

Notice of Section 401 Application Reception

File Number: 302025-04

Project Name: Silverado Restoration and Erosion Prevention Project

Received: 04/24/2025

Date Posted: 05/07/2025

End of 21 Day Public Comment Period: 05/28/2025

Project City: Silverado

Project County: Orange

Applicant Organization: Orange County Public Works

Applicant Name: Giles Matthews

Waterboard Staff: TBA

Brief Description of Project:

Project Description: OC Public Works is proposing to address localized erosion that has occurred at Silverado Creek through the implementation of a creek restoration project that aims to result in an overall increase in habitat diversity and native vegetation and at the same time protect the mature California live oak and western sycamore trees from future loss due to erosion and restore the bank of the creek to its original configuration, leading to a local environmental uplift.

Project Activities: The project would divert the low flow channel to its former location, opposite of the road shoulder on the right-hand side of the channel, looking upstream, effectively creating a mirror image of the current channel layout. The eroded banks would be repaired using void filled riprap, gently placed around the mature tree roots to protect them from further erosion and to avoid root damage. The voids in the riprap would be filled with local material generated from the excavation of the low flow realignment. Approximately one to two feet of earthen material would be placed on top of the void filled riprap, prior to seeding and planting with locally prevalent native plants that are appropriate for the semi-shaded conditions. The low flow diversion would result in the removal of several small willow (*Salix* spp.) and mule fat (*Baccharis salicifolia*) trees/bushes. The willow and mule fat would be harvested prior to commencement of construction activities and placed in large water filled containers to encourage root development. The willow and mule fat would be placed along the toe of the restored creek bank, extending up to four feet up the slope to provide habitat and erosion protection. Larger willow branches would be utilized to create bendway weir deflectors to ensure that flows do not revert to their current configuration. The willow branches would be installed such that two-thirds of the branch would be buried and one third would be exposed, aligned at an approximately forty-five-degree angle, pointing

upstream, to deflect flows away from the creek bank. The willow branches would be held in place with riprap, which would be partially buried in the bank. The riprap would extend into the channel approximately three to five feet to form bendway weirs at two to three locations, to be determined at the time of construction. The bendway weirs would deflect flows away from the creek bank and encourage natural sediment deposition in front of the creek bank, further protecting the road from future erosion. The riprap and bendway weirs will be built from existing material (e.g., cobble, boulder, riprap) from the current channel and banks, and will be covered with earthen material obtained from the project site. There is expected to be approximately 400 cubic yards of material repositioned within the project site; no import of soil is anticipated for this project. Approximately 350 cubic yards of boulder rocks will be placed to form the void filled rock. See attached Project Description and project plans for more information.