 feet of riverward slope will more clearly show which sections require repair within that area, estimated to be 460 feet. Class II riprap armor will be used, as consistent with the surrounding area. As described above, emergency repairs along a portion of Site 2 were completed during flood fight activities in

February 2012. To fully restore the flood protection, further work is required at site 2. The proposed construction includes work at two separate locations in Site 2; the west site is 830 feet and the east site is 480 feet. The Site 2 repair will repair and armor an existing earthen berm. All proposed in-water work would be completed during the approved in-water work window (1 August – 31 October) for this area and is expected to take approximately 4 weeks to construct.

3. Impacts Summary. Pursuant to the National Environmental Policy Act (NEPA), the attached Environmental Assessment (EA) has been prepared. The EA evaluates the environmental impacts associated with the emergency actions and the proposed action and whether those actions would cause significant effects to the quality of the human environment as briefly summarized below.

Through a combination of Corps project priority determinations and funding timelines, it was not feasible for the Corps to complete all NEPA procedures prior to accomplishing the Federal emergency response activities during the flood event of February 2012. The action taken in 2012 was an emergency response designed to avert more widespread damage that may have resulted from progressive levee failure originating at the vulnerability point generated by 2009 damage. In February 2012, the District Engineer made real time decisions, communicated verbally, to proceed with any action having the potential to affect the quality of the human environment, in the absence of full NEPA evaluation and documentation, in light of the urgent circumstances then presented. The agency complied with NEPA "to the fullest extent possible" under the circumstances, with respect to emergency response activities during and after the ongoing flood event.

Site 1 was an armored bank previous to the damage and will be replaced with an armored bank, however a small amount of sedge wetland (0.02 acres) has become established in the footprint and will be impacted by the repair. Repairs to Site 2 will convert approximately 0.7 acres of intertidal wetland and muddy bottom habitat to an armored bank. Compensatory mitigation is proposed at a 2-to-1 ratio to offset the loss of habitat and water quality function. The proposal includes purchase of 1.45 acres of offsite mitigation at the City of Everett advanced mitigation site upstream on Union Slough. The mitigation site is designed to restore intertidal salmon rearing habitat that historically existed along Union Slough. Because the site is on Smith Island and will provide similar habitat characteristics, it is being considered as in-kind mitigation in close proximity to the impacted area. USACE finds that this project is within the public's interest and complies with the substantive elements of Section 404 of the Clean Water Act. Clean Water Act compliance review was conducted by the Washington State Department of Ecology and a Water Quality Certification was received on 23 July 2012.

The Corps has determined that the project is consistent with the Washington Shoreline Management Act, based on review of applicable sections of the State of Washington Shoreline Management Program and policies and standards of the Snohomish County Shoreline Management Plan, as well as the City of Everett's Shoreline Master Program. As per each of these shoreline management documents, the repair of a diking system that was established prior to 1975 is exempt. Records show that improvements to the levee were made by the Board of County Commissioners in 1931, therefore the Corps has determined that the project is exempt, as per RCW 90.58.030. The project is also consistent with the five other enforceable policies of the

Coastal Zone Management Act (CZMA). The Corps received a CZMA consistency concurrence from Ecology on 30 July 2012.

The Corps has determined that the Union Slough Preferred Alternative is an undertaking of the type that has No Potential to cause effects to Historic Properties under the National Historic Preservation Act, as the levee system has been recommended as ineligible for the National Register of Historic Places and all activities will be conducted within demonstrated limits of previous construction activities. The project has complied with the National Historic Preservation Act and the Corps has coordinated with all recognized Native American Tribes in the project vicinity.

A Biological Assessment (BA) of the impacts of the completed emergency response and the proposed repairs of the Union Slough Levee Rehabilitation project was sent to the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) on 21 May 2012. The BA analyses concluded that the change in substrate and loss of emergent wetlands required to repair the damaged levee *is likely to adversely affect Puget Sound steelhead, Puget Sound Chinook, and bull trout and is likely to adversely affect Chinook and bull trout critical habitat*. While an impact may be seen to Chinook, a main killer whale prey species, that impact was not expected to be sufficient to impact this species. The BA found that the project *may affect but is not likely to adversely affect Southern Resident killer whale or their critical habitat*. NMFS provided their findings in a Biological Opinion dated 30 July 2012. Reasonable and prudent measures to limit impact to Chinook and steelhead were provided. These include the purchase of credits to offset impacts, use of best management practices, and turbidity monitoring. These measures will be implemented as a part of the construction. Consultation with the USFWS is ongoing. Draft Reasonable and Prudent Measures and Terms and Conditions were received on 5 September 2012. These include working in the dry at low tide to the extent possible and placing rock individually in a slow controlled manner if in-water work is required.

The Corps will commit to fully funding and performing all Reasonable and Prudent Alternatives necessary to avoid the likelihood of jeopardy to listed species or destruction or adverse modification of designated critical habitat, as well as Reasonable and Prudent Measures (RPMs) necessary and appropriate to minimize the impact of Incidental Take, that are described in a Biological Opinion is received. The Environmental Assessment will be reevaluated at the time that consultation with USFWS is complete. If necessary, this EA will be supplemented with necessary and applicable corresponding modifications to the scope and/or nature of the project, the procedures and practices used to implement the project, and/or the type and extent of compensatory mitigation associated with the project.

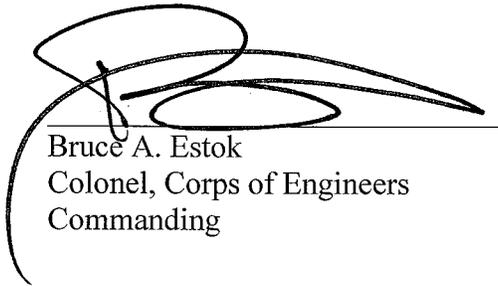
Unavoidable adverse effects associated with this project include: (1) a temporary and localized increase in noise and emissions, which may disrupt fish and wildlife in the area, (2) a temporary and localized disruption of local traffic by construction vehicles, (3) a temporary and localized increase in turbidity levels during in-water construction which may affect aquatic organisms in the area, (4) temporary relocation and disturbance of recreation trails and facilities at the project sites, (5) removal of vegetation from within the proposed construction areas, (6) temporary impacts to wetlands from the road improvements completed as a part of the emergency response, and (7) a permanent change from the earthen bank at Site 2 to an armored bank. The proposed

mitigation offsets the permanent impact to wetlands and intertidal mudflat habitat at the City of Everett advanced mitigation site. The inclusion of the mitigation along with the availability of similar nearby habitats and the minimization of vegetation removal decreases the impact to less than significant levels. The Diking District plans to remove the temporary wetland fill to return the access road to pre-project condition after the proposed levee repair is completed. The other unavoidable impacts would be short in duration and considered insignificant.

4. Conclusion. I find that the proposed action will not result in significant adverse environmental impacts and complies with all applicable laws, regulations, and agency consultations, including the Clean Water Act, Endangered Species Act, Coastal Zone Management Act, and National Environmental Policy Act, as well as Executive Orders. Based on the analysis described above and provided in more detail in the accompanying Environmental Assessment, the 2012 Union Slough Levee Rehabilitation is not a major Federal action significantly affecting the quality of human environment, and therefore, does not require preparation of an environmental impact statement.

14 Sep 12

DATE



Bruce A. Estok
Colonel, Corps of Engineers
Commanding