



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
450 GOLDEN GATE AVENUE
SAN FRANCISCO, CALIFORNIA 94102

May 6, 2020

SUBJECT: San Lorenzo River Levee Vegetation

Mr. Mark Dettle
Director of Public Works, City of Santa Cruz
809 Center Street, Room 201
Santa Cruz, California 95060

Dear Mr. Dettle,

Thank you for your comments in the letter dated April 17, 2020, subject: Confirmation and Acknowledgment of Corps Responses to City Comments on OMRR&R.

The U.S. Army Corps of Engineers (Corps) acknowledges the City's request to execute a supplemental O&M manual that specifically addresses the vegetation requirements. The Corps does not propose a supplemental O&M manual. The San Lorenzo River's (Project) current O&M manual is a living document that will require updating throughout the lifecycle of the project and we recommend making changes to the document as needed as an approach to assisting the City in its maintenance of the Project.

We have made changes to the current O&M Manual that are aligned with the present vegetation guidelines to be implemented from the Engineering Pamphlet EP 1110-2-18, which superseded Engineering Technical Letter ETL 1110-2-583.

Enclosed are the revised pages from the O&M Manual for your review and acknowledgement.

Should you have any questions please contact the Project Manager, Pamela Patton, at 415-503-6747.

Sincerely,

John D. Cunningham
Lieutenant Colonel, U.S. Army
District Commander and Engineer

Enclosure

be managed in such a manner as to avoid the need for removal and associated embankment repair, and to avoid any incidental growth and subsequent presence of endangered species that might prohibit access and activities necessary for O&M (ETL 1110-2-583).

The Superintendent shall develop a vegetation management plan, which is reviewed and updated as needed each fall, for implementation during the following summer to fall. This schedule allows for vegetation maintenance prior to winter flood flows to meet USACE flood channel maintenance requirements. Monitoring requirements and additional trigger points for vegetation removal are given in Section 11. Results of a thorough inspection by the Superintendent after seasonal maintenance, including any deviations from original plans, should be noted on forms showing the original plans. The results should be included with semiannual reports to USACE.

Vegetation Removal

Vegetation management is partially based on EP 1110-2-18, whose purpose is stated herein:

“This EP provides guidelines to assure that landscape planting and vegetation management provide aesthetic and environmental benefits without compromising the reliability of levees, floodwalls, embankment dams, and appurtenant structures. It is important to note that all minimum guidelines presented herein are just that – minimums. The dimensions of the vegetation-free and root-free zones defined in this document provide the minimum acceptable buffer between vegetation and flood damage reduction structures. For each individual project, the design team must consider whether these minimums are adequate to the specific needs and conditions of the project.”

The Project includes both a leveed section below Highway One, and a non-leveed section above the Highway One Bridge. Vegetation management treatments differ between the leveed section of the Project and the non-leveed section of the Project.

For the leveed section, all vegetation shall be managed following guidelines outlined in EP 1110-2-18 or a vegetation variance shall be requested. This includes vegetation within the project improvement area that was designed and built after the authorized project was constructed, including the vegetation labeled as “non-approved” (out of compliance) in the 2012 Second Nature planting layout maps. Non-approved vegetation for purposes of the 2012 mapping effort referred to either vegetation existing in a non-approved zone or a species not on an approved species list. Non-approved shrubs refer to areas with existing (2012) shrubs that fell within the USACE defined 50-ft buffer zone for levee inspections. While waiting for the vegetation the guidance revision to be completed and published vegetation removal is only required when it presents an unacceptable safety risk. .

All vegetation described in the original construction drawings (Contracts 1-2) and as-built plans (Contract 3) was compliant with USACE policy at the time of construction and need not be removed.

The non-leveed section extends from the Highway One Bridge north to the project limit (City Limit). In this section vegetation removal follows 33 CFR 208.10(g)(1) [see Section 9.4] and should have as its focus to limb up trees and trim or remove vegetation which has the potential to slow flood flows during storm events, especially near the Highway One Bridge and adjacent to the Tannery Live Works Studio housing project. Trees which have fallen into the river waters shall be removed to prevent their snagging river debris during high flows and blocking or slowing flood water flows. The channel bottom width for this section should be approximately 100 feet wide (USACE 1962), and vegetation growth encroaching on the 100-foot wide channel should be removed.

This non-leveed section needs to be inspected annually to identify needed vegetation trimming or removal to maintain flow conveyance. Removal of trees which have fallen into the river should be conducted in coordination with the responsible regulatory agencies, however in event of immediate danger prior to an imminent storm event removal should be taken on an emergency basis.

However, it should be noted that the guidelines for vegetation removal is currently being reviewed. Implementation guidance for Section 3013 of the Water Resources Reform and Development Act of 2014 has been developed and states that the Non-Federal Sponsor does not have to remove vegetation unless it presents an unacceptable safety risk (USACE 2017):

“Section 3013(g)(1) does not prevent non-federal sponsors from making decisions regarding how to manage vegetation for the levee systems or segments for which they are responsible. Until the guidelines are revised, USACE will not seek to require non-federal sponsors to make specific vegetation management decisions without documenting that vegetation presents an unacceptable safety risk.”

The Superintendent has the discretion to decide when vegetation presents an unacceptable safety risk and requires removal. However, USACE engineers will also be inspecting the Project annually and may also determine when vegetation presents an unacceptable safety risk, and at that time may ask for the vegetation to be removed.

Vegetation Ground Cover Requirements

In general, the only acceptable vegetative ground cover in the vegetation-free zone shall be perennial grasses. Their primary function shall be to reliably protect against erosion. They shall be maintained as necessary to ensure the health and vigor of the primary species providing