



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

Notice of Preparation / Clean Water Act Public Notice

Planning and Project Management Division
Environmental Management Branch
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ATTN: Bobbi Jo McClain (PM-PL-ER)

Public Notice Date: February 1, 2011
Expiration Date: March 4, 2011
Reference: PL-11 - 01

Name: Cashmere Segment 1 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), an environmental assessment (EA) for proposed levee repairs on the Wenatchee River at Cashmere in Chelan County, Washington. Repairs are intended to address damage caused during the flood of January 2009. See Figure 1 for a map of the project location.

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. The local sponsor for this project is the City of Cashmere.

BACKGROUND

The non-federal levee is located along the right bank of the Wenatchee River at Cashmere in Chelan County, Washington. The levee extends upstream and downstream from the mouth of Mission Creek. Between the Wenatchee River and Mission Creek there is a narrow section of the levee extending upstream from the confluence for about 800 linear feet (LF) which serves both as the levee and as access to a storage area. Towards the confluence, this section acts as the right bank of the Wenatchee River and the left bank of Mission Creek. Levee Segment 1 is approximately 2,000 linear feet (LF) and is 12 feet (ft) high. In both November 2008 and January 2009, significant flooding occurred on both the Wenatchee River (a 20-year flood event occurring at the Cashmere gage in January 2009) and Mission Creek. Flows were compounded by an ice jam at the confluence of Mission Creek and the Wenatchee River.

NEED

During November 2008 flood event and again in January 2009, both the Wenatchee River and Mission Creek exceeded flood stage. High flows from Mission Creek resulted in toe scour and embankment loss on the slope of the levee facing the left bank of Mission Creek for about 100 LF. The embankment loss constitutes a degradation of the levee prism and if not repaired

Mission Creek flooding would cause it to erode further, threatening both the Levee Segment 1 prism and the access bridge. In its damaged state the levee offers a 20-year level of protection. With repair, the levee would be restored to the pre-existing 40 –year level of protection.

PURPOSE

The purpose of the project is to repair and return the damaged levees to the level of flood protection found prior to the January 2009 flood event in order to protect lives and property from subsequent flooding. See Figure 2 for a photo of the damage at the project site.

PROPOSED ACTION

Multiple alternatives were considered as follows.

- No Action. No levee repairs would be done. Further damage during floods is possible, putting infrastructure and homes at risk.
- Setback Levee. Realigning the levee into a setback would require the relocation of the lower end of Mission Creek and adjacent businesses.
- Replace In Kind. This alternative is currently the preferred alternative. Repairs would consist of repairing the scoured riverbank along 100 LF adjacent to Mission Creek. Existing, deteriorated concrete slab and bollard retaining wall would be removed. Repairs would include excavating and grading the levee slope to a 1.5H:1V slope, installation of a filter blanket (spalls), and class IV riprap armor protection. A willow lift would also be installed in this repair along the left bank of Mission Creek at the ordinary high water level, such that a minimum of 6 inches of soil would be placed with coyote willow cuttings inserted into the soil at a density of one cutting per six inches. Also, if the existing willow at the upstream end of the project obstructs the repair, it would be carefully removed including the rootball, cleaned of excess soil and stored in the creek until construction is complete enough to replant it within the project footprint near its current location. All disturbed areas other than the riprapped, repaired areas would be hydro seeded with native grasses at the end of construction. See Figure 3 for project design.
- Nonstructural. This alternative would relocate all existing structures, utilities and other infrastructure within the damage area protected by this section of levee.

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. Construction activities would be done so as to avoid any impacts to wetlands. The repairs would remain in the pre-flood footprint of the levee. Access roads have been previously constructed and would not be widened. No jurisdictional wetlands were observed.

Biological Resources. The Wenatchee River is home to several species of salmonids, including sockeye, coho, Chinook, steelhead and bull trout. Various types of birds and mammals may be found in the area, including geese, ducks, swans, raccoon, and otter. It is expected that the project would cause temporary disruptions during construction to nearby fish and wildlife as a result of noise and vibration. Repairs would be done in the approved in-water work window of July 1-August 15, to minimize disturbances to salmonids.

The following table lists threatened and endangered species potentially occurring in the project vicinity.

Species	Listing Status	Critical Habitat
Upper Columbia River Steelhead <i>Oncorhynchus mykiss</i>	Threatened	N/A
Coastal/Puget Sound Bull Trout <i>Salvelinus confluentus</i>	Threatened	Designated, includes action area
Upper Columbia River Spring Chinook Salmon <i>Oncorhynchus tshawytscha</i>	Endangered	Designated, includes action area

Other listed species that occur in Chelan County include gray wolf (endangered), as well as threatened Canada lynx, grizzly bear, marbled murrelet, and northern spotted owl. The nearest grizzly bear sighting is 8 miles away. Northern spotted owls have nested approximately 5 miles from the site and critical habitat is designated approximately 7 miles east of the site. The other species have no known sightings within 10 miles of the project area. All of these species are not likely to be found in the project vicinity due to specialized habitat requirements, intolerance of human activity, or both. Listed plants in Chelan County include endangered showy stickseed and Wenatchee mountains checker-mallow, and threatened Ute ladies-tresses. Because the project site is highly disturbed (the bridge and levee top are used as access for a refuse recycling facility), these plants are not expected to be present.

It is anticipated that there would be no significant adverse effect to any threatened or endangered species, due to construction timing in the approved work window, the presently disturbed nature of the project location, and the vast majority of the work being conducted above the water line. The toe would be established at the point where the existing bankline sits to avoid channel encroachment beyond that of the existing condition.

There may be short-term impacts from re-sloping of the levee segment. The primary impact may be a temporary increase in turbidity due to fill placement. If present, adult and juvenile salmonids may be temporarily displaced from this area. Construction noise may temporarily disturb any fish or wildlife in the area. The project will provide new armor rock on a re-sloped bank to replace the existing slab concrete and debris on the project site.

A biological evaluation is being prepared pursuant to Sec. 7 of the Endangered Species Act to assess the effects of the proposed actions on listed species, particularly steelhead, bull trout, and Chinook, or their designated critical habitat.

Water Quality. It is possible that turbidity from suspended solids may result, especially if it rains during construction, but the use of clean rock and other best management practices would minimize such impacts. At this location Mission Creek is very narrow and confined with steep banks 10 or more feet high. Cottonwood trees and willows are located along the right bank of the creek. The left bank, where the repair would be conducted, is largely devoid of woody vegetation with approximately 40% cover by non-native herbaceous species and non-native woody vines. There is one larger willow in the area of the repair site which may need to be removed for construction. If it is removed, it would be replanted following construction within the project footprint. This is the only existing vegetation within the project footprint large enough to provide shade to the creek. The project would install a willow lift throughout the repair.

Cultural Resources. To comply with Section 106 of the National Historic Preservation Act, a Corps archaeologist conducted a cultural resource inventory of the proposed project's Area of Potential Effect (APE) and documented the results in a report entitled Historic Properties Inventory of Cashmere, Segment 1 which is on file at the Department of Archaeology and Historic Preservation (DAHP). The Corps has also initiated consultation with the Yakama Indian Nation by soliciting knowledge of historic properties and traditional cultural properties, or concerns for the project via letter on May 4, 2009. No cultural resources were located during the inventory. The Corps has determined that the project will result in "No Historic Properties Affected". A concurrence letter from the State Historic Preservation Officer was received on August 31, 2009. No monitoring is required.

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 increases in noise would occur as a result of rock delivery and placement. Work would be done during daylight hours to minimize the adverse effects of noise on residents and adjacent businesses.

Traffic. Construction-related traffic would cause minor temporary increases to, and disruption of, local traffic. Efforts would be made to minimize disturbances to traffic patterns during construction through appropriate work hours, signage and notifications and proper traffic controls.

Cumulative Effects. The repairs would result in returning the levee to its pre-flood condition and would install willows throughout the repair. Development within the Wenatchee River and Mission Creek areas would continue. Development could possibly be fostered by the presence of this levee, which would mean further long-term environmental degradation.

COMPLIANCE WITH OTHER LAWS AND REGULATIONS

The Corps will coordinate the proposed action with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concerning anticipated effects on threatened and endangered species and their critical habitat, pursuant to Sec. 7(a)(2) of the Endangered Species Act. A Biological Evaluation is being prepared, based on a preliminary determination that the project is not likely to adversely affect threatened Upper Columbia River Spring Chinook salmon and its designated critical habitat, Upper Columbia River steelhead, and Coastal/Puget Sound bull trout and its critical habitat.

An evaluation will be made concerning the effects of the project on Essential Fish Habitat pursuant to the Magnuson-Stevens Fishery Conservation and Management Act.

In the event that work is conducted below the OHW mark, pursuant to 33 U.S. Code section 1344(f)(1)(B), emergency reconstruction of recently damaged parts of levees does not require a Clean Water Act Section 404 evaluation provided that the work is conducted for maintenance purposes. Analogizing to the Code of Federal Regulations Title 33, Section 323.4(a)(2), rehabilitation may not include any modification that changes the character, scope, or size of the original fill design and remain exempt from requirements of Section 404. Work on this site under

the preferred alternative would not change the footprint of the levee, however current drawings do indicate that there would be a change in the character (slope and materials) from the original design. Therefore a Sec. 404(b)(1) evaluation may be required; if so, the Corps will also request 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.

EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposal can be adequately evaluated under the NEPA through preparation of an EA. Preparation of an EA addressing potential environmental impacts associated with the proposed action is currently underway.

Any person who has an interest that may be affected by this disposal of fill or dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this notice, and 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.

The decision whether to conduct the project will be based on an evaluation of the probable impact on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered; among these are: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

The Corps invites submission of factual comment on the environmental impact of the proposal. 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 by 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 Branch, 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 bobbi.j.mcclain@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 "Cashmere Levee Rehabilitation Project". Requests for additional information should be directed to Ms. Bobbi Jo McClain at 206-764-6968 or at the above e-mail address.

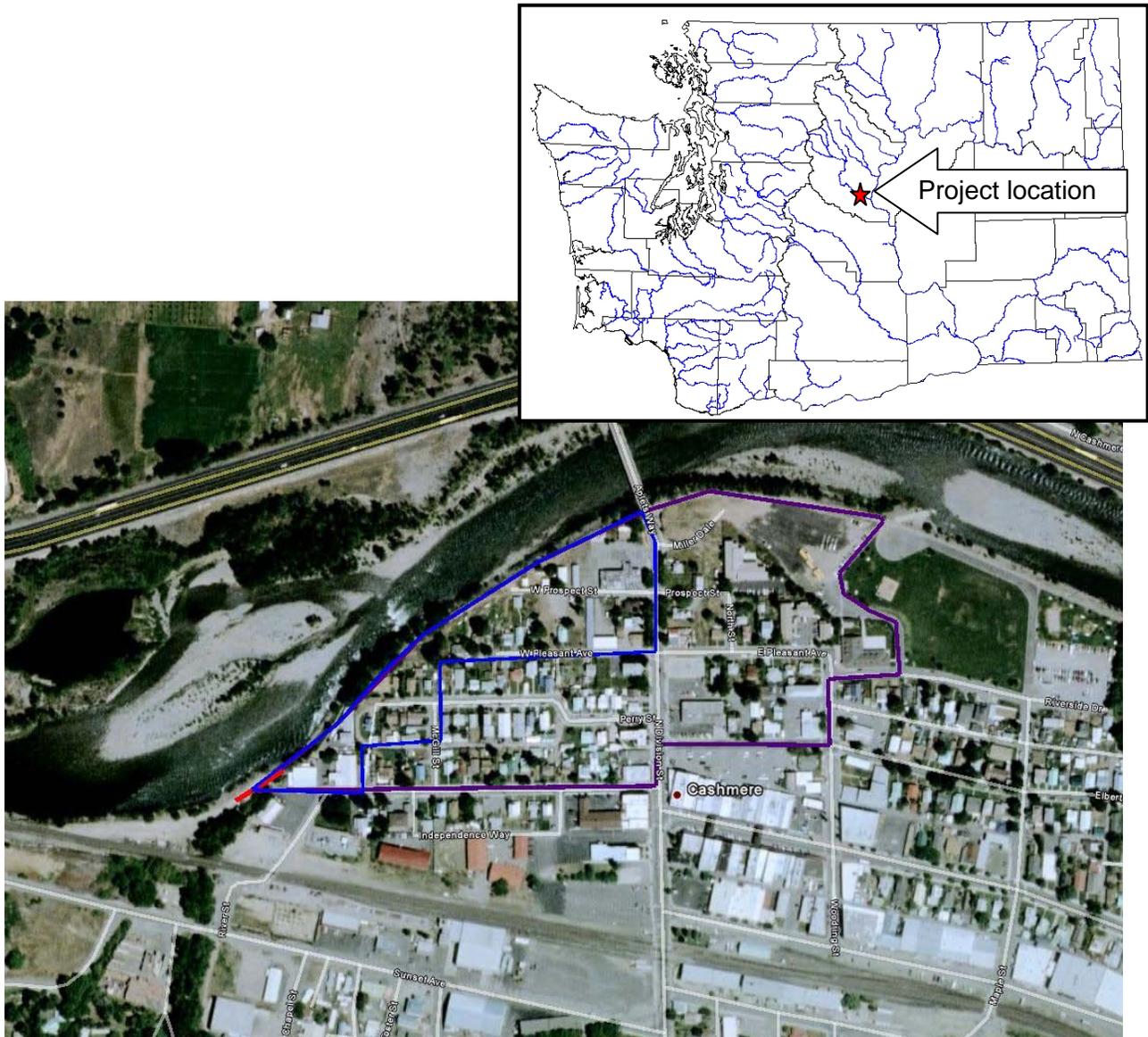


Figure 1: Map of the project area within Cashmere, WA. The red line shows the project location near the confluence of Mission Creek and the Wenatchee River. The blue outline shows the 20 year floodplain and the purple line shows the 40 year floodplain.



Figure 2: Photo showing slope damage.

Figure 3: Designs for the proposed repair.

