



US Army Corps  
of Engineers®  
Seattle District

## Notice of Preparation / Clean Water Act Public Notice

Planning, Environmental and Cultural  
Resources Branch  
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ATTN: Elizabeth McCasland (PMP-E)

Public Notice Date: 10 April 2019  
Expiration Date: 10 May 2019  
Reference: PMP-18-02

PROJECT NAME: *Elmway Levee Rehabilitation, Okanogan County, Washington*

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Interested parties are hereby notified that the U.S. Army Corps of Engineers, Seattle District (Corps) plans to prepare, pursuant to the National Environmental Policy Act (NEPA), an environmental assessment (EA) for proposed and previously completed levee repairs to the Elmway Non-Federal Levee, constructed along the right bank of the Okanogan River upstream of Okanogan, Washington. Emergency work was completed in May 2018, and further repair is expected to be conducted in 2019. Repairs are intended to address damage caused during the May 2017 and May 2018 flood events when the Okanogan River exceeded the flood stage. The purpose of this Notice is to solicit comments from interested persons, groups, and agencies on the Corps' proposed action under NEPA.

A further purpose of this Notice is to solicit comments on the proposed disposal of fill material into the waters of the U.S. under the Clean Water Act. This Public Notice is being issued in accordance with rules and regulations published as 33 CFR 335 "Operation and Maintenance of Army Corps of Engineers Civil Works Projects Involving the Discharge of Dredged or Fill Material into Waters of the U.S. or Ocean Waters"; 33 CFR 336 "Factors to be Considered in Evaluation of Army Corps of Engineers Dredging Projects Involving the Discharge of Dredged Material into Waters of the U.S. and Ocean Waters"; 33 CFR 337 "Practice and Procedure"; and 33 CFR 338 "Other Corps Activities Involving the Discharge of Dredged Material or Fill into Waters of the U.S."

### AUTHORITY

The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code Section 701n). The Corps' rehabilitation and restoration work under this authority is limited to the repair of flood control works damaged or destroyed by floods. The statute authorizes rehabilitation to the condition and level of protection exhibited by the flood control work prior to the damaging event. Okanogan County is the levee owner and non-Federal sponsor of the proposed action.

## PROJECT LOCATION and DESCRIPTION

The Elmway Levee is comprised of a rock and earthen embankment levee along Okanogan River, approximately river mile 26.6 to 26.0, in the City of Okanogan, Washington (Figures 1 and 2). The levee is 1,880 long; 6 feet tall on the landward side; 12 feet wide at the crown; and has side slopes of 2 Horizontal (H):1 Vertical (V) riverward and landward. As-builts for this levee do not exist. An as-built for a 1972 repair to a levee about a mile downstream (Okanogan Segment 2) exists that shows a 2 ft blanket of Class III riprap placed to the top of the slope with a 10 ft wide by 5 ft high launchable toe. These old as-builts represent the only known available historical designs near the current repair site. Although the 1972 drawing is not specific for this particular levee, it is indicative of what is most likely to have been constructed at this location. Inspection reports from 2002 to 2014 indicate shrubs and small trees were present on the levee in the reach that is the subject of this NOP, prior to the 2018 flood event. The exact nature of the pre-flood condition of this levee is not known. Heavy vegetation obscured much of the slope during past inspections. Observations made during the 2017 site visit during the post-damage assessment indicated remnants of a riprap blanket that was eroded away by high flows.

## NEED

Excessive snow melt in the springs of 2017 and 2018 resulted in two major run off events which damaged the Elmway Levee. In the spring of 2017, the river exceeded flood stage from May 13-14, and from May 23-June 5 measured at the Tonasket, WA river gage upstream of Okanogan. During the May 23-June 5 event, the river exceeded moderate flood stage of 17 ft. for two days (June 1-2). Based on flow and stage data, the 2017 floods have reduced the level of protection from 2 percent (50-yr) to 33 percent (3-yr) annual chance exceedance (ACE).

In May 2018 a larger flood occurred that further damaged the levee. Rapid snowmelt resulted in 25 days of sustained flows exceeding flood stage along the Okanogan River from May 5-30. The river exceeded 17 ft. for 14 days (May 8-22). The Corps began an emergency repair on May 7, 2018 (Figure 4) after accepting Okanogan County's request for direct assistance for the flood-fight. The purpose of the emergency repair was to temporarily provide supplemental protection, in light of the structure's condition as damaged by 2017 and 2018 flooding, to prevent levee failure. However, even with the addition of armor rock, part of the levee prism remains compromised and scour protection was not fully restored along the levee toe by the floodfight action due to high water level. In the damaged condition, the levee presently provides an approximate 3-year level of protection. If the levee were to fail, there would be an increased risk to life safety, improved property (commercial and residential structures), and public infrastructure (roads, power, water, and septic sewer systems). The levee armor needs to be reworked to bring it back to the 50-year level of protection.

## PURPOSE

The purpose of the project is to restore the pre-damage level of flood protection exhibited prior to the 2017 flood event to protect lives and property from subsequent flooding.

## ACTIONS ADDRESSED UNDER NEPA

The Corps conducted temporary emergency repairs between May 7 and 11, 2018 to supplement local efforts during the 2018 flood. Shoreline and river impacted by construction activities was restricted to the areas of the damaged levee. The team used an excavator to clear small vegetation from the upper slope of the damaged locations and placed riprap in the active scour pockets of the riverward slope. The temporary measures executed in May 2018 involved work from the top of the levee, placing material by bucket load in a controlled manner to provide a blanket of armor to reduce the impacts from the high-velocity flows and high water levels. The emergency repairs included the removal of remaining vegetation and the placement of approximately 1000 cubic yards (cy) of Class III to Class VI riprap along approximately 400 linear feet of the riverward slope of the levee. The riprap that was placed reduced erosion from the high river velocities and reduced the risk of levee failure from slope instability and seepage. The flood fight emergency response efforts were necessary to prevent catastrophic levee failure. Approximately 90% of the areal coverage of the pre-existing shrubs and smaller vegetation had been lost as a result of the flood flows. The remainder of the smaller vegetation and three trees were removed as a necessary element of the emergency repair.

For the prospective repairs in 2019, four alternatives are being considered as follows:

- No Action Alternative. The No Action Alternative would leave the levee in its current damaged state. This alternative would not meet the project purpose because the levee would likely be further damaged in future flood events and could fail which would endanger protected homes, businesses and public infrastructure during future flood events.
- Repair In Kind. This alternative repairs the levee by returning it to the pre-flood condition with minor change to the character, scope, or size of the levee. This alternative maintains the status quo of the river and levee at the repair location as existed prior to the flood damage. The design uses updated engineering techniques including a thicker armor blanket (Figure 3).
- Non-Structural Alternative. This alternative consists of floodplain management strategies generally involving changes in land use offered by other federal and state programs. Such strategies would include: zoning, easements, flood warning, floodplain evacuation, and flood insurance. Nonstructural strategies involve acquisition, relocation, elevation, and flood proofing existing structures. The costs and timeframe for implementing this alternative makes it impractical. Furthermore, the participation of the non-Federal sponsor would be required to implement a non-structural alternative, and the Sponsor has not agreed to meet its various obligations in executing a non-structural alternative. In addition, physical construction has already taken place during the flood fight and thus structural elements of the project have already been implemented.
- Set Back Levee. This alternative would shift the alignment of the levee embankment landward by the necessary distance in order to avoid or minimize direct contact with the river current. Typically, the setback would be a newly-constructed earth embankment structure and would abandon the existing levee located on the river bank. It may not be able to be completed prior to the next flood season and may be

more costly than other alternatives due to more extensive embankment material requirements. This approach would encroach on existing structures and privately-owned land currently used for residential and business purposes. This alternative would also require participation of the non-Federal sponsor to implement, and the Sponsor has not agreed to meet its various obligations in executing a setback alternative. In addition, physical construction has already taken place within the existing footprint during the flood fight, reflecting a commitment of resources to the present alignment and thus reducing the viability of this alternative for the 2019 repairs.

- The Repair In Kind Alternative was selected as the preliminarily recommended alternative for the Elmway Levee repair. This alternative would incur the least cost to restore the full level of protection. Final selection of the preferred alternative will be made after final design has been completed. The alternatives will be evaluated according to NEPA. Any recommendations that emerge from NEPA and the Endangered Species Act (ESA) evaluation will be considered. All NEPA and ESA processes are intended to be completed prior to project construction.

The Corps proposes to construct a more permanent repair to the damaged levee in 2019. The proposed repair would replace the temporary repair constructed during the 2018 flood fight, including the removal of the Class IV to Class VI rock. All work for the proposed repair would occur within the designed and pre-damage footprint. There has been some loss of erosion protection through the years, and the levee profile appears to have undergone modification between original construction and the 2017 flood. Figure 3 shows the deviation between the initially designed weighted/launchable toe design profile and the prospective repair profile, which will be engineered to current riverine conditions. A launchable toe is not appropriate for this site under present flow conditions. A uniformly thick riprap blanket extending up part of the slope, backed by quarry spalls, was preliminarily selected as the recommended design. The height up the slope of the riprap blanket was selected to match the field-located remnant rock bench, which is above the assumed ordinary high water line. Class III riprap was preliminarily selected based on good performance of this gradation on nearby recent and historic repair projects on the same river, and on flow velocity of the river. A 2 Horizontal: 1 Vertical slope was preliminarily selected based on current Corps standards for levee slope stability and general performance. Current Corps levee design standards, good engineering practice, and local standards for layer thickness and slope grade provided the basis for estimating the riverward extent of the pre-flood location of the riverward toe, which would also be consistent with the riverward extent of the proposed levee repair, so that the riverward toe location of the 2018 proposed repair would not extend outside of the toe location of the 1972 repair. As reflected in Figure 3, while the footprint of the toe section would be pulled landward as compared with the initial design, in the repair design the cross-section of the riverward levee face between the top elevation of the historic toe and an elevation just above the ordinary high water line would be extended riverward to form a three-foot blanket. The net change in protrusion of the levee's riverward face into the waterway, comparing the 1972 repair and the proposed repair, would be an addition of 415 CY of riprap which constitutes fill in the Waters of the U.S.

The proposed repairs would salvage suitable flood fight material for reuse into the final repairs. The 2019 repair would re-establish the riprap toe and slope in the damaged areas. Repairs will include removal of the existing riprap, regrading the riverward slope to achieve 2H:1V slope, replacement of the quarry spall layer, re-placement of salvaged Class III flood fight material, and finally placement of a 3-ft blanket of Class III riprap. Approximately 500 CY of additional riprap will be required to complete the repair. The armor rock will be placed by bucket load in a controlled manner down to the toe of the slope. Access to the site would primarily be on existing roads or paths. Total construction length of the levee repairs, including smooth transitions into the existing slopes, would be approximately 400 feet; this 400-lf segment would be the same footprint as was encompassed in the May 2018 emergency repair. From start to completion, the 2019 repair is expected to take four (4) weeks.

The Corps has developed a list of conservation measures and incorporated these into the levee repair to reduce environmental impacts of the repair. For this project the measures are:

- Willow and cottonwood planting, maintenance, monitoring, and adaptive management
- Additional off-site planting of cottonwood to compensate for loss of vegetation cleared due to construction
- Additional off-site planting of red osier dogwood, coyote and Drummond willow for the additional fill in Waters of the U.S.
- Hydroseeding
- In-water work will be limited to the in-water work window (July 1 - August 15).

Best management practices would be employed to minimize project impacts. Project construction includes environmental enhancements to offset temporary construction impacts and long-term loss of vegetation on the levee slope. Environmental enhancements will be assessed further during the NEPA analysis, including full consideration of those proposed by agencies during NEPA coordination. Appropriate enhancements would be incorporated into the project during Engineering and Design. Environmental enhancements already incorporated into the design concept include best management practices to protect water quality.

## CONDITIONS PRE-EXISTING THE 2017 FLOOD

The Elmway Levee is along the urbanized right bank of the Okanogan River. The levee is an average of 6 feet tall on the landward side, sloping 12-15 down on the riverward side, with a 12-ft crown, constructed of earthen material, predominately sand and gravel with Class III riprap armoring and a launchable toe. Prior to the 2018 flood the levee was vegetated with approximately 25 smaller deciduous trees/large shrubs, approximately 20-ft tall, 4-8 inches DBH; and 3 or 4 larger trees; approximately 40 ft tall. Species were predominately mountain alder (*Alnus incana* spp. *tenuifolia*), wild rose (*Rosa* spp.), and red-osier dogwood (*Cornus stolonifera*) as well as grasses and forbs. Approximately 90% of the areal coverage of the pre-existing shrubs and smaller vegetation was lost as a result of the flood flows. The remainder of the smaller

vegetation was removed as a necessary element of the May 2018 repairs. Most of the pre-existing trees were lost as a result of the flood. Three trees were removed as a necessary element of the 2018 repairs. Human impacts along the Okanogan River have included road construction, conversion of riparian habitat for agricultural, residential, and commercial development, and water diversion for agricultural irrigation. These impacts can increase sedimentation and bank erosion, reduce the extent and availability of riparian vegetation, and limit channel function.

## IMPACTS OF THE PROJECT

The Corps' preliminary analyses of the principal effects of (a) the May 2018 temporary emergency repair activities and (b) the prospective 2019 permanent repairs are summarized below.

**Wetlands:** No wetlands are located within or immediately adjacent to the project area. (a) Access roads and staging areas were not located in jurisdictional wetlands during the May 2018 temporary emergency repair. (b) Access roads and staging areas are not projected to be located in jurisdictional wetlands during the 2019 permanent repair action.

**Water Quality:** The Okanogan River is listed by Washington Department of Ecology (Ecology) on the State's 303(d) list of impaired waters for DDT and PCBs in edible fish tissue, as well as for non-attainment of Washington's criteria for DDT in water. (a) The May 2018 emergency flood repair occurred when the river was already highly turbid. Although no turbidity monitoring was conducted, the work was unlikely to cause turbidity greater than the already high background conditions. The emergency repair only utilized clean rock free of contaminants. Best management practices, including restrictions on fueling and prevention of fluid leaks from construction equipment were in place to minimize discharge of pollutants into the river.

(b) The proposed permanent repair action would require work in the active channel with some work below the elevation of ordinary high water. Construction could be expected to cause minor, temporary, localized increases in turbidity. Best management practices, including restrictions on fueling and prevention of fluid leaks from construction equipment would be employed that would minimize discharge of pollutants into the river. Quarry rock and spalls used for the repair would be clean, and contaminant free. Turbidity would be monitored upstream and downstream of the project site during construction, as required. If turbidity exceeded state water quality standards, particulate-generating activities would be halted until standards were met and construction methods would be changed to avoid further exceedances.

**Aquatic Resources:** (a) Impacts to aquatic resources from the completed flood fight included possible injury or displacement of aquatic species as a result of placing riprap into the water along the slope of the damaged levee. Since the construction work occurred during the peak of a flood, any impact from construction was minimized due to the flood conditions of rapidly moving, noisy and highly turbid waters. Most species of fish would not be expected to occur in waters immediately adjacent to the levee during



the short duration of the emergency repair. This is due to the fact that this was a high energy and turbulent location that was actively eroding which are conditions that most species of fish avoid. If fish were present in the vicinity during the flood, they would more likely occur on the opposite bank which is the inside of bend in the river that has a lower velocity and less turbulent flows. The 2018 emergency repair resulted in a change to the shoreline habitat by adding riprap larger (i.e., greater than Class III) than previously existed at the site and by removing approximately 10% of the shrub and smaller vegetation, as well as three trees, that pre-existed the event but survived the flood conditions. It is possible that the larger rock size could be preferred habitat for predatory fish, such as smallmouth bass which could prey on juvenile salmonids.

(b) Projected impacts to aquatic resources from the proposed permanent repair action include possible displacement or injury due to excavation and placement of riprap along the slope of the levee, temporary degraded water quality associated with excavation, and potential impacts to fish migration. The work will also result in a net fill of riprap into waters of the U.S. due to a thicker riprap blanket than existed before the flood.

Given the location of proposed repair, use of an open bucket excavator, and relatively slow speed of excavation; it is reasonably certain that the risk of injury to aquatic species from the completed and proposed excavation activities is low but not insignificant.

Short-term, localized project-related increases in turbidity levels would likely occur as a result of in-water toe or bank excavation, rock placement for toe rock, and rock placement for bank construction during the proposed repair. Short-term increases in turbidity around the action areas resulting from work below the OHWM would be temporary and are not expected to result in long-term adverse effects to aquatic species, or significant net change in function of the in-stream habitat.

Disturbance from vibration from the flood fight and the proposed action is possible during construction, stemming from delivery and dumping of rock on land as it is staged for construction, and as a result of excavation and placement of rock along the riverward face of the levee. Vibrational disturbance during the proposed construction would be minimized by working from the top of the bank, avoiding in-water excavation, and placing rock individually or in small bucket loads (no end-dumping into the river). Following these construction techniques it is reasonably certain that impacts to aquatic species resulting from equipment use or rock placement during construction would be minimal, but not entirely insignificant or discountable for injury or long-term adverse behavioral effects.

Adult fish migrating upstream at the time of construction may be temporarily delayed at the construction site due to disturbance and/or turbidity. If construction does interfere with migration, breaks in the work during the day or overnight would allow migration to continue minimizing any effect. The degree to which aquatic species use the specific project locations for spawning is unknown. The area affected would be limited to the

portion of the channel adjacent to the levee and the proposed actions would likely have no long-term effect on migrating or spawning fish species.

**Terrestrial Resources/Wildlife:** (a) The effects of the 2018 emergency temporary repair on terrestrial resources and wildlife included a change to the shoreline habitat from removal of the remaining vegetation that was not lost to active erosion in the damaged area. This loss of riparian vegetation may displace wildlife and slightly reduce in-water shade and organic input to the river. The loss of trees would affect wildlife habitat by reducing cover, perching, foraging, and nesting opportunities. These effects would be mitigated by plantings incorporated into the 2019 repair as well as plantings in the upstream mitigation area, as further detailed below. Effects on wildlife likely included displacement of birds and other small vertebrates as a result of construction activities. Construction would also cause temporary displacement of birds in the project area due to noise and the presence of human activity. Construction may temporarily displace small mammals and may injure or cause mortality of reptiles and rodents.

(b) The effects of the proposed repairs on wildlife would likely include displacement of birds and other small vertebrates as a result of construction activities (noise, operation / movement of equipment and personnel, ground disturbance). The loss of trees during the 2018 repair and additional fill into Waters of the U.S. would be mitigated by plantings incorporated into the repair as well as plantings in the upstream mitigation area, as further detailed below in the section on Vegetation.

**Threatened and Endangered Species:** The following species are listed under the Endangered Species Act (ESA), and could potentially occur in the general project area:

- Canada Lynx (*Lynx canadensis*) – Threatened
- Gray Wolf (*Canis lupus*) – Endangered
- North American Wolverine (*Gulo gulo luscus*) – Proposed Threatened
- Yellow-billed Cuckoo (*Coccyzus americanus*) – Threatened
- Bull Trout (*Salvelinus confluentus*) – Threatened
- Upper Columbia River Steelhead (*Oncorhynchus mykiss*) – Threatened
- Spring Chinook salmon (*O. tshawytscha*) – Endangered

Upper Columbia River steelhead and bull trout could occur in the vicinity of the work area, and the Okanogan River is designated critical habitat for steelhead. Potential effects to these species are discussed below. The Canada lynx, gray wolf, grizzly bear, wolverine, and yellow-billed cuckoo were not and are not expected to be present in the specific project area due to specialized habitat requirements, lack of tolerance for human activity, or both. The project would be unlikely to affect individuals of these species. The project area is not within designated or proposed critical habitats of these species. The Spring Chinook salmon population has been extirpated from the Okanogan River since the 1930s from overfishing, hydropower development and habitat degradation. In 2015-2016 the Colville Confederated Tribe's Fish and Wildlife Department started a non-essential experimental population under ESA Section 10(j).



(a) For the 2018 emergency temporary repair, the loss of some riparian vegetation along the river had adverse effects on foraging and cover for juvenile steelhead and their critical habitat. While the lost vegetation will be mitigated by the plantings during the proposed 2019 repair, the new plantings cannot fully account for lost function until the plantings mature. It is possible that adding slightly larger rock to the levee may have slightly improved habitat conditions for juvenile steelhead predators but this is uncertain. Bull trout are not expected to be present in the river during the time the flood fight occurred so were likely not affected by the work.

(b) For the proposed 2019 permanent repairs, effects to steelhead are expected to be minimal for the following reasons: 1) A limited number of juvenile steelhead may be present in the action area, 2) In-water work would be conducted during the agency-approved in-water work window for Okanogan River when adult steelhead are least expected to be in the area, 3) No spawning occurs in the work area 4) Best management practices would be implemented to minimize the possibility of turbidity, noise, and vibrational disturbance to juveniles during construction, 5) Minor impacts to riparian vegetation would occur, but willows would be planted at the water's edge along the levee, 6) 400 live stakes comprised of a mix of three species (red osier dogwood, Drummond and coyote willows), and nine cottonwoods poles will be installed/planted along the Okanogan River upstream of the levee repair, and 7) the large size rock placed during the flood fight will be removed. Bull trout are not expected to be present at the time of the repair because they can't tolerate the relatively high water temperatures at the project site that are likely to occur. Bull trout are thus not likely to be affected by the work.

**Vegetation:** (a) At the time of the temporary emergency repair in May 2018, the flood team found active slope failure including sloughing embankment material and vegetation. The 2018 flood event had previously removed approximately 90% of the then-existing trees and shrub, predominately mountain alder, wild rose, and red-osier dogwood, along the riverside slope of the levee in the damaged area, by sweeping them away or otherwise rendering them non-viable. Upon the commencement of the May 2018 emergency repairs, approximately three of the 25 mature trees that pre-existed the flood event remained in the repair footprint and were removed during the flood fight process. The proposed repair includes planting willows in the repair and replacing the lost trees at a ratio of 3:1 immediately upstream of the levee repair location (Figure 2). (b) There are no additional adverse effects on existing vegetation projected to result from the 2019 permanent repairs.

**Cultural Resources:** The Corps is currently taking actions to identify historic properties that may have been/be affected by the temporary emergency repair action or the permanent repair action, as required by Section 106 of the National Historic Preservation Act. The Corps is consulting with the Washington State Historic Preservation Officer (SHPO), Indian tribes, and other consulting parties, about the project and will complete identification and evaluation for historic properties as well as make agency findings of effect for Section 106 prior to approval of the proposed action as well as the emergency repair.

**Air Quality:** (a) Construction vehicles and heavy equipment used during the temporary repair resulted in a short term localized increase in gasoline and diesel exhaust fumes. The small area of construction and the short duration of the work would limit the impact to air quality. Emissions generated by the activity were minor and short-term and well below the *de minimis* threshold. Unquantifiable but insignificant exacerbation of effects of carbon dioxide (CO<sub>2</sub>) emissions on global climate change would be anticipated from the completed flood fight activities.

(b) Effects to air quality would be the same as those described above from the emergency repair. The activity would constitute routine repair of an existing facility, generating an increase in direct emissions of a criteria pollutant or its precursors that would clearly be *de minimis* and would therefore be exempted by 40 CFR Section 93.153(c)(2)(iv) from the conformity determination requirements.

**Noise:** (a) During construction of the 2018 emergency repair, localized ambient noise levels within the levee Right of Way were slightly increased. However, given the urban location of the repair, any potential disturbance resulting from slightly elevated short-term ambient noise levels from construction activities were negligible. No long-term change in noise levels occurred as a result of the project. (b) Effects to noise of the proposed repairs would be the same as those described above from the emergency repair.

**Traffic:** (a) Construction-related traffic may have caused temporary increases to, and disruption of, local traffic. Flaggers and signs were used, as needed, to direct traffic safely around the construction site. (b) Effects to traffic from the proposed repair would be the same as those described above. No long-term change in traffic would occur as a result of the project.

**Cumulative Effects:** The temporary emergency repair action and the permanent repair action would not appreciably alter the baseline condition. Cumulative effects of these actions will be fully considered in the environmental documentation, as required under NEPA and ESA.

## EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposal and the completed flood fight activities can be adequately evaluated under the NEPA through preparation of an EA. Preparation of an EA addressing potential environmental impacts associated with the levee rehabilitation project is currently underway.

The proposed repair is not expected to affect water quantities in the Okanogan River; however, the permanent repair will include 415 CY fill in the Waters of the United States. The additional fill will be evaluated for substantive compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the Clean Water Act. On March 6, 2019, the Corps submitted a request to

Ecology for certification that the project provides reasonable assurance of compliance with the Water Quality Standards of Washington State, under Section 401 of the Clean Water Act. In conducting activities involving the discharge of dredged material into waters of the United States, the Corps will abide by the applicable conditions of the existing WQC to ensure compliance with State water quality standards.

In accordance with Section 7(a)(2) of the ESA, the Corps has drafted a Biological Assessment and is consulting with USFWS and NMFS, regarding the impact of the emergency repair and the proposed repair on listed species and/or designated critical habitat. The Biological Assessment was submitted to USFWS and NMFS on 15 February 2019. In a letter dated February 26, 2019 the USFWS concurred with the finding for species under their jurisdiction.

The emergency repair and the proposed repair will be analyzed with respect to its effects on Tribal Treaty Rights or rights reserved to tribes through Executive Order or other legal instrument. The proposed action area is within the area of interest of the Colville Confederated Tribes, Spokane Tribe, Kalispel Tribe, and the Yakama Nation. The Corps will coordinate and consult with these tribes on the action. The Corps is consulting with SHPO, Indian tribes, and other consulting parties about the project in accordance with Section 106 of the National Historic Preservation Act as implemented in the regulations at 36 CFR Part 800.

## PUBLIC INTEREST EVALUATION

The decision to proceed with this action involving the discharge of dredged or fill material will be preceded by a determination of whether the proposed activity would be in the public interest. All factors which may be relevant to the proposal's public interest will be considered; among those are navigation and the Federal standard for dredged material disposal; water quality; coastal zone consistency; wetlands; endangered species; historic resources; scenic and recreation values; fish and wildlife; marine sanctuaries; applicable state/regional/local land use classifications, determinations, and/or policies; conservation; economics; shoreline erosion and accretion; safety; and considerations of property ownership.

As a foundation for its public interest determination the Corps will consider, on an equal basis, all alternatives that are both reasonable and practicable, i.e., available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. The Corps will select the alternative that represents the least costly alternative, constituting the discharge of dredged or fill material into waters of the United States in the least costly manner and at the least costly and most practicable location, that is consistent with sound engineering practices, and that meets the environmental standards established by the Clean Water Act Section 404(b)(1) evaluation process.

## COMMENT AND REVIEW PERIOD

The Corps invites submission of factual comment on the environmental impact of the proposal from the public; Native American Nations or tribal governments; Federal, State,

and local agencies and officials; and other interested parties in order to consider and evaluate the effects of this activity. To make this decision, comments are used to assess impacts on ESA listed species, historic properties, water quality, general environmental effects, as well as the other public interest factors listed above. Comments will also be considered in determining whether it would be in the best public interest to proceed with the proposed project. The Corps will consider all submissions received before the expiration date of this notice. The nature or scope of the proposal may be changed upon consideration of the comments received. The Corps will initiate an environmental impact statement (EIS), and afford all of the appropriate public participation opportunities attendant to an EIS, if significant effects on the quality of the human environment are identified and cannot be mitigated.

## PUBLIC HEARING

Any person may request, in writing and within the comment period specified in this Notice, that a public hearing be held to consider this proposal. Requests for a public hearing must clearly set forth the following: the interest that may be affected, the manner in which the interest may be affected by this activity, and the particular reason for holding a public hearing regarding this activity.

Submit comments to this office, Attn: Planning, Environmental and Cultural Resources Branch, no later than **30 days after the posting of this notice** to ensure consideration. In addition to sending comments via mail to the above address, comments may be e-mailed to Ms. Beth McCasland, Environmental Coordinator, at [Elizabeth.I.mccasland@usace.army.mil](mailto:Elizabeth.I.mccasland@usace.army.mil).

The Notice of Preparation can be found at the following website:  
<http://www.nws.usace.army.mil/Missions/Environmental/Environmental-Documents/>  
 under “*Elmway Levee Rehabilitation, Okanogan County, Washington.*”

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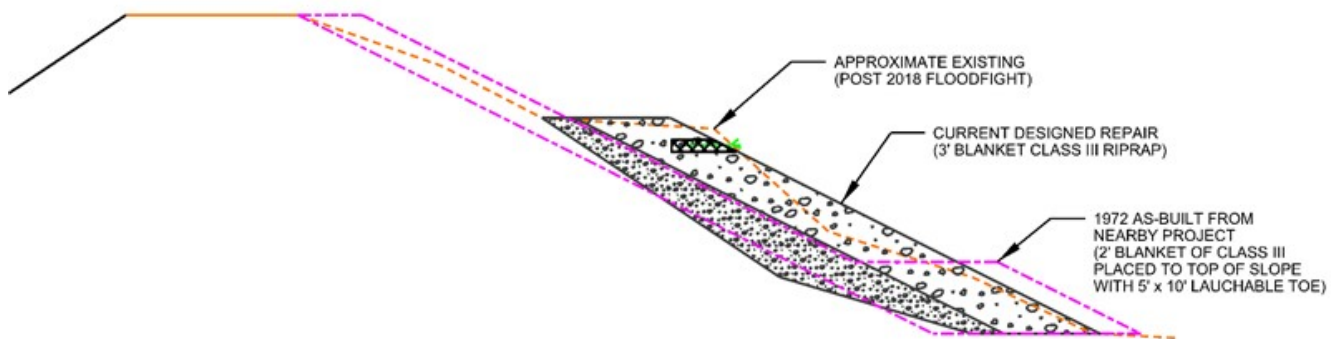
Figure 1. Elmway Levee location map, Okanogan, Washington





*Figure 2. Damaged section (orange line), levee centerline (green line), off-site mitigation planting area (yellow-green box), and river flow directions (blue arrows).*





*Figure 3. Typical cross-section of proposed levee repair, with willow bundles at OHW*

Figure 3 illustrates the deviation between the initially designed weighted/launchable toe design profile and the prospective repair profile, which will be engineered to current riverine conditions.



*Figure 4. Emergency repairs during May 2018 flood. Note vegetation covered by floodwaters as well as upstream and downstream vegetation. Photo courtesy of Okanogan County.*



*Figure 5. May 2018 flood fight emergency work. Photo courtesy of Okanogan County.*