

DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)

LEVEE VEGETATION MAINTENANCE MILL CREEK FLOOD CONTROL PROJECT WALLA WALLA, WASHINGTON JULY 2015

I. Introduction/Proposed Action

The U.S. Army Corps of Engineers, Walla Walla District (District) proposes to remove woody vegetation from the landward side of the levees along the federally owned portion of the Mill Creek Flood Control Channel in Walla Walla, Washington. This maintenance is being proposed in order to meet flood risk reduction maintenance requirements in accordance with U.S. Army Corps of Engineers Headquarters (HQUSACE) regulations and policies. HQUSACE policy on levee vegetation mandates that a corridor (vegetation-free zone) remain free of all woody vegetation. The vegetation-free zone includes the levee structure plus 15 feet from the landward and riverward levee toes (or the federal property boundary, whichever is less). The levee toe or toe line, is the line of intersection formed where the sloped surface of the levee and the surrounding grades meet, forming what resembles a crease in the ground surface.

This vegetation-free zone is to provide access to and along the levee for surveillance, inspection, maintenance, monitoring and flood-fighting. Root systems within the levee structure compromise the integrity of the levee creating safety concerns during high water events. Vegetation clearing of this type would continue as routine operation and maintenance of the levees in the future. The proposed action does not include any vegetation removal on the riverward side of the levees as currently only grasses and small shrubs exist there. The Environmental Assessment (EA) considers the potential environmental effects from the proposed action and any reasonable alternatives.

II. Background Information

Mill Creek is located in southeastern Washington State and flows through the City of Walla Walla. Mill Creek is 37 miles long. It flows for 15 miles in a relatively deep and narrow canyon, through mountainous terrain and enters an alluvial fan a few miles east of Walla Walla. Elevations range from 5,500 feet in the headwaters to about 590 feet at its confluence with the Walla Walla River. Mill Creek drains a basin of 165 square miles.

The Mill Creek Flood Control Project (MCFCP) was authorized in 1938, under Public Law 75-761. The federally-owned portion of the MCFCP is located between river mile (RM) 10.4 and 11.5 on Mill Creek (Figure 1-2). The lower six miles of the MCFCP (RM 4.5 to approximately RM 10.4) are owned and managed by the Mill Creek Flood Control Zone District (MCFCZD), and levee

vegetation maintenance on that portion is not part of the proposed action evaluated in the EA. The federal project (Mill Creek Project) is composed of two major units: 1) Mill Creek Channel; and 2) the off-channel reservoir, Virgil B. Bennington Lake (Bennington Lake).

The Mill Creek levees are constructed of well-compacted earthen materials. The levees have 1V:2H slopes, and crests that vary from 12 to 20 feet in width. The riverward slope is protected with riprap overlaying wire and rock revetment, and the slope protection toe extends three feet below the channel invert. Following initial construction, both the riverward and landward side slopes were seeded with native grasses, but were left clear of woody vegetation. The south bank levee crest consists of angular gravel surfacing (top course) for vehicle access. There is a paved bike path along the north bank levee crest and a pedestrian bridge near Rooks Park.

The riverward slope has a well established stand of dryland grasses and small shrubs. No mature trees exist on the riverward slope or within 15 feet of the riverward toe at this time, however guidelines require this area be kept clear of all woody vegetation as well so clearing may be performed in the future.

Woody and non-woody vegetation is growing on the landward shoulder and slope, and within 15 feet of the levee landward toe. This vegetation is mature and consists of grasses, shrubs, and trees (cottonwood is dominant, but locust is common in this area too) of varying height and girth. Some of the cottonwood trees are close to 100 feet tall; however, based on the District Forester's analyses, many are considered hazardous because they are estimated at approximately 60 to 70 years of age and nearing the end of their lifespan.

III. Purpose and Need

The District proposes to remove all woody vegetation from the landward side of the levees in an approximate one mile stretch from the Bennington Lake Diversion Dam to the western most federal boundary on the federally-owned portion of the Mill Creek Flood Control Project, in accordance with HQUSACE regulations and guidelines for managing levee vegetation. The vegetation removal zone includes the levee structure itself and 15 feet beyond the levee toe. This type of vegetation removal would continue as routine maintenance in the future. The purpose of the proposed action is to maintain flood risk reduction for the City of Walla Walla and surrounding area communities by managing vegetation on the levees. The action is needed because vegetation on the levees is overgrown to the point of obstructing visual inspections and access for maintenance, which compromises public safety during high water events.

Alternatives considered must: (1) maintain required flood risk reduction for Walla Walla and surrounding communities, (2) comply with HQUSACE regulations and guidance, (3) be technically feasible, and (4) be environmentally acceptable.

IV. Alternatives Considered

The National Environmental Policy Act (NEPA) and 33 CFR Part 230 *Procedures for Implementing NEPA* require a reasonable range of alternatives be considered during the planning process. Alternatives considered under NEPA must include, at least, the proposed action and the “No Action” Alternative, which provides a baseline from which to compare other alternatives. The alternatives identified below were evaluated to determine if they satisfy the purpose and need of the proposed action (Section 1.3 of the EA):

- (1) The No Action Alternative
- (2) The Proposed Action (Levee Vegetation Removal Phases I and II)
- (3) Levee Vegetation Removal on the Levee Structure Only (Variance)
- (4) Setback Levees.

However, in order for any alternative to be acceptable for further evaluation it must meet certain objectives, or screening criteria. Screening criteria help eliminate those alternatives that could not reasonably or practically meet the project purpose and need. In this case, alternatives must: (1) maintain required flood risk reduction for Walla Walla and surrounding communities, (2) comply with HQUSACE levee vegetation regulations and guidance, (3) be technically feasible, and (4) be environmentally acceptable.

Alternative 1 – No Action

Under Alternative 1, the No Action Alternative, no vegetation would be removed from the levees except what is already removed under routine maintenance activities. This includes occasional mowing and the annual use of goats to keep grasses down on the riverward side of the north and south levees.

The No Action Alternative does not meet the project purpose and need, however it is carried forward to the analysis section of the EA for comparative purposes as required by NEPA.

Alternative 2 – Levee Vegetation Removal Phases I and II (Proposed Action)

Under Alternative 2, the proposed action, the District would remove all existing woody vegetation from the landward slope of the levee structure and 15 feet beyond the toe along a one-mile stretch of the federally-owned portion of the Mill Creek Flood Control Channel from the Bennington Lake Diversion Dam to the western most federal boundary. The vegetation removal zone on the landward side of the levees includes the levee structure itself and 15 feet beyond the levee toe. It is important to note that significant portions of the landward side levee slopes are currently sloped more gradually than the original design specified. The toe line adjacent to overly gradual slopes intersects the surrounding grades farther away from the levee crown than the originally designed cross section requires. Therefore, the location of the toe line for the originally designed levee slope (1V:2H) was calculated and surveyed in March 2015 to correctly determine the limits of the vegetation-free zone and minimize the area from which

vegetation would be removed. Elevation variations in the surrounding grades cause the horizontal distance from the levee crown to the toe line to vary, as such, the outer bound of the vegetation-free zone varies with it.

Implementation of this alternative would be conducted in two phases. Phase I, scheduled for the fall of 2015 involves cutting the trees and vegetation to ground level. During Phase I, approximately 308 trees would be cut down (211 from the north levee, and 97 from the south levee) in addition to the understory (grasses, shrubs and plants under the trees). It is probable that the debris would be removed and transported to an approved off-site location; however, some or all of the debris could be stored on-site for potential future habitat improvement projects. Two potential disposal sites have been identified. Phase II, scheduled for the fall of 2016, involves excavating the remaining stumps and root balls from the ground (clearing and grubbing). Phase I in 2015 and Phase II in 2016 would be complete no later than January 30th of the following year.

Alternative 3 – Levee Vegetation Removal on the Levee Structure Only (Variance)

Under Alternative 3, the District would need to apply for and receive approval for a variance from HQUSACE regulations and guidance for levee vegetation maintenance. If approved, all woody vegetation from the landward side of the levees along the one mile stretch of the federally-owned portion of the Mill Creek Channel from the Bennington Lake Diversion Dam to the western most federal boundary would be removed. This alternative would not include the 15 foot area adjacent to the levee toe. Rather, vegetation removal would occur only on the levee structure itself. This would be a “variance” from the standard vegetation guidelines set forth in ETL 1110-2-583. Vegetation variances for either federal or non-federal flood damage reduction systems may be permitted, however there are two criteria requirements that must be met, pursuant to HQUSACE guidance: The variance must be shown to be necessary, and **the only feasible means** to (1) preserve, protect, and enhance natural resources, and/or (2) protect the rights of Native Americans, pursuant to treaty and statute.

This alternative was removed from further evaluation due to the fact that the vegetation variance criteria as set forth above is not satisfied, as there are other feasible means (i.e., other vegetation plantings) that could offset removal of levee vegetation. For example, see reference to the Mill Creek Project’s habitat improvement planting strategy as described in the EA in Section 1.5.

Alternative 4 – Setback Levees

The Setback Levee concept would move the levee landward to allow the Mill Creek channel more conveyance through the project reach and not require vegetation maintenance on existing levees. This alternative would require the acquisition of privately-owned land, as current federal land is extremely limited, and would also require hydraulic and geotechnical modeling studies to show the technical feasibility of the setback levees and eventual channel modification.

This alternative was removed from further evaluation as not technically feasible. District managed federal land near the Mill Creek channel is extremely limited. Setback levees would require acquisition of additional land from adjacent private landowners, which would require authorization from Congress, and construction of new levees (as compared to maintaining existing levees) would be cost prohibitive.

ALTERNATIVES ELIMINATED from DETAILED CONSIDERATION

- Alternative 3 – Levee Vegetation Removal on the Levee Structure Only (Variance)
- Alternative 4 – Setback Levees

V. Environmental Effects

The following environmental resources were identified as being relevant to the project: Aesthetics, Aquatic Resources, Terrestrial Resources/Wildlife, Threatened and Endangered Species, Vegetation, Cultural Resources, Recreation, Noise, Climate Change, Socioeconomics, Environmental Justice, and Cumulative Effects. Environmental analysis and effects of the proposed action and the No Action Alternative are detailed in Section 3 of the EA. The analysis concluded there would be no significant impacts to the environment resulting from implementation of the proposed action.

VI. Public Comment/Involvement

The EA and draft FONSI have been made available to potentially interested members of the public and local, state, and federal agencies for a 30-day review and comment period from July 17 to August 17, 2015. Upon conclusion of the review period, the District will consider comments received and move forward in the NEPA process with signing of the FONSI if applicable, or on to the preparation of an Environmental Impact Statement if deemed necessary.

A public meeting is planned for Wednesday, August 12, 2015 at the Airport Terminal Building Conference Room at 45 Terminal Loop Road in Walla Walla, Washington. At this meeting, the District will give a presentation on the need for levee vegetation maintenance, answer questions from attendees, and offer tours of the proposed action area.

VII. Compliance with Other Laws and Regulations

See Section 4 of the EA for a discussion of compliance with other laws and regulations. The proposed action complies with other federal laws and applicable regulations.

VIII. Conclusion/Finding

Having reviewed the Mill Creek Levee Vegetation Maintenance EA, I find that the document provides sufficient discussions on the purpose of and need for the proposed action, alternatives, the environmental effects of the proposed action and the alternatives, and a listing of agencies and persons consulted. I have taken into consideration the technical aspects of the project, best scientific information available and public comments received. These documents provide sufficient evidence and analysis to meet the District's requirements pursuant to the National Environmental Policy Act. Based on this information, I find that implementation of the proposed action would not result in significant impacts on the quality of the human environment and that an environmental impact statement is not required.

Timothy R. Vail
Lieutenant Colonel, Corps of Engineers
District Commander

Date

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