



**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: 17 March 2011
Expiration Date: 18 April 2011
Reference: PL-11-07
Name: Jensen 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 2011 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 and impacted the adjacent floodplain, including Riverbottom Road. The downstream portion of the levee was breached and lost along an approximate 1,900 linear foot (LF) length. Additionally, there was damage to the upstream section of levee, including toe scour and loss of riverward embankment armor in three locations (125, 209 and 100 LF respectively). The levee is located on the right bank of the Yakima River from river mile 152.4 to river mile 153.1 in Sections 10 and 11, Township 17 North, Range 18 East of the Willamette Meridian. The pre-damaged levee protected an adjacent 1730 acres of floodplain including 26 single family residences with associated out-buildings and County roads.

In January 2011, the Yakima River reached flood stage in the project area. Flood fight activities were initiated by Kittitas County and the Corps of Engineers. The flood fight consisted of raising Riverbottom Road, which runs through the floodplain and is set-back approximately 700 feet from the original levee alignment.

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 work completed in January 2011 raised Riverbottom Road in-lieu of repairing the downstream breached portion of the levee to stop flood waters from overtopping of the roadway and flooding residences and farm lands. Prospective work to complete the repairs by grading and paving the Riverbottom Road raised roadbed is expected to be completed during summer 2011 and would incorporate emergency work completed during January 2011.

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

- No Action. No levee repairs would be done. Further damage 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. Repairs to the Jensen levee would restore the levee to its original footprint, thereby restoring the 40-year level of protection that pre-existed the flood event.
- Setback Levee Alternative. This alternative is being evaluated as the current preferred alternative. Emergency repairs, completed in January 2011, stopped flood waters from overtopping the roadway and flooding residences and farm land. The emergency action provided risk reduction for the spring flood season. Emergency efforts involved raising Riverbottom Road, a local county road that runs approximately 2,700 LF through the floodplain, such that when fully completed the roadbed would become the levee. Material was placed to raise the road approximately three (3) feet along the entire length, tying the upstream end into high ground and the downstream end into the Jeffries levee. Approximately 15,000 tons of material was placed (13,575 tons of embankment material and small rip-rap and 1,425 tons 1 1/4 inch minus roadbed material). The presently preferred permanent repair project for construction during the summer 2011 would reestablish reliable flood protection for the future flood seasons, and restore the 40-year level of protection that existed prior to the flood event. Riverbottom Road would be graded and paved and the completed project would result in a set-back levee on average 700 feet from the original levee alignment and 800 feet from the river's edge. At the northern end, the road would tie into high ground and at the southern end the road would tie into the existing undamaged levee. The remnants of the original levee that currently remain would be abandoned.
- 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 Corps conducted a wetland delineation which included the entire project area encompassing both the upstream repair area of the original levee and the proposed permanent set-back levee to Riverbottom Road. An abandoned irrigation ditch exists near the project area that has

developed wetland characteristics on the riverward side of Riverbottom Road. This wetland provides some level of water quality function, mostly due to un-grazed persistent vegetation. It is well-buffered around greater than one half of its circumference, an undeveloped riparian area adjacent to the Yakima River, mostly east of the wetland. There would be no direct wetland impacts from the project. Potential indirect impacts would be minimized through the addition of a top soil and hydro-seed strip at the base of the proposed setback levee/road prism.

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

- Steelhead (T) (CH)
- 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. Middle 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.

Potential effects of the proposed work will be evaluated 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.

The pre-flood footprint of the levee was partially along the river, with a small setback area, approximately 200 ft from the river. The setback alternative will place the levee over 800 ft from the river, permanently opening over 110 acres of floodplain forest. It is anticipated that abandonment of the breached levee and the associated opening of the floodplain will improve local fish habitat by increasing nutrient and large woody debris availability, allowing greater river conveyance, and improving high water refugia. No work will occur in or adjacent to the river, so no effect on ESA listed steelhead or bull trout is anticipated. Construction noise may temporarily disturb any wildlife in the project area. Long-term effects would include greater conveyance of the river and greater access to floodplain due to the setback of the levee from the river.

Water Quality. Emergency construction of the levee setback did not require work below the ordinary high water line, and completion of the construction in summer 2011 would not require in-water work, either. It is anticipated that the opening of the floodplain will benefit water quality along the Yakima River by increasing floodplain connectivity.

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. The road starts and ends on Umptanum Road. Residents would be required to detour around the construction zone, which could increase their travelling distance by up to 3.5 miles. 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 currently preferred alternative includes a setback which would restore approximately 110 acres of floodplain to the river. The levee setback would result in abandonment of the existing levee in its breached and damaged state. The resulting effect will be a large area of floodplain and wetlands which will be exposed to inundation from which it has been disconnected since the levee was built in 1948. The developed land behind the setback levee would continue to be protected from inundation. The County is considering reinforcing the damaged upstream portion of the levee to protect the existing agricultural land riverward of Riverbottom Road. The pasture behind the levee would be expected to flood from downstream waters flowing through the breached levee; however the existing levee protects the area from high velocity flows. The County's long-term plan is to abandon this entire levee reach to restore the floodplain and allow the river greater conveyance and allow natural river meanders.

Overall the setback and abandonment of the entire original levee is expected to benefit riparian vegetation and habitat function. The Corps is also planning a repair to the levee downstream of this site. This repair, known as the Jefferies Levee Rehabilitation Project, is also set to be constructed in summer 2011. Cumulative effects will be analyzed and addressed, as required, pursuant to NEPA and ESA.

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 environmental assessment (EA). Preparation of an EA addressing potential environmental impacts associated with the levee rehabilitation project is currently underway.

The project would not involve a discharge of fill material into waters of the United States and is therefore not subject to Sections 401 or 404(b)(1) of the Clean Water Act.

In accordance with Section 7(a)(2) of the Endangered Species Act, the Corps will evaluate the impact of the project on listed species and/or designated critical habitat.

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.

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.

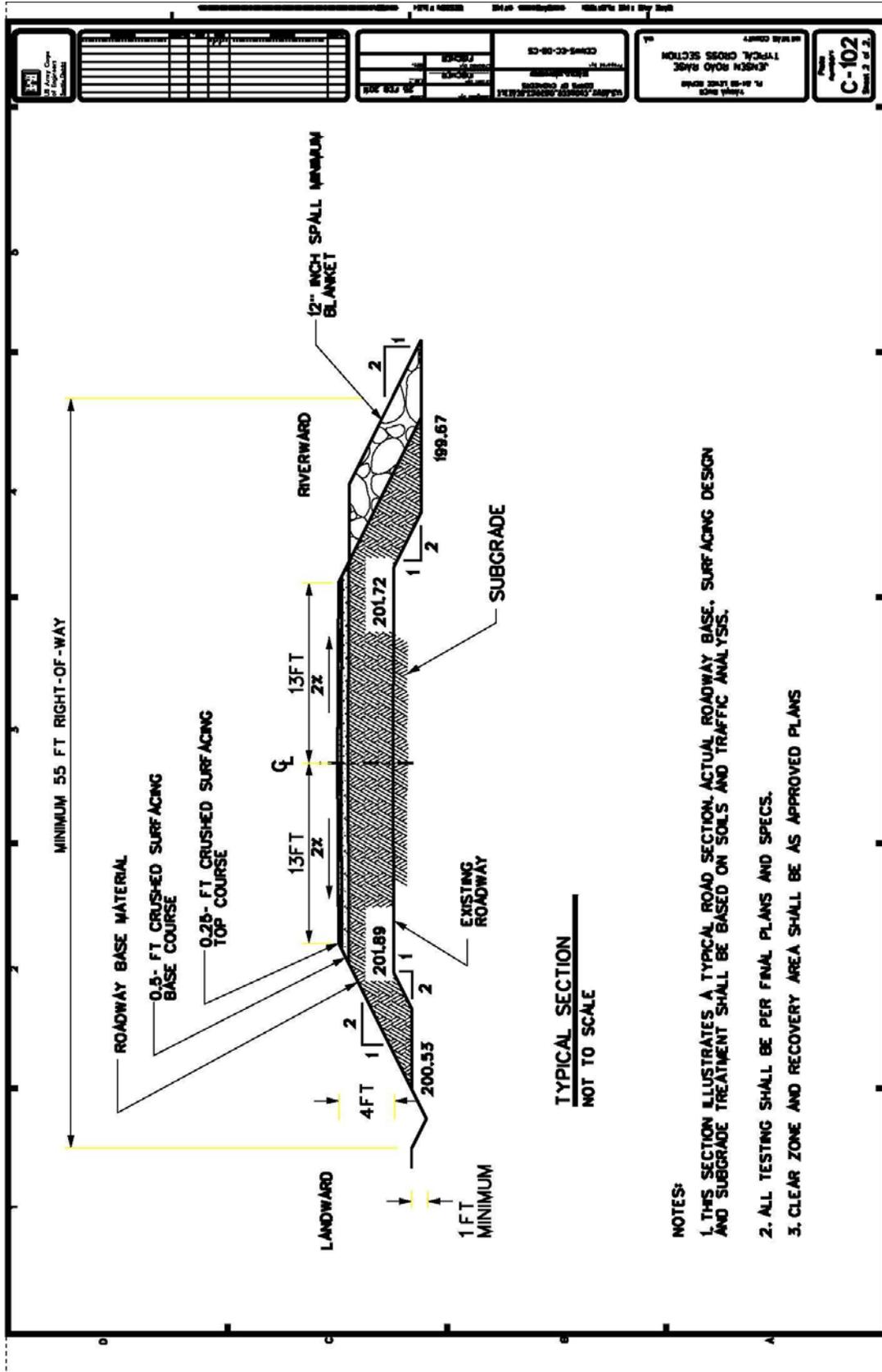
The Corps invites submission of factual comment on the environmental impact of the proposal. The Corps will consider all submissions received before the expiration date of this notice. The nature or scope of the proposal may be changed upon consideration of the comments received. The Corps will initiate 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 *30 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 “Jensen Levee Rehabilitation.” Requests for additional information should be directed to Ms. Amanda Ogden at 206-764-3628 or the above e-mail address.

PROJECT LOCATION MAP AND DESIGNS

US Army Corps of Engineers, Seattle District
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PROJECT PHOTOS

US Army Corps of Engineers, Seattle District
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Photo 1: Site 1 – Northern levee section with lost levee embankment and armor material (January 2009)



Photo 2: Site 2 - looking across breached levee. (January 2009).



Photo 3: Riverbottom Road showing wetland buffer along riverward embankment (Road to be raised) (January 2009)



Photo 4: Riverbottom Road being overtopped (January 2011)



Photo 5: Riverbottom Road being Raised (January 2011)



Photo 6: Riverbottom Road being raised (January 2011)