

**2022 Stream Maintenance Program
Pre-Project Notification Worksheet for Sediment Removal Sites**

4-EAST-2 & -1: Sediment Removal from East Creek

Location: East of Leyland Way/Cecelia Way intersection in Tiburon, CA

FC has an easement over East Creek. Lat/Long: 37° 53' 58.34" N 122° 29' 52.41" W

Channel Description: Modified earthen flood control engineered channel.

Tidal: No (Not at the Reach)

Vegetation/Habitat Types: Willow lines the creek on the left bank planted by Flood Control circa 2004. Cattails in channel and non-native/invasive species. (Fennel and French/Scottish Broom)

Geomorphic Codes: Type1 Straight

Linear Feet: 4-EAST-2 ≈750' for that entire Reach and 4-EAST-1≈680'

Total Length of work is ≈ 200 Linear Feet combining both Reaches.

Sediment Issue Severity: Medium; fills in after a decent storm

Chronic Sediment Issues: Sediment aggradation at separate locations

Dimensions of Work Area: ≈18inches to 2 feet depth and 10 feet wide to clear the channel below a 5'X10' culvert. DS from the Bridge just about 50' to remove cattails at the bend.

On the upstream, spots were there is not cover remove sediment with cattails

DS≈15 yd³

US≈ 43Yd³ for (4) individual sections

Work Days:- 1-2; every 1-3 years

Equipment: Small BobCat or a Gradall From top of bank.

Equipment Location During Sediment Removal: Adjacent Roadway or pull-out

Heavy Equipment Access and Staging: Across off-road area no vegetation removal

Temporary Stockpile Locations: On off-road area- no vegetation removal

Dewatering: Cofferdam and water diversion needed, therefore it falls under ACOE jurisdiction; (However is an Ephemeral Creek there will be No to Minimal Water in the Channel)

Permits Needed: ACOE 404; DFW 1600 RMA, RWQCB; no Special Status Species present in this project reach

Potentially Occurring Special Status Species: None in the project area; see Species designations on Site Maps attached

Avoidance and Minimization Measures

AMM-1: Environmental Compliance Coordinator, Buffers and Work Stoppages

- Before commencement of a maintenance activity, The District shall designate an Environmental Compliance Coordinator (ECC) who will determine the appropriate AMMs, to implement during operations based on the site fact sheets.
- The ECC shall distribute a work order to maintenance staff and contractors with a list of the AMMs and BMPs applicable to each site. The work order must be completed in a timely manner to allow time for pre-construction surveys.
- The ECC shall assess field conditions at the start of each work day. If any special status species or nesting birds are observed, the ECC shall establish buffers areas, if sufficient, or stop any activity the ECC deems may result in take or destruction of habitat. Stopped work shall not be allowed to resume until appropriate corrective measures have been completed or it has been determined that nesting is complete. The ECC shall immediately report any unauthorized impacts to the appropriate trustee agency (i.e. USFWS, NMFS, USACE, and/or CDFW). The ECC shall coordinate with Maintenance Supervisors to stop any activity the ECC or agencies deems may cause take of a listed species or their habitat. Work shall not be allowed to resume until appropriate corrective measures have been completed.
- All on-site maintenance activity personnel shall receive instruction regarding the presence of listed species and the importance of avoiding impacts to these species and their habitat before the start of work.

GAMM-2: Site Preparation/Wildlife Reconnaissance

The ECC shall walk the site each day before maintenance activities commence to locate wildlife; if any special status wildlife species are noted, work will not commence until all individuals have left the work site on their own and/or it has been determined that they are not nesting within the project site.

When maintenance activities require dewatering, a qualified fisheries biologist with appropriate permits shall be on-site to move fish.

All habitat improvements on salmon and steelhead streams shall be done in accordance with techniques in the California Salmonid Stream Habitat Restoration Manual (CDFW 2010d).

GAMM-3: Work Windows

To avoid impacts to special status species, the maintenance activities carried out shall typically occur during the summer low flow season. In addition, species-specific work windows shall be followed to avoid impacts. Table below shows the work windows for species that may be impacted by the proposed maintenance activities. Additional information can be found within the species-specific AMMS.

GAMM-4: Trash Removal

During all activities at project sites, all construction trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following maintenance activities, all construction trash and maintenance debris shall be removed from work sites and disposed of properly.

GAMM-5: Equipment Staging

Staging/storage areas for equipment, materials, fuels, lubricants, and solvents, shall be located outside of the stream's high water channel and associated riparian area. Stationary equipment such as motors, pumps, generators, compressors, and welders located within the dry portion of the stream channel or adjacent to the stream, shall be positioned over drip-pans. Equipment shall be moved out of the normal high water area of the stream prior to refueling and lubricating. The ECC or Maintenance Supervisor shall ensure that contamination of habitat does not occur during such operations. Best Management Practices covering Chemical Use (Spill Prevention and Control); contained in the BASMAA Flood Control Facility Maintenance Best Management Practices Manual (BAASMA 2000) shall be followed. These BMPs are designed to prevent the discharge of chemicals to flood control channels and storm drain systems and allow prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

The number of access routes, number and size of staging areas, and the total area of the work site activity shall be limited to the minimum necessary to complete the proposed activity.

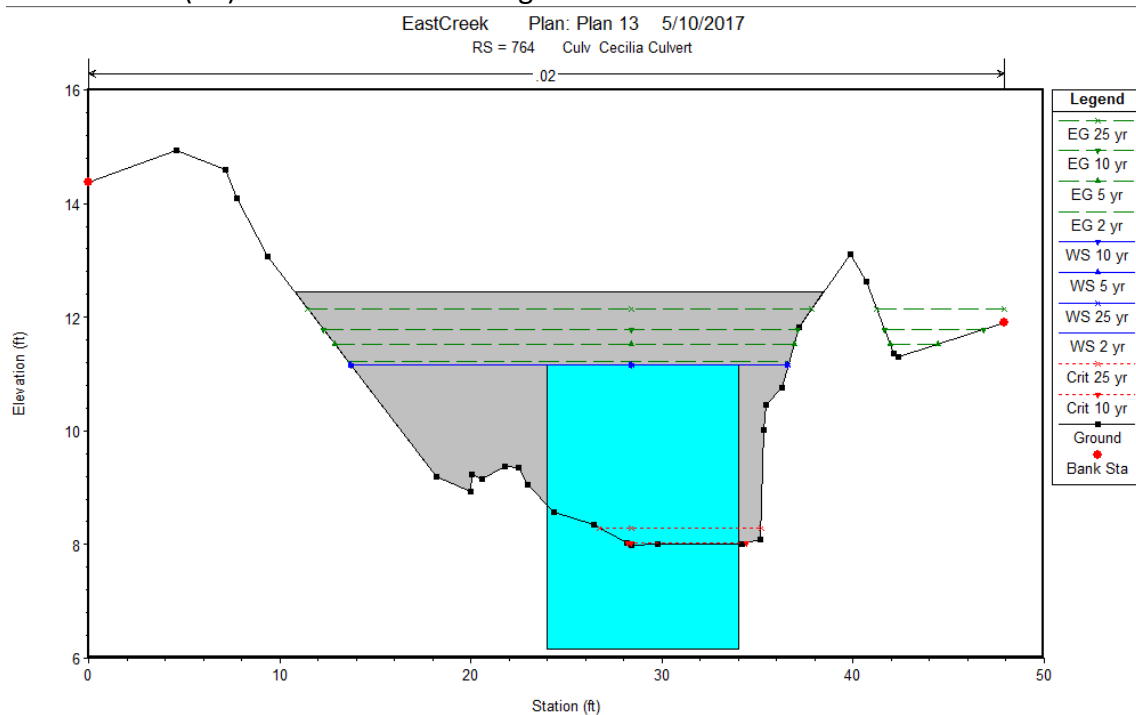
GAMM-6: Invasive Species

The ECC shall ensure that the spread or introduction of invasive exotic plants shall be avoided to the maximum extent possible. When practicable, invasive exotic plants at the work site shall be removed.

For all activities in creeks and bay, all gear exposed to water shall be allowed to dry for three days before being used again. Some disinfectants are OK to use per DFG and USFWS (users should check with those agencies). As a precaution against invasive quagga and zebra mussels, if kayaks or any other vessels are used in maintenance activities, crew will wash and dry them off-site prior to using them in another creek or tributary.

4-EAST-2: Sediment removal and clearing of cattails to establish a low flow channel downstream of Cecelia Way culvert along East Creek. In 2017, a survey of the site was conducted by a licensed land surveyor. This survey data was used in a HEC-RAAS model, and the cutler was occluded by approximately 45%

Down Stream(DS) from the Culvert Bridge.



4-EAST-1 DOWNSTREAM (DS) Cecilia Way Culvert Bridge



4-EAST-2 UPSTREAM (US) Cecilia Way Culvert Bridge



