



**US Army Corps
of Engineers®**
Seattle District

Notice of Preparation

Planning and Project Management Division
Environmental Resources Branch
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: Amanda Ogden (PM-PL-ER)

Public Notice Date: 11 May 2011
Expiration Date: 26 May 2011
Reference: PL-11-04
Name: Jefferies Levee Repairs

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) Section 102(C), an environmental assessment (EA) for proposed and previously completed levee repairs on the Yakima River near Ellensburg, Kittitas County, Washington. Repairs are intended to address damage caused by the January 2009 flood event when the Yakima River experienced an approximately 40-year flood event (measured from the Umtanum gauge). Emergency work was completed in January 2009, expedited initial repairs were completed in April 2009 and further repair is expected to be constructed in summer 2011.

AUTHORITY

The proposed levee repair is authorized by Public Law 84-99 (33 U.S. Code Section 701n). Corps rehabilitation and restoration work under this authority is limited to 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. Kittitas County is the local sponsor for this project.

NEED

In January 2009, flood waters damaged the levee at five non-continuous sites for an approximate total length of 1,170 linear foot (LF) length including a 300-LF breach at the upstream end. The breach segment was repaired during an emergency flood fight effort to re-establish the levee prism during January 2009. Work was completed at three sites (100 LF, 400 LF, 70 LF) during expedited initial repairs during April 2009. Upper slope work was also completed along 220 LF of the total 300-LF remaining damaged site during April 2009. That 300-LF remaining site has significant toe and riverward slope scour. The levee is located on the right bank of the Yakima River from river mile 151.2 to river mile 151.7 in Section 14, Township 17 North, Range 18 East of the Willamette Meridian. The pre-damaged levee protected an adjacent 413 acres of floodplain including 15 single family residences with associated out-buildings and County roads. Following the 2009 damage, the levee offered a 2-year level of flood protection. With repair, the levee would return to a 25-year level of protection.

PURPOSE

The purpose of the project is to provide the level of flood protection found prior to the January 2009 flood event in order to protect lives and property from subsequent flooding.

PROPOSED ACTION

Emergency repairs completed in January 2009, restored the levee prism at the upstream end of the levee along approximately 300 LF. Initial repairs completed in April 2009, repaired the riverward slope at two locations (100 LF and 220 LF), repaired overtopping damage and backslope scour along approximately 400 LF and rebuilt the downstream end of the levee along approximately 70 LF. Prospective work is expected to be completed during approved in-water work windows during summer 2011 (1 July – 31 August).

Multiple alternatives for the levee repair will be considered as follows:

- No Action. No levee repairs would be done. Further damage or failure of the levee is likely to transpire with the occurrence of even an annual flood. This alternative would perpetuate the risk of flood damage to nearby infrastructure including the County road, homes, farmland, and outbuildings.
- Repair In Kind. This alternative is being evaluated as the current preferred alternative. Emergency repairs, completed in January 2009, provided risk reduction for the spring flood season. Emergency efforts involved reestablishing the levee prism at the upstream end of the levee for approximately 300 LF. The levee toe was not damaged at this location and work occurred above ordinary high water (OHW) and above the actual water level at that time. Initial repair efforts, completed in April 2009, involved reestablishing the riverward slope at two locations (100 LF and 220 LF), repairing overtopping damage and backslope scour along approximately 400 LF and rebuilding the downstream end of the levee along approximately 70 LF. The initial repair efforts occurred above OHW and above the actual water level at that time, and involved placement of Class IV riprap along the upper portion of the riverward slope to match the 2H:1V slope upstream and downstream of both damaged locations. The downstream end of the levee was armored on both the riverward and landward slopes using Class IV riprap to re-establish a 2H:1V slope along 70-LF. The presently preferred permanent repair project for construction during the summer 2011, would reestablish reliable flood protection for future flood seasons, and restore the 25-year level of protection that existed prior to the flood event. The proposed project consists of replacing erosion protection along a 300 LF reach. Work would include rebuilding or supplementing the 10-foot by 4-foot armored toe with Class V riprap, reestablishing a 2H:1V riverward slope with a blanket of Class IV riprap, reestablishing a 2H:1V landward slope using compacted levee fill material, regrading the levee crown and placing crushed gravel on the crown along 1000 LF to create a driving surface for inspections and maintenance.
- Nonstructural. This alternative would relocate all existing structures, utilities and other infrastructure within the damage area protected by this section of levee. The costs associated with this alternative were deemed too high for the level of benefit.

Final selection of the preferred alternative and finalization of the design, including any additional environmental measures, would occur during the NEPA process and before construction.

ANTICIPATED IMPACTS

Impacts anticipated at this point are as follows:

Wetlands. The proposed project has been evaluated for potential impacts to wetlands. The January and April 2009 construction work occurred, and the summer 2011 work would occur,

within the footprint of the pre-existing levee. Construction access and staging areas would be along the existing levee. No impacts to wetlands are anticipated.

Biological Resources. The following species listed as threatened (T) and their associated critical habitat (CH) is located in the project area:

- Middle Columbia River summer Steelhead (T) (CH)
- Columbia Basin Bull trout (T) (CH)

The Yakima River provides spawning and rearing habitat for coho salmon, spring Chinook, summer steelhead, bull trout, rainbow trout, cutthroat trout, and several other species. The Middle Columbia River summer steelhead population is currently depressed through the project reach. Columbia Basin bull trout have documented presence in the Yakima River near the project area. The Yakima is also designated critical habitat for steelhead and bull trout. Other listed species in Kittitas County are gray wolf, Canada lynx, grizzly bear, marbled murrelet, northern spotted owl, and Ute ladies-tresses; however, they are not expected to be present in the project area due to specialized habitat requirements, lack of tolerance for human activity, or both.

A Biological Evaluation is being prepared pursuant to Sec. 7 of the Endangered Species Act to determine whether the completed or proposed actions are likely to adversely affect these species or their designated critical habitat.

Although bald eagle was delisted on June 28, 2007, they continue to be protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. These acts require some measures to continue to prevent bald eagle “take” resulting from human activities. Impacts to bald and golden eagles will be considered as a part of the NEPA process.

When completed, this levee repair is not intended or expected to generate appreciable change in habitat conditions as compared with conditions pre-existing the flood event. Repair construction work may result in short-term impacts to fish and wildlife. If present, adult and juvenile salmonids may be temporarily displaced from the project area. Construction noise may temporarily disturb any wildlife in the project area. No long-term effects to fish and wildlife are expected.

Water Quality. There may be a temporary increase in turbidity due to construction and fill placement. Turbidity would be monitored during construction. If turbidity exceeds water quality maximum standards, construction would be halted, and would recommence when turbidity returns to acceptable levels. No long-term impacts to water quality are expected.

Cultural Resources. Prior to repairs, a Corps archeologist will conduct a cultural resources survey of the project area to determine whether there is a potential for the proposed repairs to cause effects to historic properties. National Historic Preservation Act Section 106 compliance reports will be prepared for all proposed levee repairs. The report will include the findings of the investigations for each repair site, recommendations for archaeological monitoring during construction, and a determination of effects to archaeological and historic properties. If archaeological monitoring is recommended at some repair locations, the report will include a monitoring plan and protocols to be followed. The protocols will include an inadvertent discovery clause that will apply when an archaeological monitor is not present. The Corps’ determinations of effects to historic properties, the investigation report, and monitoring plan will

be reviewed by the Washington State Historic Preservation Officer (SHPO) and the appropriate tribes prior to construction.

Air Quality. Construction vehicles and heavy equipment would temporarily and locally generate gasoline and diesel exhaust fumes, carbon dioxide (CO₂), carbon monoxide, and dust on roadways. These emissions would be exempt from the conformity requirements under the Clean Air Act, because the project constitutes a routine facility repair activity generating an increase in emissions that is clearly *de minimis*, under 40 CFR 93.153(c)(2)(iv). Unquantifiable but insignificant exacerbation of effects of CO₂ emissions on global climate change is also anticipated.

Noise. Temporary local increases in noise would occur as a result of construction activities. Private residences are very close to the work sites. Work would be done during daylight hours to minimize the adverse effects of noise on businesses and residents.

Traffic. Construction-related traffic would cause disruption of local traffic during construction. Riverbottom Road is a loop road of 3.1 miles that services local residents. Efforts would be made to minimize disturbances to local traffic patterns during construction through appropriate work hours, signage and notifications and proper traffic controls.

Cumulative Effects. The Corps has completed prior repairs on this levee. In 1975, the Corps repaired 2,650 feet of levee and in 1978 the Corps repaired 630 feet. In 1996, a total of 900 feet of repairs were completed along the Jefferies levee. The Corps is also planning a setback to the levee upstream of this repair site. This setback repair, known as the Jensen Levee Rehabilitation Project, is also scheduled to be constructed in summer 2011. Cumulative effects will be assessed during the development of the EA to determine whether the incremental contribution of the Jefferies levee repair project to the overall past, present, and future environmental impacts will be significant.

EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposal can be adequately evaluated under the National Environmental Policy Act through preparation of an EA. Preparation of an EA addressing potential environmental impacts associated with the levee rehabilitation project is currently underway.

In accordance with Section 7(a)(2) of the Endangered Species Act, the Corps will draft a Biological Evaluation and will seek consultation with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service, regarding the impact of the project on listed species and/or designated critical habitat. The Corps has made a preliminary determination that the project may affect but is not likely to adversely affect Mid-Columbia River steelhead and Columbia Basin bull trout or their designated critical habitat.

The project falls within the Clean Water Act (CWA) Section 404(f)(1)(B) exemption to regulation over the discharge of dredged or fill material as there is no change to the footprint, character, scope or size of the structure within the project area in comparison to the original fill design, and thus does not require Section 404 evaluation. Therefore, no Section 401 certification is required.

The Corps has reviewed the latest published version of the National Register of Historic Places (NRHP), lists of properties deemed eligible, and other sources of information. The Corps will document the current state of knowledge regarding the presence or absence of historic properties and the effects of the undertaking upon the properties.

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In preparation of the environmental documentation for this project, coordination has been conducted or is ongoing with the following public agencies:

- (1) U.S. Fish and Wildlife Service
- (2) NOAA Fisheries;
- (3) Environmental Protection Agency;
- (4) Washington Department of Fish and Wildlife;
- (5) Washington Department of Ecology;
- (6) Yakama Nation;
- (7) State Historic Preservation Office.

The Corps invites submission of factual comment on the environmental impact of the proposal. 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 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.

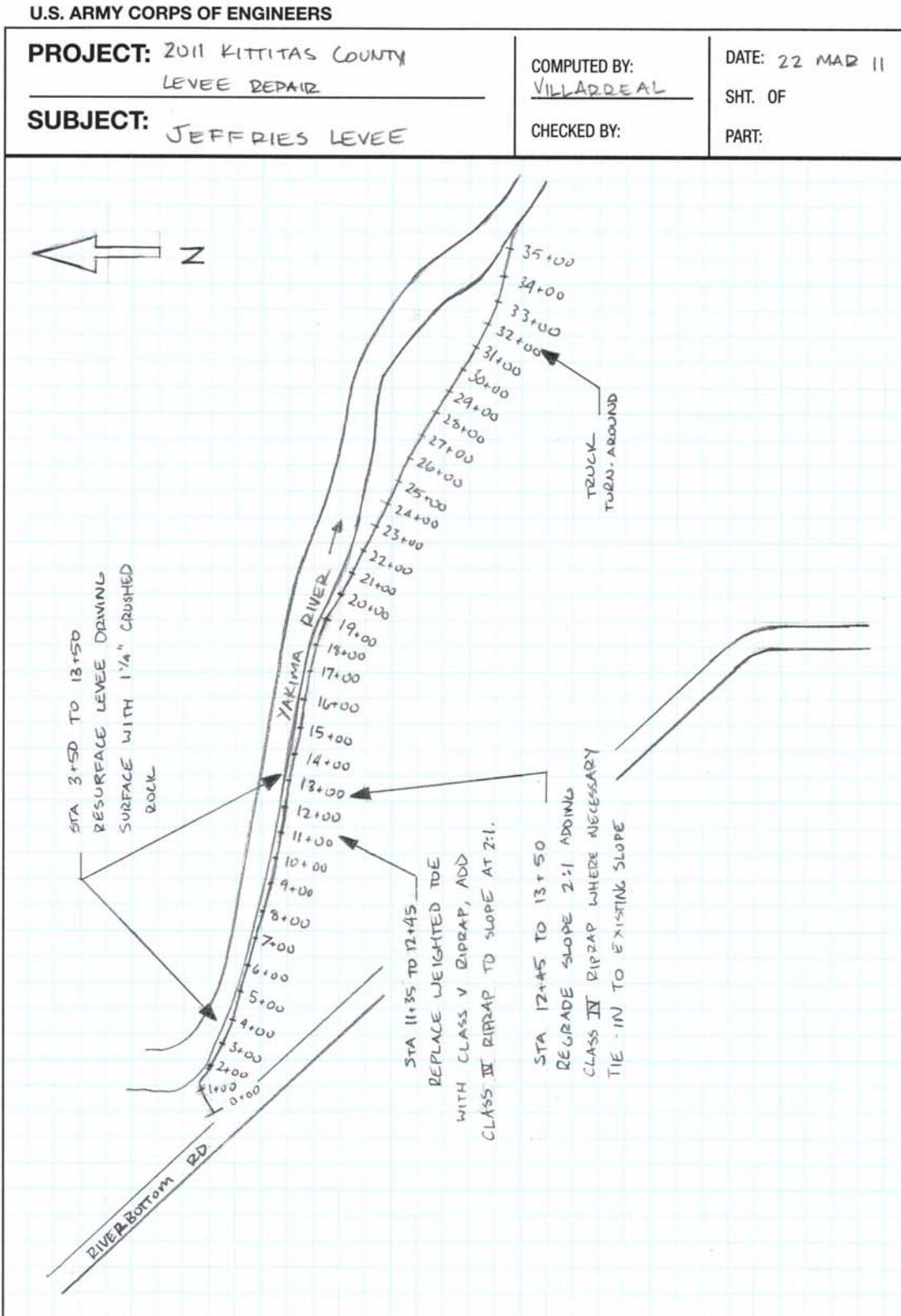
Submit comments to this office, Attn: Environmental Resources Section, no later than *15 days after the date of this notice* to ensure consideration. In addition to sending comments via mail, comments may be e-mailed to amanda.ogden@usace.army.mil. This Notice of Preparation can be found at the following website: http://www.nws.usace.army.mil/ers/doc_table.cfm under “Jefferies Levee Rehabilitation.” Requests for additional information should be directed to Ms. Amanda Ogden at 206-764-3628 or the above e-mail address.

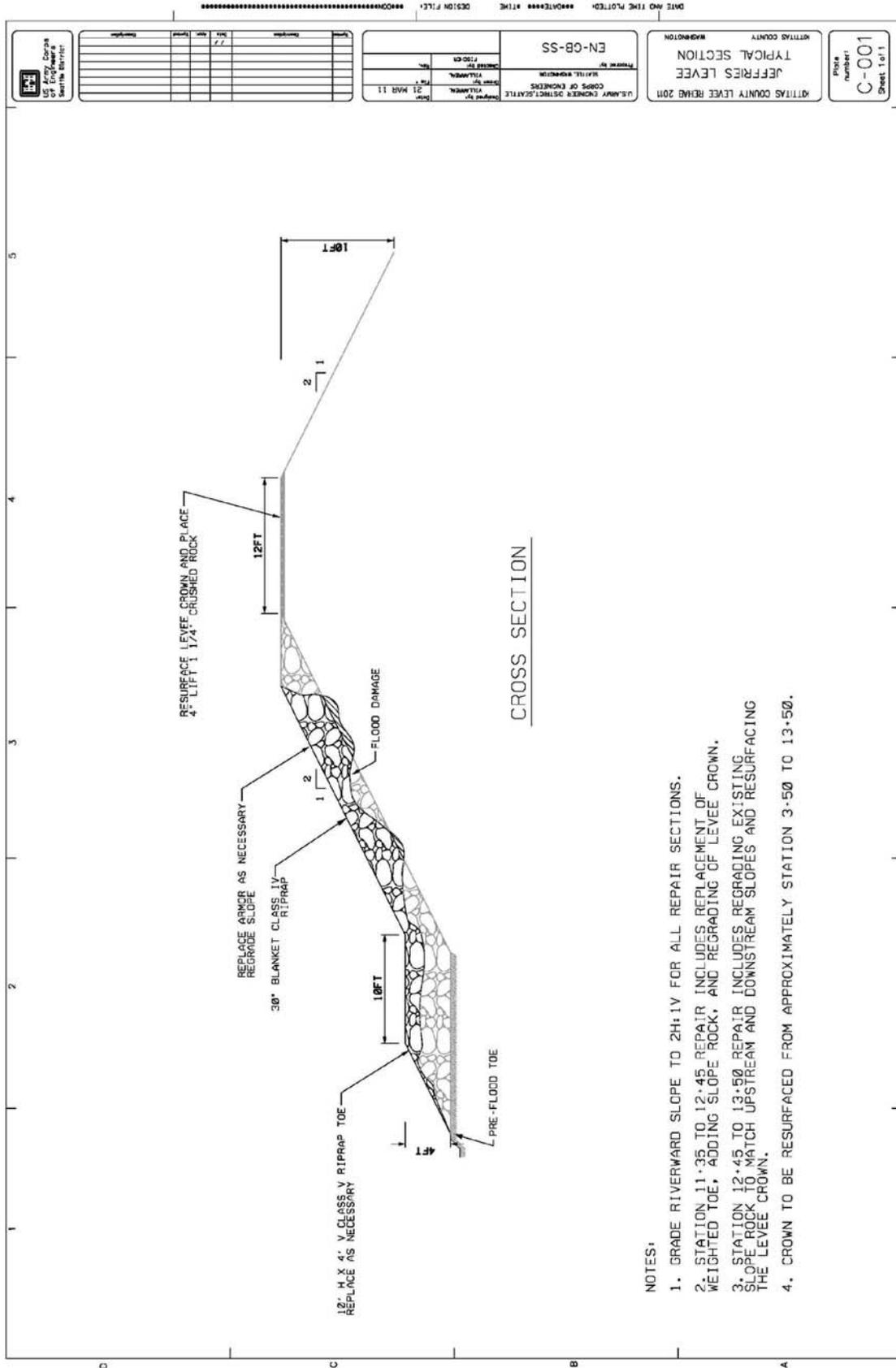
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PROJECT LOCATION MAP AND DESIGNS

Jefferies Levee, Kittitas County Existing and Future Repairs







NOTES:

1. GRADE RIVERWARD SLOPE TO 2H:1V FOR ALL REPAIR SECTIONS.
2. STATION 11+35 TO 12+45 REPAIR INCLUDES REPLACEMENT OF WEIGHTED TOE, ADDING SLOPE ROCK, AND REGRADING OF LEVEE CROWN.
3. STATION 12+45 TO 13+50 REPAIR INCLUDES REGRADING EXISTING SLOPE ROCK TO MATCH UPSTREAM AND DOWNSTREAM SLOPES AND RESURFACING THE LEVEE CROWN.
4. CROWN TO BE RESURFACED FROM APPROXIMATELY STATION 3+50 TO 13+50.

	PROJECT NO. EN-08-SS	DRAWING NO. TYPICAL SECTION	SHEET NO. C-001
DATE AND TIME PLOTTED: ***** AT THE ***** DESIGN FILE: *****	PROJECT TITLE JEFFRIES LEVEE REHAB	COUNTY KING COUNTY	STATE WASHINGTON

PROJECT PHOTOS

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Photo 1. View looking upstream at toe scour at approximate location Sta. 11+45.



Photo 2. Close-up of toe loss and scour looking upstream.



Photo 3. Upstream end of the Jefferies levee (vehicles at the access point and upstream terminus).