

# San Francisco Bay Conservation and Development Commission

375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600 fax 888 348 5190

State of California | Gavin Newsom – Governor | [info@bcdc.ca.gov](mailto:info@bcdc.ca.gov) | [www.bcdc.ca.gov](http://www.bcdc.ca.gov)

## PERMIT NO. M1977.113.07

(Originally Issued on February 9, 1978, As Amended Through April 16, 2021)

## AMENDMENT NO. SEVEN

Santa Clara Valley Water District  
5750 Almaden Expressway  
San Jose, California 95110

### I. Authorization

- A. Subject to the conditions stated below, the permittee, Santa Clara Valley Water District (Valley Water), is hereby authorized to do the following:

**Location:** In the Bay, certain waterways, and within the 100-foot shoreline band in the Santa Clara Basin, at various locations in and adjacent to, San Francisquito Creek, Mayfield Slough, Charleston Slough, Mountain View Slough, Permanente Creek, Stevens Creek, Guadalupe Slough, Sunnyvale East and West Channel, and Alviso Sloughs, Calabazas Creek, San Tomas-Aquino Creek, Guadalupe River, Coyote Creek and Coyote Bypass, and any unnamed tidal sloughs in Santa Clara County (Exhibit A) (Amendment No. Seven).

**Description:** Within the Commission's jurisdiction, conduct maintenance and repair activities necessary to preserve flood water capacity and conveyance, maintain the structural and functional integrity of Valley Water's flood protection facilities, and maintain healthy tidal creeks, and sloughs through its annual work program, and as described in the Streambed Maintenance Program Manual 2019-2023 (SMP-2) (Amendment No. Seven).

1. Perform on-going in-kind repair and maintenance of water control structures, stream banks, existing levees, and wells, and other miscellaneous maintenance activities related to flood control and water conservation facilities;
2. Conduct limited bank and levee stabilization measures on an as needed basis, including installation of burrowing animal prevention measures (Amendment No. Seven);



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3. Desilt, dredge, and excavate up to 75,000 cubic yards (cy) of accumulated sediments and soil within the Commission's jurisdiction to maintain existing flood water conveyance with disposal of dredged sediments and excavated soils at approved and authorized upland locations (Amendment No. Seven);
4. Install and remove coffer dams as necessary to conduct in stream maintenance, water control structure repair, and desilting activities (Amendment No. Seven);
5. Conduct vegetation management, including hand and mechanical removal, grazing (within upland areas only), and limited herbicide application, where appropriate (Amendment No. Seven); and
6. Perform minor maintenance activities such as fence, access road, and amenity repair, limited sediment removal (up to 25 cy), and other activities resulting in not more than 3,485 square feet of impacts to wetlands to maintain facility function (Amendment No. Seven).

B. This amended authority is generally pursuant to and limited by your original application dated November 28, 1977, your letters dated July 19, 1999 (received in our office on July 23, 1999), ~~and~~ November 9, 1999 (received in our office on January 7, 2000), requesting Amendment No. Two, and, your letters dated September 10, 2004, ~~February 22, 2010,~~ September 15, 2020, May 22, 2014, and September 15, 2020 requesting Amendment Nos. Three, Four, Five and Six, respectively; and your application dated May 1, 2020, received in our office on May 20, 2020, including all accompanying exhibits, and subsequent submittals and correspondence, particularly the exhibit entitled "Items of Work for general Permit (1977)," and the "Stream Maintenance Manual Program 2019-2023," and all conditions of this amended permit.

C. Authorization for work described by Amendment No. Seven, herein shall remain in effect until April 30, 2026 ~~May 5, 2010~~, at which time this amended permit will expire. This amended permit may be renewed for successive five-year periods by or on behalf of the Commission where application for renewal is made prior to the expiration of this amended permit.

## **II. Special Conditions**

The amended authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. **General Conformance.** The work shall be conducted generally in conformance with the Stream Maintenance Program Manual 2019-2023 (SMP-2), and the approved annual work plans. Valley Water is responsible for ensuring that the stream maintenance activities conducted annually are consistent with the authorization and conditions of this amended permit. Any substantial differences from the work authorized herein shall be via review and written approval by or on behalf of the Commission through plan review or a permit amendment. In case of a discrepancy between final approved documents and the special conditions of this permit or legal instruments, the special condition shall prevail (Amendment No. Seven).

**B. Stream Maintenance Program Manual Update.** If, during the five-year authorization period of Amendment No. Seven, Valley Water completes the Stream Maintenance Program Manual 2024 – 2028 (SMP-3), Valley Water shall submit SMP-3 for Commission review and approval. When drafting SMP-3, Valley Water shall work with Commission staff to incorporate BCDC policies and requirements in appropriate sections of the document, such as waiver and mitigation requirements. 60 days prior to completion of SMP-3, Valley Water shall provide Commission staff the draft document for review and approval of sections pertaining to Commission jurisdiction, policies, and requirements. If there are significant changes in the updated SMP-3, Valley Water shall request an amendment to this amended permit. If an amendment is not required, Valley Water shall request an extension of time for this amended permit (Amendment No. Seven).

**C. Notice of Proposed Work.** Not later than April 15<sup>th</sup> of any year, Valley Water shall submit for review and approval a notice of proposed work (NPW 1) for review and approval by Commission staff. The types of proposed work within BCDC jurisdiction that require approval by or on behalf of the Commission include: bank stabilization, desilting or sediment removal noting if a coffer dam would be used, hardscape removal, repair or maintenance of water control structures, in channel or shoreline vegetation management, management of animal conflicts where there is modification of habitat or facility, and minor repair and maintenance. The NPW will include information as described in Chapter 12 of SMP-2 and Exhibit B included herein for activities within the Commission's jurisdiction, and shall include at a minimum, the information listed in items C1, C2, and C3 below. Chapter 12 describes the process and content of the NPW and Exhibit B provides an updated description of activities that require notification and approval. In its submittal, Valley Water shall clearly identify activities that would occur within the Commission's jurisdiction for Commission staff for ease of review (Amendment No. Seven).

The Commission staff will provide written review, comment, and if acceptable approval within 45 days of submission. If a second notice of proposed work is necessary, it shall be provided for review and approval not later than August 1 of any year and will be responded to within 45 days of receipt as in NPW 1. If, during the course of annual inspections, Valley Water identifies additional work not included in the initial notice of proposed work, it shall submit additional notices of proposed work as needed identifying newly identified projects to the Commission staff with a minimum of 30 days for review and approval (Amendment No. Seven).

- 1. The Notice of Proposed Work should identify project location and specifications, proposed work description, project map and plans (where applicable), anticipated construction and vegetation impacts within the Commission's jurisdiction, photographs of existing conditions, timing of work, and any minimization or mitigation measures proposed to reduce impacts of the maintenance activities, and other pertinent information as described in Chapter 12 of the SMP-2 (Amendment No. Seven).**
- 2. Changes in the Field.** If changes are identified in the field that require notification, e.g., size, impacts, unanticipated need for dewatering, or types of repair, the Valley Water shall notify the Commission staff in writing as soon as the necessary change is

identified. Valley Water may request a 3-day review as described in the SMP-2. If Commission staff cannot accommodate such a request, an estimated time of response shall be provided (Amendment No. Seven).

- 3. Incomplete Projects.** “Carry over” projects, those that were not completed within the work season, can be completed in the following year as previously approved with minor variations due to on site changes. However, the NPW for the following year shall include notification of the need to complete “carry over” projects (Amendment No. Seven).

**DA. Annual Summary Report.** The permittee shall submit a written report to the Commission by January 31, of each year for any work which may have been undertaken the previous year pursuant to this amended authorization, describing in narrative form the type and extent of work performed. The report shall include the information outlined below in Special Condition II.A and as described in Chapter 12, Section 12.3, ~~(1-4)~~ or the report may be a compilation of the SMP reports from the previous year, provided that the information required in Special Condition II.A ~~(1-4)~~ is included and activities occurring within the Commission’s jurisdiction highlighted so that it can be easily located by Commission staff ~~a reviewer~~. Regardless of the report format, the following information shall be included:

1. Actual impact numbers (e.g., linear footage/acreage) for activities where such numbers were only estimated in the NPW;
2. Description of maintenance activities completed the previous year;
3. A list of what projects were proposed in the NPW but not performed;
4. Cumulative summary of SMP-2 impacts to date;
5. Cumulative summary of compensatory activities to date stated below by work activity;
- ~~6.~~ a channel-by-channel description of (a) length of channel dredged; (b) amount, in cubic yards, of sediment dredged; (c) dredging method employed (i.e., dragline, backhoe, front-end loader, and/or hydraulic dredge); ~~(d)~~ placement of the dredged sediment (e.g. Pond 8A) material disposal site used;
- ~~7.~~ (e) Amount of cubic yards of material imported to raise, repair, stabilize or armor existing, levees and the length of the levee maintained;
- ~~8.~~ (f) Size and type of water control structure repaired or replaced; and ~~(g)~~ cost of the dredging and disposal operations.
- ~~2.~~ A narrative description of the work proposed in the current calendar year. The information required in Special Condition II A ~~1~~ above shall also be provided in this section of the report.
- ~~9.~~ A description of any tidal or diked wetlands inadvertently lost as a result of unanticipated events such as slippage or erosion of sediment temporarily placed on levees into marsh areas. This section of the report shall also include a discussion of: (a) how and when the material will be removed from such areas; (b) the measures proposed to restore such areas to the prior conditions existing ~~prior to unauthorized~~

~~dredged material disposal; and (c) the measures taken to prevent the reoccurrence of such events. Annual mitigation monitoring report(s) required by Special Condition II-F may be submitted separately or as an attachment to the Annual Summary Report (Amendment No. Seven).~~

4. ~~Any work proposed after submittal of the annual report shall be submitted to the Commission in a format similar to the annual report no less than 30 days prior to the date when work is proposed to be started. Within 30 days of the date BCDC receives either the annual report or subsequent proposal(s) for work within that calendar year, BCDC shall notify the permittee of any proposed work which does not conform to the intent, terms, or conditions of this amended permit. Such notification shall constitute denial of the work under this amended permit. A separate BCDC application can be made for any such denied work (Amendment No. Two).~~

~~**B. Wetland Protection.** All repair and maintenance activities shall be performed in such a manner so that no salt pond, managed wetland or marsh area is reduced in area or permanently damaged and to assure that the marshes and mudflats in all areas not slated to be dredged and are not disrupted by dredging and disposal or construction activities (Amendment No. Two).~~

~~**EG. Marsh and Upland Plant Habitat Protection.** The work authorized by this amended permit shall be performed in a manner that will prevent or minimize any significant adverse impact on any tidal marsh, other sensitive wetland resources, and existing upland vegetation within the Commission's jurisdiction. Valley Water shall implement the best management practices provided in Exhibit C (an excerpted and updated table from Attachment A of the SMP-2) to reduce impacts to habitat and wildlife living within and using the habitat. Specifically, should activities authorized herein impact native vegetation within the Commission's jurisdiction, the Valley Water biologists shall monitor all tidal wetland impacts and other jurisdictional areas, including shoreline band, to determine if the impacted areas are restored within two years of impact to qualify as temporary impacts. If the tidal wetlands or jurisdictional areas are not restored within two years, mitigation for permanent impacts are required as described in Special Condition II-F. If any unforeseen adverse impacts occur to any such areas as a result of the activities authorized herein, the permittee shall restore the area to its previous condition, including returning the disturbed area to its original elevation and soil composition and, if the area does not revegetate to its former condition within one year, the permittee shall seed or plant all disturbed areas with appropriate marsh vegetation after receiving approval of a restoration plan by or on behalf of the Commission. Such restoration plan must be implemented within two years of the initial disturbance (Amendment No. Two). Further, impacts to vegetation in impacted areas within the Commission's jurisdiction shall be actively planted, if necessary, with native vegetation to restore habitat function and suppress invasive species. Methods to revegetate upland areas may include hydroseeding and plantings as described in Section 10.6.2 of SMP-2 (Amendment No. Seven).~~

1. ~~**Vegetation Management.** Valley Water conducts vegetation maintenance activities within tidal waters to maintain flood flow capacity, facility integrity, and public safety. Vegetation management shall be conducted in via mechanical mowing (including the use of a "Marsh Master" track vehicle in tidal areas and weed wackers), hand pruning~~

(including the use of pole saws, or chainsaws when necessary), and limited application of herbicides where other methods of vegetation control is not feasible. Vegetation management in tidal areas shall be limited to mowing or weed whacking outside of bird nesting season, generally January 15<sup>th</sup> through August 31<sup>st</sup> of any year, or after management areas have been surveyed by qualified biologists to ascertain if nesting birds are present. If nests are present, the area within the nest buffer shall not be treated until nesting session has concluded. Specific bird nesting periods and best management practices are provided in Exhibit C herein (Amendment No. Seven).

**2. Herbicides.** When Valley Water employs herbicides for vegetation control, only herbicides and surfactants that have been approved for aquatic use by the EPA and are registered for use by the California Department of Pesticide Regulation (CDPR) will be used for SMP aquatic vegetation control as described in Best Management Practice Gen-8 in Exhibit C. Valley Water shall use the lowest recommended rate of both herbicides application to achieve project objectives, and shall not be allowed to enter wetted waterways or tidal areas (Amendment No. Seven).

**3. Grazing.** Valley Water shall not use goats or other grazing animals within the tidal wetlands or high marsh area for vegetation control due to their indiscriminate foraging behavior (Amendment No. Seven).

**4K. Protection of Special Status Animal Species.** Valley Water The permittee shall take all precautions to avoid adverse impacts to native wildlife, and specifically the California clapper Ridgway's rail, California black rail, salt marsh harvest mouse, salt marsh yellow throat, burrowing owls, and west South-Central California Coast steelhead trout, and other species of special concern, including swallows. The permittee Valley Water shall employ the best management practices included in Exhibit C and the applicable minimization and mitigation measures outlined in Special Condition II-F, and SMP-2 and future SMPs if approved as described in Special Condition II-A, its permit application and subsequent submittals, and the biological opinions and incidental take permits/stream bed alteration permits issued by the U.S. Fish and Wildlife Service's (USFWS), NOAA National Marine Fishery Service (NMFS), and California Department of Fish and Wildlife (CDFW), respectively Biological Opinion (Amendment No. Seven).

Resource Agency knowledgeable and experienced approved biologists approved by the Department of Fish and Game and retained by the Santa Clara Valley Water District as biological monitors, shall survey special status species habitat area prior to project implementation to determine species presence and areas to be avoided. Further, qualified biologists shall be present during all project activities within areas of salt marsh harvest mouse and Ridgway's California Clapper rail habitat to help avoid mortality or injury to individuals and to minimize disturbance to the habitat. These biological monitors shall have the express authority to stop work or order any immediate changes to bring the project into compliance with habitat and species protection measures. In the project activities that are necessary to avert a risk of imminent mortality or injury to salt marsh harvest mouse or California Clapper Rail and to stop any activity that cannot be or has not been brought into immediate compliance. (Amendment No. Three)

In addition, Valley Water shall implement revised salt marsh harvest mouse protections developed by CDFW in 2020 and as described in Exhibit C during work in tidal wetland areas and adjacent tidal refugia areas (Amendment No. Seven).

~~FJ. **Mitigation.** Prior to May 5, 2007, To mitigate for impacts associated with the ongoing maintenance activities authorized herein, Valley Water provided funds to the South Bay Salt Pond Restoration Project to restore the Island Ponds, which the permittee shall submit plans, receive Commission authorization, and complete the restoration of 30 acres of a diked salt evaporator pond in the south Bay (Pond A4) to historic tidal marsh conditions. In the event that Pond A4 is not available for this restoration, the permittee shall receive Commission authorization for and complete an equivalent mitigation project by May 5, 2009, which may include Ponds 19, 20, and 21. The Island Ponds restoration mitigated for 30 acres of impacts to tidal wetlands and wetland species impacts. As described in Amendment No. Three, the Island Ponds provide mitigation in perpetuity for work impacting 21 acres completed in SMP-1 and SMP-2 to date, considered "previously mitigated areas" described in the SMP-2 Chapter 10. Valley Water maintains 9 acres of mitigation credit remaining for future work included in the SMP-2 for actions outside the previously mitigated areas (Amendment No. Seven).~~

1. **Additional Mitigation Requirements.** Valley Water distinguishes work that creates temporary impacts and permanent impacts to natural resources (Amendment No. Seven).
  - a. **Temporary Impacts.** Mitigation for temporary impacts to tidal wetlands (when it does not passively restore within two years) or banks from vegetation and sediment removal or bank stabilization and repair shall be mitigated through on-site ecological services mitigation where possible and practical, including the invasive plant management program (IPMP) and the planting appropriate species within the impacted area (Amendment No. Seven).
  - b. **Permanent Impacts.** As discussed above, permanent impacts to tidal marsh shall be compensate for using portions of the remaining 9 acres of tidal marsh mitigation created by the Island Ponds restoration at a 3:1 ratio (Note- this is different than described in SMP-2, but consistent with BCDC policy). Bank stabilization that installs additional hardscape shall be mitigated for at a ratio of 3:1 when it impacts earthen or softer bank conditions, compensating for loss of habitat features and complexity. Removal of concrete within jurisdictional areas can compensate for bank stabilization or hardscape installation (Amendment No. Seven).
  - c. **Offsite Mitigation.** Should Valley Water propose an activity that requires off site mitigation and use of all or a portion of the remaining 9 acres, it shall be noted in the Notice of Proposed Work and request specific authorization from the Commission for use of those credits. ~~(the Island Ponds).~~ The plan and program submitted to the Commission for its review and approval shall include the following Furthermore, should Valley Water propose an additional offsite mitigation project as described in Chapter 10.4 during the life of this permit, Valley Water shall provide a mitigation restoration plan as described in Attachment I to the SMP-2. Attachment I describes

the information that shall be provided by Valley Water for review and approval by or on behalf of the Commission should additional mitigation projects be required and is incorporated herein (Amendment No. Seven).

- d. **Annual Monitoring.** Should Valley Water propose an additional wetland restoration site as mitigation, an annual monitoring program shall be developed and submitted to the Commission for review, approval and implementation (Amendment No. Seven).
- a. **Site Conditions and Modifications.** ~~A topographic map of the site at one foot contour intervals and a topographic map showing the proposed modifications. All elevations shall be relative to National Geodetic Vertical Datum (NGVD) or some other commonly used datum. The map shall include typical cross-sections showing proposed elevation of marsh plain, any channels, and any high spots. The map shall show: (1) figures for the ratios of typical horizontal to vertical slopes for existing and proposed marsh surface, channels, and sloughs; (2) proposed plant species along the cross-sections according to their expected zone of growth; (3) the elevation of adjacent surrounding properties; and (4) figures for the estimated tidal range related to Mean Higher High Water, Mean High Water, Mean Lower Low Water, Mean Sea Level, the maximum predicted tide, and the 100-year tide.~~
- b. **Soil Information.** ~~The program shall include a report identifying the type of soils found at the site and the soil type of any fill to be imported to the site. Information shall be provided on the quantitative soil measurements of soil texture and dry density for both existing and imported soils. In addition, for imported soils only, information shall be provided on the salinity, pH, and organic content.~~
- c. **Planting and Seeding Plan.** ~~The restoration plan shall include a list of the vegetation proposed to be planted if any, and a planting and maintenance plan. Such plans shall include a program for eliminating existing exotic vegetation and preventing the establishment of exotic vegetation at the site.~~
- d. **Schedule.** ~~The program shall include a schedule indicating when excavation, fill, and grading will occur, the time to be allowed for settlement, and the time when planting will occur.~~
- e. **Monitoring.** ~~Every other year, starting July 1 of the year following project completion, for a ten-year period, or until those portions of the restoration site subject to tidal action are approximately 80% vegetated, whichever occurs first, the permittee shall report to the Commission on the effects of the project in restoring tidal marsh and transitional habitat at the restoration site. The report shall include measuring sedimentation rates, percentage of the site revegetated, plant survival, approximate percentage representation of different plant species, and a qualitative assessment of plant growth rates for the tidal restoration area, including adjacent transitional and upland habitats. Undesirable exotic plant species such as pepperweed (*Lepidium latifolium*), *Spartina alterniflora*, broom, or star thistle shall be reasonably controlled during the five-year monitoring period. Should adverse conditions be identified during the five-year monitoring period, the permittee shall take corrective action as specified by or on behalf of the Commission.~~



~~These restored and enhanced areas shall be maintained as wetlands and open space (Amendment No. Three).~~

G. **Water Quality.** When implementing sediment removal, bank stabilization, and coffer dam use, Valley Water shall monitor the water quality downstream in tidal areas for the release of sediment and soils, such that water quality is impacted. Specific attention to containing mercury contaminated soils in the Guadalupe River watershed is necessary. To protect water quality during bank stabilization activities, appropriate erosion prevention measures shall be employed, such as placement of straw bale or coils at the toe of the work area, in accord with the best management practices of SMP-2 and Exhibit C. Prior to instream or tidal sediment removal, the area shall be isolated from live flow by use of a coffer dam or appropriate diversion method to avoid muddying the water. When conducting in water work, Valley Water shall implement the Water Quality Monitoring Plan 2018 described in Attachment E of the SMP-2 and provide the monitoring data for activities within the Commission's jurisdiction as part of the annual summary report. In addition, when conducting work in areas with potential mercury contamination, Best Management Practice Gen-3 shall be implemented, including soil testing, containment, and removal as necessary to prevent further mercury contamination at the site or downstream (Amendment No. Seven).

H. ~~Dredged Sediment Material.~~ Sediment dredged from within the Commission's jurisdiction shall be beneficially reused when the physical and chemical sediment quality is appropriate for the use, including at wetland restoration sites, and levee maintenance opportunities. Any dredged sediment that is not appropriate for beneficial use shall be disposed at a landfill or other location outside the Commission's jurisdiction (Amendment No. Seven).

Prior to placement of dredged sediment in wetland restoration projects or other areas that may be exposed to tidal activity, Valley Water shall test the sediment in accord with the *Sediment Characterization Plan for Santa Clara Valley Water District Multi-Year Stream Maintenance Program (2019)* to determine whether the sediment is appropriate for that use. If sediment is to be placed at the South Bay Salt Pond Restoration Project, testing shall follow the "*Master Quality Assurance Project Plan for Don Edwards San Francisco Bay National Wildlife Refuge*". Test results shall be provided to BCDC staff for review and approval 15 days prior to the dredging project. In the event that the plan is revised, Valley Water shall provide a draft document with revisions clearly identified for review and approval 30 days prior to use of the revised plan (Amendment No. Seven). All dredged material shall be removed to an area outside of the Commission's jurisdiction except for those materials which would be used for levee repair. Dredged material may be temporarily stored on levees adjoining project sites only if the materials are placed in such a manner so as to preclude the possibility of marsh vegetation or mudflats being lost as a result of erosion, slippage, or settlement of the materials. Any dredged material placed in any wetlands within the Commission's jurisdiction, including managed wetlands, salt ponds, tidal marsh, or diked wetlands shall be removed within 60 days of notification by BCDC staff, or such other reasonable time approved by or on behalf of the Commission. All dredged material left permanently within the Commission's jurisdiction shall be placed and/or graded so as to preserve the opportunity for use of the site for public access (Amendment No. Two).

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**I.D. Public Access.** At such time that suitable arrangements for operating, maintaining, and policing public access areas can be made with local park districts, the U.S. Fish and Wildlife Service, or other appropriate public agencies, as determined by the Commission, the permittee shall make its lands along the channels described in Section I-A above available without cost for public access purposes, including walking, sitting, picnicking, bicycling, viewing, etc. (Amendment No. Two).

1. Any closure of public access areas and trails located along or within work areas shall be for the minimum time necessary to complete the maintenance or repair activities and shall include detours and signage directing the public to the detour when safe and feasible (Amendment No. Seven).

**J.F. Construction Activities.** All construction activities shall be performed to prevent construction and excavated materials from falling into the Bay. In the event that such material escapes or is placed in an area subject to tidal action of the Bay, the permittee shall immediately retrieve and remove such material at its expense (Amendment No. Two).

~~**H. Partial Assignment.** The permittee may make a full or partial assignment of the rights and/or duties under this amended permit provided that the assignee is acceptable to the Commission. The assignment shall be made in writing and clearly indicate which portions of the permit rights and/or duties are assigned and which portions remain the unassigned. The assignee shall sign a written statement to the effect that he has read and understands the conditions of the permit, agrees to be bound by all terms and conditions and that he understands that no amendments deleting or reducing the burden of any duties imposed by this amended permit will be favorably considered by or on behalf of the Commission without full justification; joinder of all parties to this amended permit and clear indication that the amendment will not reduce the degree of protection afforded to the public by the conditions of this amended permit.~~

**K.I. Future Five-Year Permit Extension.** The maintenance activities described herein are authorized for a period of five years beginning April 16, 2021 ~~June 1, 2000~~. At the conclusion of this five-year period, the Executive Director, based on the evaluation of the annual reports submitted to date summarizing the work completed pursuant to this amended permit, the effectiveness of best management practices in minimizing disturbance to existing habitat, and reported impacts to special status species, and the status of development of Valley Water's Stream Maintenance Program 3, may extend this amended permit for another five-year period. Such extension may include modifications to the best management practices and modifications to construction windows, based upon monitoring results and experience with methods to minimize habitat disturbance and harmful effects to special status species. Any proposed modification shall be approved, disapproved or approved with modifications by or on behalf of the Commission following Commission staff consultation with interested agencies, other organizations, and individuals.

**L. Responsibility for Flooding.** The Commission shall not be responsible for any flooding that may occur as a result of undertaking this project (Amendment No. Three).

### III. Findings and Declarations

On behalf of the Commission, I find and declare that:

A. The project originally authorized by this permit and Amendment Nos. Two and Three involves both maintenance dredging and new dredging of 100,000 cubic yards or less completed within a five-year period, as defined by Regulations Section 10602(a) and 10602(b), respectively, and the placement of small amounts of inert inorganic fill in such a way as to not have a significant adverse effect on present or possible future maximum feasible public access consistent with the project and the repairs to existing protective works in the minimum amount necessary to stabilize existing dikes and banks, as defined in Regulation Sections 10601 (b)(1) and 10601(b)(4), respectively, and thus is a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10622(a), and an amendment to a permit pursuant to Regulation Section 10810 (Amendment Nos. Two and Three).

The project authorized by Amendment No. Seven includes activities to support the structural and functional integrity of Valley Water's flood protection facilities and to maintain healthy tidal creeks, and sloughs through its annual work program. Specifically, authorized activities include: (1) up to 75,000 cy of in channel or tidal wetland dredging to maintain flood water conveyance as described in Commission Regulation Section 10602(a) and 10602(b), with disposal or placement of the dredged sediment as described in Commission Regulation Section 10602(g) – at a salt pond, or non-aquatic location within the Commission's jurisdiction; (2) use of coffer dams to conduct the work including in-kind repair and replacement of water control structures as described in Commission Regulations Section 10601(a)(2) and 10602(b)(4) as installation of new or repairs to existing protective works either in the Bay or shoreline band; (3) minor bank stabilization projects that may include soft approaches such as plantings, to hybrid planting and boulder use to hardened structural items, including riprap placement as described in Commission Regulations Section 10601(a)(2)A and B, and 10601(b)(4) as bank stabilization that uses the minimum amount of fill necessary and does not cover more than 10,000 square feet of the surface of the Bay and the minimum amount of fill necessary in the shoreline to stabilize the banks; and (4) repair and maintenance for existing infrastructure, vegetation management, gates and fencing, and other maintenance activities as described in Commission Regulation Sections 10601 (a)(6) and 10601(b)(5) in that they are routine repair and replacement that does not involve substantial enlargement or change of use in either the Bay or shoreline band, respectively, and thus is a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10622(a), and an amendment to a permit pursuant to Regulation Section 10810 (Amendment No. Seven).

B. The SMP-2 actionable areas includes portions of watersheds in Santa Clara County below the 1,000-foot elevation contour, but areas within BCDC jurisdiction are limited to tidal creek areas identified in Exhibit B and tidal marshes. Valley Water generally conducts work where they either own the property or have easements to do so, and does not provide maintenance on private property unless otherwise authorized to do so. The SMP-2 applies to all of the Valley Water's routine stream maintenance activities, which are grouped into five categories: (1) vegetation management through mowing, hand removal and limited use of

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herbicides; (2) sediment removal via dredging or excavation; (3) bank stabilization through multiple approaches from vegetated buffers to vegetated boulder placement to rip rap; (4) management of animal conflicts, particularly burrowing animals such as ground squirrels that compromise bank stability; and (5) minor maintenance activities such as existing road, fence, or building repairs. This work is described in the SMP-2 and the 2012 FSEIR. As further described in Chapter 3 of SMP-2, routine stream maintenance includes activities and procedures that are conducted to Valley Water's standards, performed regularly and often repeatedly and include a wide variety work, based on annual rainfall, stream flow and growth of vegetation. This permit does not cover capital projects or maintenance of those projects as they would be evaluated separately as needed. The program period for SMP-2 is 2014–2023, although this permit authorizes work over five years, anticipating any potential delays in approval of SMP-3, which would cover work proposed for 2024 through 2029. However, Special Condition II-B sets forth a process for review and approval of SMP-3 as it is developed and may be initially covered through this authorization. SMP-2 provides significant details regarding how Valley Water conducts its work, however, it covers the full range of work over approximately 240 miles of streams, and therefore this permit and exhibits included herein focus on work specifically within the Commission's jurisdiction (Amendment No. Seven).

The project authorized by Amendment No. Seven of this permit is consistent with the McAtter-Petris Act and the San Francisco Bay Plan in that adequate measures will be taken to protect marshland, managed wetland, and salt pond areas during performance of the work, and in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay.

While the proposed activity has been determined to impact habitat availability and quality, via removal of sediment from tidal areas, vegetation removal, and changes to bank habitat Valley Water has identified and worked with the resource and regulatory agencies to implement best management practices and avoidance measures for special status species identified in Exhibit C and required in Special Condition II- E1-4. Further, NOAA National Marine Fisheries Service, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife have issued biological opinions and take permits where necessary, such that the project is consistent with the Endangered Species Act and the California Endangered Species Act. These minimization and avoidance measures reduced impacts to the extent feasible while allowing Valley Water to maintain infrastructure and flood conveyance capacity. As described below, Valley Water has provided mitigation for unavoidable impacts, therefore, the proposed work is consistent with the Commission's policies on Fish, Other Aquatic Organisms and Wildlife in that the project works to preserve habitat and species for future generations where feasible (Amendment No. Seven).

**3. Marsh Protection.** The San Francisco Bay Plan Tidal Flats and Tidal Marsh policies requires that marshes and mudflats be maintained to the fullest possible extent and that habitats that are needed to maintain threatened or beneficial species be protected. To minimize the project's adverse impact on fish and wildlife resources in San Francisco Bay, this amended permit authorizes the use of coffer dams so that ~~contains conditions that:~~ (1) require that dredging occurs in dry conditions and the sediment be beneficially reused where feasible and appropriate. It is noted that much of the sediment that Valley Water dredges is placed at the South Bay Salt Pond Restoration Project, which will support tidal marsh development more

quickly than if sediment were not placed at the site. In addition, any marsh area disturbed by Valley Water's maintenance activities shall be monitored by qualified biologists and if they do not passively revegetate within two years, additional measures such as plantings or mitigation will be requires as described in Special Condition II-E and F (Amendment No. Seven) material shall not be placed on marsh vegetation, or placed in such a manner that dredged material is likely to move into a marsh through slippage or erosion (Special Condition II B, E, F and G); and (2) specify that dredging and disposal operations only disturb marsh vegetation in those reaches of the channel slated for dredging (Special Condition II-D).

**1-Dredging and Dredged Sediment Placement ~~Material Disposal~~.** The Bay Plan authorizes the removal of sediment via maintenance dredging or excavation in tidal streams and marshes and of flood control channels when the sediment either blocks critical water conveyance structures or significantly decreases flood water conveyance capacity. Prior to sediment removal and placement, Special Condition II-H requires testing of the sediment to determine sediment quality per both Valley Water's Multi-District Stream Maintenance Program (2019) sediment characterization program or the Don Edwards Wildlife Refuge's Master Quality Assurance Project Plan to ensure beneficia reuse of the sediment is appropriate. If beneficial reuse is not appropriate, the sediment/soil is required to be disposed of outside the Commission's jurisdiction. provided that conditions are imposed to minimize the environmental impacts of the dredging and the disposal. Further, the Bay Plan authorizes the disposal of dredged material at upland locations assuming other criteria are met. In this amended permit, conditions and best management practices require the avoidance of any damage to wetland or marsh vegetation within BCDC jurisdiction and the removal of any dredged sediment material that may inadvertently be placed in such areas. Outside of BCDC jurisdiction, however, the Commission has no control over the disposal of dredged sediment material (Amendment No. Seven).

**2-Water Quality.** In addition, Special Conditions II-GE and II-F, which requires erosion prevention measures, as well as best management practices during dredging and bank stabilization activities to keep soil and sediment from entering downstream waters. Special attention is focused on sediment and soil in the Guadalupe watershed due to the legacy mercury contamination from historic mining activities. Special Condition II-G also requires that downstream monitoring occurs as described in the 2018 Water Quality Monitoring Plan to ensure that mercury does not further contaminate the watershed. In addition, the San Francisco Regional Water Quality Control Board issued Order No. R2-2020-0017, which includes additional water quality monitoring requirements, discharge requirements and water quality standards. Assuming Valley Water complies with the Board Order and the conditions herein regarding water quality and dredging, the project would comply with Commission's policies that do not allow for release of pollutants to the Bay that all dredging operations be performed to minimize the roiling of waters, and that all disposal operations be carried out to assure that no dredged material erode into tidal waters, assure that the project will not adversely affect the quality of Bay waters (Amendment No. Seven).

**4.Public Access.** The permittee has allowed public access to be developed on many of the properties under its control. This amended permit, although not requiring the permittee to provide any specific public access areas or improvements at this time, does require the permittee to provide its land along the channels for public access purposes when other public agencies, such as local park districts or the United States Fish and Wildlife Service, are able to operate and maintain them. Without such a condition and the representations of the permittee that it will continue to make its land available for public access purposes as it has in the past, the Commission could not find that the project provides the maximum feasible public access consistent with the project.

**5.Grading Ordinances.** This amended permit authorizes the permittee to continue maintenance dredging of various flood control channels throughout Santa Clara County. As conditioned, the amended permit assures that such maintenance dredging and beneficial reuse of sediments or disposal~~spoil disposal~~ (Amendment No. Seven) shall be carried out in such a manner to minimize the adverse impacts of such activity on wildlife resources. However, by the very nature of the project, which involves dredging of channels where marshes and mudflats have become reestablished, the various projects authorized will result in the destruction of significant wildlife habitat. The Bay Plan states that the Commission should encourage increased efforts by soil conservation districts and public works agencies to continuously reduce soil erosion as much as possible. In light of the facts that dredged material disposal sites are in increasingly short supply, and because some of the remaining disposal sites are diked wetlands and contain significant wildlife resources, the Commission strongly encourages the permittee to work with other local government agencies in an effort to reduce the sediment entering such channels as a result of new construction and grading activities (Amendment No. Two).

**6.Mitigation.** The San Francisco Bay Plan policies on mitigation require measures to compensate for unavoidable adverse impacts to the natural resources of the Bay. “[W]hen compensatory mitigation is necessary, a mitigation program should be reviewed and approved by or on behalf of the Commission as part of the project.” Furthermore, the Bay Plan policies on fish, other aquatic organisms, and wildlife require the Commission to “[c]onsult with the California Department of Fish and Game and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species” and give appropriate consideration to the recommendations of these agencies in order to avoid possible adverse effects of a proposed project. Pursuant to the Commission staff’s review of the permittee’s maintenance activities and these San Francisco Bay Plan policies, Special Condition II-~~F~~ requires mitigation to offset unavoidable impacts of dredging activities and vegetation maintenance for the next five years. The SMP-2 distinguishes between temporary impacts and permanent impacts due to maintenance activities. Temporary impacts include impacts to marshes that are fully restored within two years. In instances where impacts to tidal wetlands occur, Valley Water monitors these sites to ensure the site revegetates and becomes functioning habitat. If the site passively revegetates, then mitigation for temporary impacts is required as described in Chapter 10 for tidal marsh habitat, listed species impacts, and mitigation for bank stabilization activities within the Commission’s jurisdiction. While Valley Water does not anticipate permanent impacts to tidal wetlands, it has available 9 acres of mitigation credit for funding

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contribute to restore the Island Ponds (A19, A20, and A21), part of the South Bay Salt Pond Restoration Project. Commission staff conducted site visit of this restoration action and has confirmed that the restoration was completed and habitat re-established as described. With the mitigation requirements included in Special Condition II-F, the project is consistent with the Commission policies requiring compensatory mitigation for impacts to habitats and species of special concern and II-K has been included to ensure the avoidance of impacts on special status species (Amendment No. ~~Seven~~Three).

**C. Permit History.** The original permit issued on February 9, 1978 included 100,000 cy of maintenance dredging, placement of small amounts of inert fill, and repair and maintenance of infrastructure for a period of ten years. Amendment No. One extended the permit period for an additional seven years but did not include additional authorizations. Amendment No. Two included an authorization for an additional 100,000 cy of dredging, annual reporting requirements, public access considerations, best management practices to protect tidal marsh habitat from maintenance activities and extended the permit activities for an additional 5 years. Amendment No. Three added mitigation requirements for the activities in tidal wetland restoration and special conditions to protect listed and special status species. Amendment No. Four refined the mitigation requirement and identified the Island Ponds A19, A20 and A21 as the appropriate mitigation site, authorized an additional 5 years of maintenance activities, and update the standard conditions section of the permit. Amendments Nos. Five and Six were time extensions that did not include any further conditions or authorizations (Amendment No. Seven).

**D. Coastal Zone Management Act.** The Commission further finds, declares, and certifies that the activities authorized by this amended permit and modified by the conditions herein, are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

**E. Environmental Review.** Santa Clara Valley Water District, the permittee and lead agency, has determined that the originally authorized project was categorically exempt under Section 40 of its Guidelines from the requirement to prepare an environmental impact report. In December 2011, Valley Water completed the California Environmental Quality Act (CEQA) review of the Stream Maintenance Program Update for the period between 2012-2022 in its Final Subsequent Environmental Impact Report (FEISR) (SCH # 200102055). It found that the project would have significant, unavoidable impacts on the environment including: temporary alteration of visual character and quality from vegetation management and bank stabilization efforts; temporary increase in emissions and greenhouse gases; noise; and habitat fragmentation, and has development minimization and mitigation measures to reduce the impacts as much as feasible. As a result, Valley Water made a statement of overriding considerations that stated, in summary, the implementation of the Stream Maintenance Program would likely result in unavoidable, significant impacts. As such, it has adopted measures to reduce the impacts wherever feasible, and that the need to protect the

community from significant flooding events overrides those impacts that could not be avoided or reduced to less than significant. Valley Water's Board of Directors certified the FEIR on January 24, 2012 (SCVWD Board Resolution No. 12-07), adopting the Mitigation Monitoring and Reporting Program reflected in the special conditions herein (Amendment No. Seven).

F. **Listing.** Pursuant to former Regulation Section 10542, the original project was listed with the Commission on January 19, 1978.

#### **IV. Standard Conditions**

A. **Other Government Approvals.** All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city and/or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee of any obligations imposed by State or Federal law, either statutory or otherwise.

B. **Notice of Completion.** The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C. **Built Project must be Consistent with Application.** Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

D. **Muddying Waters.** Work must be performed in a manner so as to minimize muddying of waters, and if diking is involved, dikes shall be waterproof. If any seepage returns to the Bay, the permittee will be subject to the regulations of the Regional Water Quality Control Board in that region.

E. **Permit Assignment.** The rights, duties, and obligations contained in this amended permit are assignable. When the permittee transfers any interest in any property either on which the authorized activity will occur or which is necessary to the full compliance of one or more conditions to this amended permit, the permittee/transferor and the transferee shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignee executes and the Executive Director receives an acknowledgment that the assignee has read and understands the amended permit and agrees to be bound by the terms and conditions of the amended permit, and the assignee is accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

F. **Life of Authorization** Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the amended permit remains in effect or for so long as any use or construction authorized by this permit exists, whichever is longer.

G. **Permit Runs with the Land.** Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.



H. **Permission to Conduct Site Visit.** The permittee(s) shall grant permission to any member of the Commission's staff to conduct a site visit at the subject property during and after construction to verify that the project is being and has been constructed in compliance with the authorization and conditions contained herein. Site visits may occur during business hours without prior notice and after business hours with 24-hour notice. ~~Unless otherwise provided in this permit, any work authorized herein shall be completed within the time limits specified in this permit, or, if no time limits are specified in the amended permit, within three years. If the work is not completed by the date specified in the amended permit, or, if no date is specified, within three years from the date of the amended permit, the amended permit shall become null and void. If a permit becomes null and void for a failure to comply with these time limitations, any fill placed in reliance on this permit shall be removed by the permittee or its assignees upon receiving written notification by or on behalf of the Commission to remove the fill (Amendment No. Seven).~~

I. **Violation of Permit May Lead to Permit Revocation.** Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any permit for such violation after a public hearing held on reasonable notice to the permittee or its assignee if the amended permit has been effectively assigned. If the amended permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this permit shall be removed by the permittee or its assignees if their permit has been assigned.

J. **Permit Execution.** This amended permit shall not take effect unless the permittee executes the original of this permit and returns it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

K. **Commission Jurisdiction.** Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the amended permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit. ~~↳~~ Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

L. **Changes to the Commission's Jurisdiction as a Result of Natural Processes.** This amended permit reflects the location of the shoreline of San Francisco Bay when the amended permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this amended permit does not guarantee that the Commission's jurisdiction will not change in the future (Amendment No. Seven).

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**M. Should Permit Conditions be Found to be Illegal or Unenforceable.** Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee or its assignees if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

**N. Abandonment.** If, at any time, the Commission determines that the improvements in the Bay authorized herein have been abandoned for a period of two years or more, or have deteriorated to the point that public health, safety or welfare is adversely affected, the Commission may require that the improvements be removed by the permittee(s), its assignees or successors in interest, or by the owner of the improvements, within 60 days or such other reasonable time as the Commission may direct (Amendment No. Seven).

Executed at San Francisco, California, on behalf of the San Francisco Bay Conservation and Development Commission on the date first above written.

DocuSigned by:  
  
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LAWRENCE J. GOLDZBAND  
Executive Director  
San Francisco Bay Conservation and  
Development Commission

LJG/BG/ra

cc: U. S. Army Corps of Engineers, Attn.: Regulatory Functions Branch,  
Attn: Sarah Firestone, Sarah.M.Firestone@usace.army.mil  
San Francisco Bay Regional Water Quality Control Board,  
Attn.: Susan Glendenings, susan.glendenning@waterboards.ca.gov  
Environmental Protection Agency, WTR-8, Attn: Sam Ziegler, ziegler.sam@epa.gov  
NOAA National Marine Fisheries Service, Attn: Gary Stern, gary.stern@noaa.gov  
US Fish and Wildlife Service, Attn: Vincent Griego, Vincent\_Griego@fws.gov  
California Department of Fish and Game, Attn: Mayra Molina,  
mayra.molina@wildlife.ca.gov  
Santa Clara Valley Water District, Attn: Scott Akin, sakin@valleywater.org  
Santa Clara Valley Water District, Attn Joe Chavez, jchavez@valleywater.org  
Santa Clara Valley Water District, Attn Sue Tippets, stippets@valleywater.org  
Santa Clara Valley Water District, Attn Tamra Zozaya, tzozaya@valleywater.org

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\* \* \* \* \*

**Receipt acknowledged, contents understood and agreed to:**

Executed at 4/16/2021 2:45 PM

Santa Clara Valley Water District

**Permittee**

On 4/16/2021 | 2:45:22 PM PDT

By: DocuSigned by:  
*Ms. Jennifer Codianne, Deputy Operating Officer*  
B70005F5A010445...  
**Signature**

Ms. Jennifer Codianne, Deputy Operating Officer

**Print Name**

Acting Deputy Watersheds O&M PCA# 135644

**Title**





Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics,

**Potential BCDC Jurisdiction within Program Area**

**BCDC Jurisdiction Upstream Limits**

- Definite Limit
- Certain Waterway

Bay (shoreline band applies)\*

Certain Waterway (up to 5 ft amsl; no shoreline band)\*

Example Cross Section Location

Tide Gate\*\*\*

Mean High Water Contour (7 feet NADV 88)

Channel Centerline

County Boundary

\*As determined by McAteer Petris Act, regulations, and/or previous BCDC staff determination.

\*\* Based on Horizon spatial analysis where the intersection of AECOM/NOAA vertical tidal data intersects with 1-ft contours.

**Note:** The 7-foot contour was based on MHW tidal elevation because MSL values were not available from the AECOM/NOAA data source in proximity to the program area.

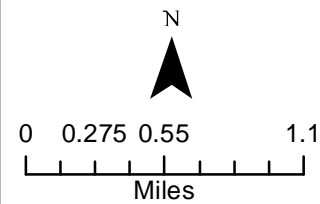
\*\*\* No BCDC jurisdiction for Adobe, Barron, and Matadero Creeks due to being located upstream of the Palo Alto tide gate structure

No BCDC jurisdiction for Berryessa and Lower Penitencia Creeks upstream of station 453+00.

**Exhibit A Overview of BCDC Jurisdiction within Stream Maintenance Program Area**



Valley Water





**BCDC Permit No. M1977.113.07 Exhibit A**  
**BCDC Jurisdiction**

<b>Channel Name</b>	<b>Type of BCDC Jurisdiction</b>	<b>Extent of BCDC Jurisdiction</b>
Barron Creek*	None	None
Permanent Creek	Bay	Station 105+80, downstream of Amphitheater
Stevens Creek	Bay	Station 92+00, upstream of Crittenden Lane
Sunnyvale West Channel	Bay	Station 66+00, downstream of Caribbean Drive
Sunnyvale East Channel	Bay	Station 37+00, downstream of Caribbean Drive
Calabazas Creek	Bay	Station 18+50, downstream of Highway 237
San Tomas Aquino Creek	Bay	Station 30+00, downstream of Highway 237
Guadalupe River	Bay	Station 288+44
Coyote Creek	Certain Waterway and Bay	Station 453+00, downstream of Dixon Landing Road
Coyote Creek Bypass	Certain Waterway	Station 90+00
Berryessa Creek	None	None
Lower Penitencia Creek	None	None

*Table Notes: BCDC jurisdiction for each channel was confirmed during the 8/13/2020 site visit with Valley Water and BCDC staff and follow-up correspondence.*

*\*No BCDC jurisdiction is located upstream of the Palo Alto tide gate structure due to the date of installation of the tide gate (1957).*

**SMP Activities Requiring Approval from BCDC**

<b>Maintenance Activity</b>	<b>Description of Maintenance Activity</b>	<b>Approval Required</b>
Bank Stabilization	Repair stream banks and levees that are eroding or destabilizing.	Yes
Sediment Removal	Mechanically remove sediment that has deposited within a channel	Yes
Sediment Disposal	Collected sediment that meets the wetland surface or foundation reuse criteria may be reused at upland/instream sites or to support restoration efforts for other projects.	Yes, use within jurisdiction
Vegetation Management	In tidal areas, primary vegetation management work includes mowing or hand removal along outboard areas and creek slopes.	Yes
Management of Animal Conflicts	Filling burrows along levees and banks	No
	Placement of physical barriers to inhibit burrowing (e.g., geotextile mats, fences, etc.)	No
	Installation of netting on bridges, culverts, and stream gauges	Yes
	Modifying habitat through vegetation management such as changing a plant palette to reduce suitability or managing growth to prevent individuals from nesting	Yes
	Live trapping of species that negatively impact levees, banks, and habitat	No
Minor Maintenance	Cleaning and minor sediment removal (limited to 25 cubic yards) at outfalls, culverts, flap gates, etc.	Yes
	Grading and repairs to restore existing access roads or small areas outside top of bank to reduce erosion	"No
	Repair or replacement of structures such as culverts, concrete linings, etc. with similar materials within the same footprint	Yes
	Trash and debris removal, including downed trees	No
	Repair and installation of fences and gates that do not block public access or views to the Bay	No
	Installation and maintenance of mitigation and landscape sites (irrigation, weed control, etc.)	No
	Removal of obstructions to maintain function of bridges, box culverts, etc.	No
	Minor erosion repair above OHWM of small rills and gullies	No
	Stream gauge maintenance	No

## Stream Maintenance Program 2 – Best Management Practices

### A. SECTION A—PRE-PROJECT PLANNING AND GENERAL BMPS

General BMPs are applicable program-wide, for most routine SMP maintenance activities. These measures include standard construction practices and impact avoidance measures that will minimize potential environmental impacts. These BMPs will be implemented by the stream maintenance crew, as appropriate and as overseen by site managers, for all activities associated with the maintenance program. The majority of these BMPs are implemented prior to and during maintenance operations, though the level of activity varies depending on the work type. Stream Maintenance Program operations often pose situations that warrant standard measures to avoid or minimize impacts to water quality. The following best management practices represent measures currently used by the SMP; however, since many of these pollution prevention measures are based on industry standards for stormwater management maintained by the California Stormwater Quality Association (CASQA), the selection of appropriate BMPs from this list must be verified by comparison with the most current standards found on the CASQA website.

Other General BMPs are conducted prior to implementing maintenance activities on site. This group of measures includes procedures to identify site or maintenance constraints, such as biological or cultural resource surveys which coincide with permit compliance requirements. Site design constraints for sediment and bank stabilization activities in particular are also identified as part of the pre-project planning process. **This table has been modified to address BCDC policies and jurisdiction.**

BMP Number	BMP Title	BMP Description
GEN-1	In-Channel Work Window	<p>All ground-disturbing maintenance activities (i.e., sediment removal, bank stabilization, tree removal, and mechanized vegetation management) occurring in the channel (below bankfull) will take place between June 15 and October 15. No new instream sediment removal projects and bank protection work will be initiated after October 15. Requests for work window extensions must be submitted to the regulatory agencies by October 1<sup>st</sup>, listing the creek names and reaches where a work extension will occur. Work extensions vary per work activity. The agencies will provide a single response within one week. Significant rainfall applies after October 15. An extension through December 31 may apply if the following requirements are met and regulatory agency approval is received:</p> <p>For ground-disturbing activities:</p> <ul style="list-style-type: none"> <li>▪ Work may continue if no significant rainfall, defined as greater than 0.5 inches per 24 hours within a local watershed, is either forecasted<sup>1</sup> or observed. Following October 15<sup>th</sup>, maintenance work shall cease for the season if such a rain event is forecasted or observed.</li> <li>▪ Winterized sites will be visually inspected prior to, and within 48 hours following, each significant rain event (defined as rainfall 0.5 inch or greater within a 24-hour period in the subject watershed) to ensure that winterization measures are properly implemented and maintained.</li> </ul>

<sup>1</sup> Weather Forecasts. No phase of the project may be started if that phase and its associated erosion control measures cannot be completed prior to the onset of a storm event if that construction phase may cause the introduction of sediments into the stream. Seventy-two-hour weather forecasts from the National Weather Service or other localized and more detailed weather forecast service will be consulted prior to start-up of any phase of the project that may result in sediment runoff to a stream.

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BMP Number	BMP Title	BMP Description
		<p>Sediment Removal</p> <ul style="list-style-type: none"> <li>▪ Extended Work Window:               <ol style="list-style-type: none"> <li>1. Creeks supporting anadromous fish: An extended work window may occur from October 15 through October 31, or until local rainfall of 0.5 inches or greater falls within the subject watershed within a 24-hour period, whichever occurs first.</li> <li>2. Creeks not supporting anadromous fish: An extended work window may occur from October 15 through November 30<sup>th</sup>, or until local rainfall of 0.5 inches or greater falls within the subject watershed within a 24-hour period, whichever occurs first.</li> </ol> </li> </ul> <p>Bank stabilization projects may continue until the approved date stated below. Prior to a forecasted significant rainfall event (0.5 in/24 hrs), all incomplete bank stabilization projects must be winterized.</p> <ol style="list-style-type: none"> <li>1. In Creeks Supporting Anadromous Fish               <ul style="list-style-type: none"> <li>○ An extended work window may occur until October 31<sup>st</sup> for bank stabilization projects that will be 50% complete by October 15<sup>th</sup>.</li> </ul> </li> <li>2. In Creeks Not Supporting Anadromous Fish               <ul style="list-style-type: none"> <li>○ An extended work window may occur until November 30<sup>th</sup> for projects that will be 50% complete by October 15<sup>th</sup> or until significant rainfall.</li> <li>○ An extended work window may occur until November 30<sup>th</sup> for new bank stabilization projects that will be completed in five (5) days or less, or until significant rainfall.</li> </ul> </li> </ol> <ul style="list-style-type: none"> <li>▪ Instream hand pruning and hand removal of vegetation will occur year-round, except when:               <ul style="list-style-type: none"> <li>○ Wheeled or tracked equipment needs to access the site by crossing a creek, ponded area, or secondary channel; or</li> <li>○ Work occurs in streams that support steelhead. In these streams instream vegetation maintenance will cease on December 31 or when local rainfall greater than 0.5 inches is predicted within a 24-hour period of planned activities, whichever happens first.</li> </ul> </li> </ul> <p>Modification and removal of instream large woody debris will occur at any time of the year, and as further described in the NMFS Biological Opinion.</p> <p>Work (including LWD, encampment cleanup, and burrow filling) within the wetted channel of streams that support steelhead that is being done outside of the in-stream work window must adhere to the following conditions:</p> <ol style="list-style-type: none"> <li>1. Pre-activity surveys must be conducted within seven days of the start of work. A qualified biologist must be on site to monitor this in-stream work.</li> </ol>

<sup>2</sup> Winterization is the process to maintain work sites with the appropriate BMP's to prevent erosion, sediment transport, and protect water quality. Winterization occurs upon completion of bank repairs or on incomplete projects after October 15 and prior to significant rainfall, 0.5 inches or greater of local watershed rainfall within 24 hours. Winterization shall be completed prior to the occurrence of such actual significant rainfall.



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BMP Number	BMP Title	BMP Description
GEN-2	Instream Herbicide Application Work Window	<p>Instream herbicide applications will take place between June 15 and October 15, or until the first occurrence of any of the following conditions; whichever happens first:</p> <ul style="list-style-type: none"> <li>▪ local rainfall greater than 0.5 inches is forecasted within a 24-hour period from planned application events; or <ul style="list-style-type: none"> <li>• when steelhead begin upmigrating and spawning in the 14 anadromous steelhead creeks, as determined by a qualified biologist (typically in November/December), <ul style="list-style-type: none"> <li>i. A qualified biologist will determine presence/absence of sensitive resources in designated herbicide use areas. Proposed herbicide use will be limited to an aquatic formulation on the District's Approved Pesticide List. Surfactant use would be limited to non-ionic products on the District's Approved Pesticide List.</li> <li>ii. A qualified fisheries biologist will review the proposed stream reaches for aquatic herbicide application. The fisheries biologist would conduct a pre-construction survey (and any other appropriate data research) to determine whether the proposed herbicide application is consistent with approvals concerning biological resources and determine what BMPs would be instituted for work to proceed.</li> </ul> </li> </ul> </li> </ul> <p>In addition, herbicide application requirements are as follows:</p> <ul style="list-style-type: none"> <li>• No direct application into water.</li> <li>• Herbicide application shall not occur when wind conditions may result in drift.</li> </ul>
GEN-3	Avoid Exposing Soils with High Mercury Levels	<p>Sediment removal and bank stabilization projects in portions of the Guadalupe River watershed affected by historic mercury mining may expose soils containing mercury.</p> <ol style="list-style-type: none"> <li>1. In Basin Plan identified creeks in the Guadalupe River Basin, soils that are likely to be disturbed or excavated shall be tested for mercury (Hg). Soils shall be remediated if disturbed or excavated soils exposed to streamflow have a residual sample test exceeding 0.2 mg mercury per kg erodible sediment (dry wt., median).</li> <li>2. Remediation may be accomplished either by: <ol style="list-style-type: none"> <li>a. treating the site so that contaminated soils excavated for the purpose of bank stabilization shall not be susceptible to erosion; or</li> <li>b. further excavating contaminated soils and replacing them with clean fill or other bank stabilization materials that are free from contaminants.</li> <li>c. Soils with residual sample mercury concentrations exceeding 0.2 mg mercury per kg erodible sediment (dry wt., median) shall be removed and disposed of in a Class I landfill following established work practices and hazard control measures. Soils with residual sample mercury concentrations less than 0.2 mg mercury per kg erodible sediment (dry wt., median) will remain at the project site.</li> </ol> </li> </ol>

## Stream Maintenance Program Manual 2019-2023

**Biological Resources**

BMP Number	BMP Title	BMP Description
GEN-4	Minimize the Area of Disturbance	To minimize impacts to natural resources, soil disturbance will be kept to the minimum footprint necessary to complete the maintenance operation.
GEN-5	Mitten Crab Control Measure	Sediment from the San Francisco Bay Watershed, including that for reuse, cannot be moved to areas any farther south than Coyote Creek Golf Drive in south San Jose, and the intersection of McKean and Casa Loma Roads.
GEN-6	Minimize Impacts to Nesting Birds via Site Assessments and Avoidance Measures	<ol style="list-style-type: none"> <li>1. For activities occurring between January 15 and August 31, project areas will be checked by a qualified biologist or Designated Individuals (DI – for limited ground nesting species surveys) for nesting birds within 2 weeks prior to starting work. If a lapse in project-related work of 2 weeks or longer occurs, another focused survey will be conducted before project work can be reinitiated.</li> <li>2. If nesting birds are found, a buffer will be established around the nest and maintained until the young have fledged. Appropriate buffer widths are 0.5 mile for bald and golden eagles; 250 feet for other raptors and the least Bell's vireo, herons, and egrets; 25 feet for ground-nesting non-raptors; 700 feet for the California clapper rail; 600 feet for the California least tern and western snowy plover; and 50 feet for non-raptors nesting on trees, shrubs and structures. Mowing and weed whacking will have a 25 feet buffer. A qualified biologist may identify an alternative buffer based on a site specific-evaluation. No work within the buffer will occur without written approval from a qualified biologist, for as long as the nest is active.</li> <li>3. All vegetation management, sediment reuse, road grading, or other SMP activities in or immediately adjacent to suitable California clapper rail or Alameda song sparrow nesting habitat, as determined by a qualified biologist, shall not be conducted prior to September 1 (the non-nesting season).</li> <li>4. If a pre-activity survey in high-quality San Francisco common yellowthroat breeding habitat (as determined by a qualified biologist) identifies more singing male San Francisco common yellowthroats than active nests, then the inconspicuous nests of this species might have been missed. In that case, maintenance activities in that area shall be delayed until the San Francisco common yellowthroat non-breeding season (i.e., August 16–March 14).</li> <li>5. The boundary of each buffer zone will be marked with fencing, flagging, or other easily identifiable marking if work will occur immediately outside the buffer zone.</li> <li>6. All protective buffer zones will be maintained until the nest becomes inactive, as determined by a qualified biologist.</li> <li>7. If monitoring shows that disturbance to actively nesting birds is occurring, buffer widths will be increased until monitoring shows that disturbance is no longer occurring. If this is not possible, work will cease in the area until young have fledged and the nest is no longer active.</li> <li>8. Biological evaluation is required for all vegetation management, sediment reuse, road grading, or other SMP activities conducted within 250 feet of occupied artificial nest structures (e.g. barn owl boxes). The appropriate buffer distance would be determined by a qualified biologist based on site-specific and activity-specific conditions to minimize nest disturbance and prevent abandonment.</li> </ol>

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BMP Number	BMP Title	BMP Description
GEN-7	Protection of Burrowing Owls	<ol style="list-style-type: none"> <li>1. If occupied burrows are identified, a 250-foot radius no work buffer zone will be established around the burrow. The buffer may be modified, with CDFW approval, to take into consideration of paved roads, intervening riparian corridors and levees.</li> <li>2. No construction work will occur within the 250-foot buffer zone until after the nesting season.</li> <li>3. After the nesting season, work may occur within the 250 foot buffer zone provided: <ol style="list-style-type: none"> <li>a. A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).</li> <li>b. The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.</li> <li>c. If there is any change in owl foraging behavior as a result of construction activities, these activities will cease within the 250-foot buffer.</li> <li>d. If the owls are gone for at least one week, the project proponent may request approval from the Santa Clara County Habitat Agency that a qualified biologist excavate the usable burrows to prevent owls from re-occupying the site. After the usable burrows are excavated, the buffer zone will be removed and construction may continue.</li> <li>e. Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.</li> </ol> </li> <li>4. Routine use of existing District maintenance roads within the 250-foot buffer will be allowed. However, no construction traffic will be allowed to use the maintenance road during the active nesting period.</li> <li>5. Exceptions. <ol style="list-style-type: none"> <li>a. Mowing on levees may occur during the nesting season and within 250 feet of active burrows provided the burrows are marked by a qualified biologist.</li> <li>b. No vehicle mounted mowers will be used within 10 ft of occupied burrows.</li> <li>c. A qualified biologist will monitor the mowing within the buffer zone and stop the mowing if burrowing owls are observed on the surface at the nest or another burrow.</li> <li>d. Areas within 10 feet of the burrows may be mowed using hand equipment when no owls are visible on the surface.</li> <li>e. All mowing activities within the buffer zone will be completed within 30 minutes.</li> </ol> </li> </ol>
GEN-8	Protection of Sensitive Fauna Species from Herbicide Use	<p>Approved herbicides and adjuvants may be applied in habitat areas for sensitive wildlife species (including steelhead, salt marsh harvest mouse, and Bay checkerspot butterfly); all applications will occur in accordance with federal and state regulations.</p> <p>For sprayable or dust formulations: when the air is calm or moving away from sensitive wildlife habitat, applications will commence on the side nearest the habitat and proceed away from the habitat. When air currents are moving toward habitat, applications will not be made within 200 yards by air or 40 yards by ground upwind from occupied habitat. However, these distances may be modified for the control of invasive species on salmonid streams if the following measures are implemented:</p> <ul style="list-style-type: none"> <li>▪ A qualified biologist will determine presence/absence of sensitive resources in designated herbicide use areas and develop site-specific control methods (including the use of approved herbicide and surfactants). Proposed herbicide use would be limited to the aquatic formulation of glyphosate (Rodeo or equal). Surfactant use would be limited to non-ionic products, such as Agri-dex, Competitor, or another brand name</li> </ul>

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BMP Number	BMP Title	BMP Description
		<p>using the same ingredients. Any modifications to these materials would require review and approval by NMFS and CDFW.</p> <ul style="list-style-type: none"> <li>▪ A qualified fisheries biologist will review proposed herbicide application methods and stream reaches. The fisheries biologist would conduct a pre-construction survey (and any other appropriate data research) to determine whether the proposed herbicide application is consistent with SMP approvals concerning biological resources and determine which BMPs would be instituted for work to proceed.</li> </ul>
GEN-9	Avoid Impacts to Special-Status Plant Species and Sensitive Natural Vegetation Communities	<p>A qualified botanist will identify special status plant species and sensitive natural vegetation communities and clearly map or delineate them as needed in order to avoid and/or minimize disturbance, using the CDFW protocols and the <i>CNPS Botanical Survey Guidelines</i> to formulate the following protocols:</p> <ol style="list-style-type: none"> <li>1. A qualified botanist will use the GIS database, CNDDDB, and/or other suitable tools to identify special status plants and sensitive natural vegetation communities located within or near work areas.</li> <li>2. Surveys of areas identified as sensitive natural communities or suitable habitat for special status plant species will be conducted by a qualified botanist prior to commencement of work.</li> <li>3. Surveys will be conducted during the appropriate time of the year to adequately identify special-status plants that could occur on the site of proposed maintenance activities.</li> <li>4. The qualified botanist will ensure avoidance and/or minimize impacts by implementing one or more of the following, as appropriate, per the botanist’s recommendation:             <ol style="list-style-type: none"> <li>a. Flag or otherwise delineate in the field the special status plant populations and/or sensitive natural community to be protected;</li> <li>b. Allow adequate buffers around plants or habitat; the location of the buffer zone will be shown on the maintenance design drawings and marked in the field with stakes and/or flagging in such a way that exclusion zones are visible to maintenance personnel without excessive disturbance of the sensitive habitat or population itself (e.g., from installation of fencing).</li> <li>c. Time construction or other activities during dormant and/or non-critical life cycle period;</li> <li>d. Store removed sediment off site; and</li> <li>e. Limit the operation of maintenance equipment to established roads whenever possible.</li> </ol> </li> <li>5. No herbicides, terrestrial or aquatic, will be used in areas identified as potential habitat for special status plants species or containing sensitive natural communities, until a qualified botanist has surveyed the area and determined the locations of special status plant species present.</li> <li>6. If special status plant species or sensitive communities are present, then a qualified botanist will determine if a given type of vegetation management method is ecologically appropriate for a given area. Alternative strategies based on the botanist’s recommendations will be coordinated with appropriate staff.</li> <li>7. All impacts to sensitive natural communities and special status plants identified by the qualified botanist will be avoided and/or minimized.</li> </ol>

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BMP Number	BMP Title	BMP Description
GEN-11	Protection of Salt Marsh Harvest Mouse and California Clapper Rail	<ol style="list-style-type: none"> <li>1. A District qualified biologist will conduct a desk audit to determine whether suitable Salt Marsh Harvest Mouse (SMHM) or California Clapper Rail (CCR) habitat is present in or adjacent to a maintenance activity. Suitable habitat for SMHM includes area with 5% pickleweed or other preferred vegetation coverage in areas with bare ground or other marsh vegetation is present, including levee slopes.</li> <li>2. Within 7 days prior to work within the range of the Salt Marsh Harvest Mouse (SMHM) or California Clapper Rail (CCR), as depicted on the District's GIS layers, the proposed project area will be surveyed by a qualified biologist to identify specific habitat areas. Surveyed areas will include work locations and access routes. The range of the salt marsh harvest mouse and California clapper rail is based on the SCVWD's GIS mapping reflecting occurrence information and potential habitat. If this mapping is revised, it will be provided to the Service for review.</li> <li>3. To minimize or avoid the loss of individuals, activities within or adjacent to California clapper rail and salt marsh harvest mouse habitat will not occur within two hours before or after extreme high tides (6.5 feet or above) when the marsh plain is inundated, because protective cover for those species is limited and activities could prevent them from reaching available cover.</li> <li>4. Specific habitat areas are vegetated areas of cordgrass (<i>Spartina</i> spp), marsh gumplant (<i>Grindelia</i> spp.), pickleweed (<i>Sarcocornia pacifica</i>), alkali heath, (<i>Frankenia</i> sp.), and other high marsh vegetation, brackish marsh reaches of creek with heavy accumulations of bulrush thatch (old stands), and high water refugia habitat that may include annual grasses, and shrubs immediately adjacent to channels.</li> <li>5. Within the identified specific habitat areas, vegetation will be removed by hand from areas to be directly impacted by the work activities if possible (hand removal of vegetation in some channels may not be possible). If within the mapped range of the mouse but outside of areas identified as specific habitat areas, then use of other methods may be possible.</li> <li>6. Prior to the initiation of work each day for all vegetation management work, ground or vegetation disturbance, operation of large equipment, grading, sediment removal, and bank stabilization work and prior to expanding the work area, if suitable habitat occurs within the immediate work area, a qualified biologist will conduct a pre-construction survey of all suitable habitat that may be directly or indirectly impacted by the day's activities (work area, access routes, staging areas). <ol style="list-style-type: none"> <li>a. If during the initial daily survey or during work activities a CCR is observed within or immediately adjacent to the work area (50 feet), initiation of work will be delayed until the CCR leaves the work area.</li> <li>b. If during the initial daily survey or during work activities a SMHM or similar rodent is observed within or immediately adjacent to the work area (50 feet), initiation of work will be delayed until a <i>Site Specific Species Protection Form</i> can be developed and implemented by a qualified biologist to protect the SMHM or similar rodent is developed and implemented by the qualified biologist. Acceptable plan activities may include one or more of the following activities: 1) establishment of a buffer zone at least 50 feet in radius from the rodent; 2) ongoing active monitoring, 3) construction of silt fence barrier between maintenance work and location of the rodent, 4) use of hand removal of vegetation only within 20 feet of identified nest, and 5) delay of work activity until the qualified biologist can provide CDFW and the Service a suggested course of action and seek concurrence.</li> </ol> </li> <li>7. Mowing using heavy equipment (tractors, boom mowers, rider mowers) will not be conducted in habitat areas or within 50 feet of habitat areas. If mowing with hand equipment is necessary within 50 feet of habitat areas, an on-site monitor will observe the area in front of the mower from a safe vantage point while it is in operation. If SMHM are detected within the area to be mown, no mowing will occur in that area. If CCR are detected within the area to be mown, the mowing will stop until the individual(s) have left the work area.</li> </ol>

**BCDC Permit No. M1977.113.07**  
**Exhibit C**

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BMP Number	BMP Title	BMP Description
		8. See ANI-2 for additional restrictions. 9. If visual observation cannot confirm California clapper rail left the work area then it is assumed that the individual(s) remains in the work area and the work will not resume until the area has been thoroughly surveyed (and absence confirmed) or the Service has been contacted for guidance. 10. When grazing occurs in or near salt marsh harvest mouse habitat, a qualified biologist will guide fence installation to exclude grazing animals from salt marsh harvest mouse specific habitat. Once exclusion fencing has been installed, a biologist does not need to be on site to monitor grazing.
GEN-13	Protection of Bat Colonies	1. A District Wildlife Biologist will conduct a desk audit to determine whether suitable habitat (appropriate roost trees or anthropogenic structures) is present for bat colonies within 100 feet of the work site, staging areas, or access routes. 2. If potential bat colony habitat is determined to be present, within two weeks prior to the onset of work activities a qualified biologist will conduct a survey to look for evidence of a bat use. If evidence is observed, or if potential roost sites are present in areas where evidence of bat use might not be detectable (such as a tree cavity), an evening survey and/or nocturnal acoustic survey may be necessary to determine if the bat colony is active and to identify the specific location of the bat colony. 3. If an active bat colony is present then the qualified biologist will make the following determinations: <ul style="list-style-type: none"> <li>a. The work can proceed without unduly disturbing the bat colony</li> <li>b. There is a need for a buffer zone to prevent disturbance to the bat colony, and implementation of the buffer zone (determined on a case-by-case basis by a qualified biologist) will reduce or eliminate the disturbance to an acceptable level.</li> </ul> If a bat colony is found in a tree or structure that must be removed or physically disturbed the qualified biologist will consult with DFW prior to initiating any removal or exclusion activities.
GEN-15	Salvage Native Aquatic Vertebrates from Dewatered Channels	If fisheries or native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, a fish and native aquatic vertebrate relocation plan shall be implemented to ensure that fish and native aquatic vertebrates are not stranded. Relocation efforts will be based on the District's Fish Relocation Guidelines (Attachment B). Streams that support a sensitive species (i.e. steelhead) will require a relocation effort and/ or initial onsite monitoring by a qualified biologist depending on seasonal conditions: <ul style="list-style-type: none"> <li>1. In non-tidal channels, where water is to be diverted, prior to the start of work or during the installation of water diversion structures, native aquatic vertebrates shall be captured in the work area and transferred to another reach as determined by a qualified biologist. Timing of work in streams that supports a significant number of amphibians will be delayed until metamorphosis occurs to minimize impacts to the resource. Capture and relocation of aquatic native vertebrates is not required at individual work sites when site conditions preclude reasonably effective operation of capture gear and equipment.</li> <li>2. Aquatic invertebrates will not be transferred (other than incidental catches) because of their anticipated abundance and colonization after completion of the repair work.</li> </ul>

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**General Maintenance Practices**

<b>BMP Number</b>	<b>BMP Title</b>	<b>BMP Description</b>
GEN-16	In-Channel Minor Activities	For in-channel minor work activities, work will be conducted from the top of the bank if access is available and there are flows in the channel.
GEN-17	Employee/Contractor Training	All appropriate District staff and contractors will receive annual training on Stream Maintenance Program BMPs. The training will also include an overview of special-status species identification and habitat requirements. District staff and contractors will receive fact sheets to assist with in-the-field identification of special-status species and their habitats.
GEN-18	Paperwork Required On-Site	<ol style="list-style-type: none"> <li>1. Copies of regulatory permits related to the Stream Maintenance Program will be kept on-site and available for review, if requested by regulatory personnel.</li> <li>2. Copies of the Stream Maintenance Program Manual and this BMP Manual will be kept on-site.</li> </ol>
GEN-19	Work Site Housekeeping	<ol style="list-style-type: none"> <li>1. District employees and contractors will maintain the work site in neat and orderly conditions on a daily basis, and will leave the site in a neat, clean, and orderly condition when work is complete.</li> <li>2. Slash, sawdust, cuttings, etc. will be removed to clear the site of vegetation debris. As needed, paved access roads and trails will be swept and cleared of any residual vegetation or dirt resulting from the maintenance activity.</li> <li>3. For activities that last more than one day, materials or equipment left on the site overnight will be stored as inconspicuously as possible, and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality (see BMPs GEN-24).</li> <li>4. The District's maintenance crews are responsible for properly removing and disposing of all debris incurred as a result of construction within 72 hours of project completion.</li> <li>5. All trash that is brought to a project site during maintenance activities (e.g., plastic water bottles, plastic lunch bags, cigarettes) will be collected at the site daily.</li> </ol>
GEN-20	Erosion and Sediment Control Measures	<ol style="list-style-type: none"> <li>1. Soils exposed due to maintenance activities will be seeded and stabilized using hydroseeding, straw placement, mulching, and/or erosion control fabric. These measures will be implemented such that the site is stabilized and water quality protected prior to significant rainfall. The channel bed and areas below the Ordinary High Water Mark (OHWM) are exempt from this BMP.</li> <li>2. The preference for erosion control fabrics will be to consist of natural fibers; however, steeper slopes and areas that are highly erodible may require more structured erosion control methods. No non-porous fabric will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff, but only if there are no indications that special-status species would be impacted by the application.</li> <li>3. Erosion control measures will be installed according to manufacturer's specifications and following the California Stormwater Quality Association (CASQA) Construction Stormwater Best Management Practice Handbook guidelines.</li> <li>4. Appropriate measures include, but are not limited to, the following: <ul style="list-style-type: none"> <li>o Silt Fences</li> <li>o Straw Bale Barriers</li> <li>o Brush or Rock Filters</li> <li>o Storm Drain Inlet Protection</li> <li>o Temporary Sediment Traps</li> <li>o Temporary Sediment Basins</li> </ul> </li> </ol>

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BMP Number	BMP Title	BMP Description
		<ul style="list-style-type: none"> <li>○ Erosion Control Blankets and Mats</li> <li>○ Soil Stabilization (i.e., tackified straw with seed, jute or geotextile blankets, etc.)</li> <li>○ Wood chips</li> <li>○ Straw mulch</li> </ul> <ol style="list-style-type: none"> <li>5. Where necessary to minimize soil from being tracked onto streets near work sites, stabilize construction entrances and exits.</li> <li>6. All temporary construction-related erosion control methods shall be removed at the completion of the project (e.g., silt fences).</li> <li>7. Oily, greasy, or sediment-laden substances or other material that originate from the project operations and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway. The project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows: where natural turbidity is between 0 and 50 NTU, waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses; where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent; where the receiving water body is a dry creek bed or storm drain, waters in excess of 50 NTU will not be discharged from the work area.</li> <li>8. Active non-stormwater discharges of sediment, sediment-laden water, and/or construction related materials shall cease immediately. Corrective actions shall be implemented before the next rain event, but no longer than 10 business days after the potential and/or actual discharges are discovered. If more than 10 business days are required for compliance, a rationale shall be recorded. Active non-stormwater discharges and visual increases in turbidity must be immediately reported to the District's Stream Maintenance Program Implementation Project Manager.</li> <li>9. Each maintenance site will be visually inspected at least once daily during extended storm events to confirm that BMPs are effective and maintained as necessary.</li> <li>10. Each maintenance site will be visually inspected within two business days (48 hours) after each significant rain event to determine whether BMPs were effective and identify the need to modify or maintain existing BMPs or include additional BMPs to be protective.</li> </ol>
GEN-21	Staging and Stockpiling of Materials	<ol style="list-style-type: none"> <li>1. To protect on-site vegetation and water quality, staging areas should occur on access roads, surface streets, or other disturbed areas that are already compacted and only support ruderal vegetation. Similarly, all maintenance equipment and materials (e.g., road rock and project spoil) will be contained within the existing service roads, paved roads, or other pre-determined staging areas.</li> <li>2. Building materials and other maintenance-related materials, including chemicals and sediment, will not be stockpiled or stored where they could spill into water bodies or storm drains.</li> <li>3. Materials with decaying organic material, or other potentially odorous materials, will be handled in a manner that avoids impacting residential areas and other sensitive receptors, including not stockpiling odorous materials longer than seven (7) calendar days.</li> <li>4. No runoff from the staging areas may be allowed to enter water ways, including the creek channel or storm drains, without being subjected to adequate filtration (e.g., vegetated buffer, swale, hay wattles or bales, silt screens).</li> <li>5. The discharge of decant water to water ways from any on-site temporary sediment stockpile or storage areas is prohibited.</li> </ol>



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BMP Number	BMP Title	BMP Description
		<ol style="list-style-type: none"> <li>6. Wet material removed from an isolated creek reach may be pulled to the side of the channel (within the channel and below top of bank) and allowed to naturally drain prior to removal from the channel. Pulled material will be removed from the channel prior to deactivation of the site or forecast of rain.</li> <li>7. During the wet season (generally October 1 through April 30), no stockpiled soils will remain exposed, unless surrounded by properly installed and maintained (i.e., per manufacturer specifications) silt fencing or other means of erosion control. During the dry season; exposed, dry stockpiles will be watered, enclosed, covered, or sprayed with non-toxic soil stabilizers (GEN-24).</li> <li>8. All pipes, culverts, or similar structures stored at a site within sensitive species areas, for one or more overnight periods shall be securely capped prior to storage or inspected before the pipe is subsequently moved. If any potential special-status species are observed within a pipe, a District biologist shall be consulted on what steps should be taken to protect the species. If a District biologist is on-site, they may remove the special status species from the pipes and relocate to the nearest appropriate and unaffected habitat.</li> </ol>
GEN-22	Sediment Transport	To prevent sediment-laden water from being released back into waterways during transport of sediment to disposal locations, truck beds will be lined with an impervious material (e.g., plastic), or the tailgate blocked with wattles, hay bales, or other appropriate filtration material. Trucks may then drain excess water by slightly tilting the loads and allowing the water to drain out through the applied filter, but only within the active project area of the creek where the sediment is being loaded into the trucks or within an identified vegetated area (swale) that is separated from the creek.
GEN-23	Stream Access	<p>District personnel will use existing access ramps and roads to the extent feasible. If necessary to avoid large mature trees, native vegetation, or other significant habitat features, temporary access points will be constructed in a manner that minimizes impacts according to the following guidelines:</p> <ol style="list-style-type: none"> <li>1. Temporary access points will be constructed as close to the work area as possible to minimize equipment transport</li> <li>2. In considering channel access routes, slopes of greater than 20 percent will be avoided, if possible.</li> <li>3. Any temporary fill used for access will be removed upon completion of the project and pre-project topography will be restored to the extent possible.</li> <li>4. When temporary access is removed, disturbed areas will be revegetated or filled with compacted soil, seeded, and/or stabilized with erosion control fabric immediately after construction to prevent future erosion.</li> <li>5. Personnel will use the appropriate equipment for the job that minimizes impacts and disturbance to the stream bottom. Appropriately-tired vehicles, either tracked or wheeled, will be used depending on the site and maintenance activity.</li> </ol>
GEN-24	On-Site Hazardous Materials Management	<ol style="list-style-type: none"> <li>1. An inventory of all hazardous materials used (and/or expected to be used) at the worksite and the end products that are produced (and/or expected to be produced) after their use will be maintained by the worksite manager.</li> <li>2. As appropriate, containers will be properly labeled with a "Hazardous Waste" label and hazardous waste will be properly recycled or disposed of off-site.</li> <li>3. Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage.</li> <li>4. Quantities of toxic materials, such as equipment fuels and lubricants, will be stored with secondary containment that is capable of containing 110% of the primary container(s). Generators and other equipment with the potential to leak or spill fuels and lubricants will be stored or operated with secondary containment.</li> </ol>

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BMP Number	BMP Title	BMP Description
		<ol style="list-style-type: none"> <li>5. Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and not be allowed to enter surface waters or the storm drainage system.</li> <li>6. All toxic materials, including waste disposal containers, will be covered when they are not in use, and located as far away as possible from a direct connection to the storm drainage system or surface water.</li> <li>7. Sanitation facilities (e.g., portable toilets) will be placed outside of the creek channel and floodplain. Direct connections with soil, the storm drainage system, and surface waters will be avoided.</li> <li>8. Sanitation facilities will be regularly cleaned and/or replaced, and inspected daily for leaks and spills.</li> </ol>
GEN-25	Existing Hazardous Materials	If hazardous materials, such as oil, batteries or paint cans, are encountered at the maintenance sites, the District will carefully remove and dispose of them according to applicable regulatory requirements. District staff will wear proper protective gear and store the waste in appropriate hazardous waste containers until it can be disposed at a hazardous waste facility.
GEN-26	Spill Prevention and Response	<p>The District will prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels, storm drains, or on the ground following these measures:</p> <ol style="list-style-type: none"> <li>1. District field personnel will be appropriately trained in spill prevention, hazardous material control and cleanup of accidental spills.</li> <li>2. Equipment and materials for cleanup of spills will be available on site and spills and leaks will be cleaned up immediately and disposed of according to applicable regulatory requirements.</li> <li>3. Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means.</li> <li>4. Secondary containment will be used for all containers, equipment, and vehicles with potential to leak or spill hazardous materials. Rainwater in secondary containment that may have mixed with hazardous waste will be properly disposed of.</li> <li>5. Spill prevention kits will always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations). All field personnel will be advised of these locations.</li> <li>6. District staff will routinely inspect the work site to verify that spill prevention and response measures are properly implemented and maintained.</li> </ol> <p><i>Spill Response Measures:</i></p> <p>For small spills on impervious surfaces, absorbent materials will be used to remove the spill, rather than hosing it down with water. For small spills on pervious surfaces such as soil, the spill will be excavated and properly disposed rather than burying it. Absorbent materials will be collected and disposed of properly and promptly.</p> <p>If a hazardous materials spill occurs that cannot be contained or cleaned up with the onsite materials, the onsite District field personnel will be responsible for immediately initiating an emergency response sequence by notifying the proper authorities (i.e., District Emergency Response (ER) Team and public fire and hazmat agencies) of the release; taking appropriate defensive steps from a safe distance to secure the site to minimize damage to people, environment, and property (PEP); and deferring all other response activities to public emergency response agencies and/or the District Emergency Response (ER) Team or District ER Contractor. Depending on the nature of the release, the District ER Team's actions will include: urgent (responding within 2 hours of notification) field response site reconnaissance, emergency sequence initiation, defensive containment, release control, incident command; or priority (non 2-hour) field response site reconnaissance and clean-up operations.</p>

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BMP Number	BMP Title	BMP Description
		<p>If a “reportable” spill of petroleum products occurs, the District’s Stream Maintenance Implementation Program Manager will be notified and action taken to contact the appropriate safety and cleanup crews. A reportable spill is defined as when:</p> <ul style="list-style-type: none"> <li>▪ a film or sheen on, or discoloration of, the water surface or adjoining bank/shoreline is observed; or</li> <li>▪ a sludge or emulsion is deposited beneath the surface of the water or adjoining banks/shorelines (40 Code of Federal Regulations 110); or when</li> <li>▪ another violation of water quality standards is observed.</li> </ul> <p>A written description of the reportable release must be submitted to the appropriate Regional Water Quality Control Board and BCDC, within or affecting its jurisdiction, and the California Department of Toxic Substances Control (DTSC). This submittal must contain a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases.</p> <p>If an appreciable spill has occurred, and results determine that project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed to the specifications of DTSC to identify the likely cause of contamination. This analysis will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the District or contractors will select and implement measures to control contamination, with a performance standard that surface and groundwater quality will be returned to baseline conditions. These measures will be subject to approval by the District, DTSC, BCDC, and the Regional Water Quality Control Board.</p>
GEN-27	Existing Hazardous Sites	<p>Upon selection of maintenance project locations, the District will conduct a search for existing known contaminated sites, as part of its annual preparation of the Notice of Proposed Work (NPW), on the State Water Resource Control Board’s GeoTracker Web site (<a href="http://www.geotracker.waterboards.ca.gov">http://www.geotracker.waterboards.ca.gov</a>). The GeoTracker search will only be performed for the District’s ground disturbing activities. For any proposed ground disturbing maintenance sites located within 1,500 feet of any “open” sites where contamination has not been remediated, the District will contact the RWQCB case manager listed in the database. The District will work with the case manager to ensure maintenance activities would not affect cleanup or monitoring activities or threaten the public or environment.</p>
GEN-28	Fire Prevention	<ol style="list-style-type: none"> <li>1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.</li> <li>2. During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site.</li> </ol>
GEN-29	Dust Management	<p>The District will implement the Bay Area Air Quality Management District’s (BAAQMD) required Dust Control Measures (<a href="http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines%20May%202011.ashx?la=en">http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines%20May%202011.ashx?la=en</a>). Current measures stipulated by the BAAQMD Guidelines include the following:</p> <ol style="list-style-type: none"> <li>1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> </ol>

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BMP Number	BMP Title	BMP Description
		<ol style="list-style-type: none"> <li>3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>4. Water used to wash the various exposed surfaces (i.e., parking areas, staging areas, soil piles, graded areas, etc.) will not be allowed to enter the water way.</li> </ol>
GEN-30	Vehicle and Equipment Maintenance	<ol style="list-style-type: none"> <li>1. All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will be prevented.</li> <li>2. All equipment used in the creek channel will be inspected for leaks each day prior to initiation of work. Maintenance, repairs, or other necessary actions will be taken to prevent or repair leaks, prior to use.</li> <li>3. Incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) will be checked for leaking oil and fluids. Vehicles or equipment visibly leaking operational fluids will not be allowed on-site.</li> <li>4. No heavy equipment will operate in a live stream. This will not apply to activities for which no other option exists, such as sediment removal which cannot be conducted from top of bank, etc. In these cases, dewatering will be conducted as necessary, following the protocols in BMPs GEN-33 or GEN-34.</li> <li>5. No equipment servicing will be done in the creek channel or immediate floodplain, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps and generators).</li> <li>6. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location, and that can be performed without releasing any material into the floodway or water, will be conducted in the channel or floodplain.</li> <li>7. If necessary, all servicing of equipment done at the job site will be conducted in a designated, protected area to reduce threats to water quality from vehicle fluid spills. Designated areas will not directly connect to the ground, surface water, or the storm drain system. The service area will be clearly designated with berms, sandbags, or other barriers. Secondary containment, such as a drain pan, to catch spills or leaks will be used when removing or changing fluids. Fluids will be stored in appropriate containers with covers, and properly recycled or disposed of offsite.</li> </ol>
GEN-31	Vehicle Cleaning	<ol style="list-style-type: none"> <li>1. Equipment will be cleaned of any visible sediment or vegetation clumps before entering the work area, transferring and using in a different watershed to avoid spreading pathogens or exotic/invasive species.</li> <li>2. Vehicle and equipment washing can occur on-site only as needed to prevent the spread of sediment, pathogens or exotic/invasive species. No runoff from vehicle or equipment washing is allowed to enter water bodies, including creek channels and storm drains, without being subjected to adequate filtration (e.g., vegetated buffers, straw wattles or bales, fiber rolls, and silt screens). The discharge of decant water from any on-site wash area to water bodies or to areas outside of the active project site is prohibited. Additional vehicle/equipment washing will occur at the approved wash area in the District's corporation yard.</li> </ol>
GEN-32	Vehicle and Equipment Fueling	<ol style="list-style-type: none"> <li>1. No fueling will be done in the channel (top-of-bank to top-of-bank) or immediate floodplain unless equipment stationed in these locations cannot be readily relocated (e.g., pumps and generators).</li> <li>2. All off-site fueling sites (i.e., on access roads above the top-of-bank) will be equipped with secondary containment and avoid a direct connection to soil, surface water, or the storm drainage system.</li> <li>3. For stationary equipment that must be fueled on-site, secondary containment, such as a drain pan or drop cloth, will be used to prevent accidental spills of fuels from reaching the soil, surface water, or the storm drainsystem.</li> </ol>

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BMP Number	BMP Title	BMP Description
GEN-34	Dewatering in Tidal Work Areas	<p>For tidal areas, a downstream cofferdam will be constructed to prevent the work area from being inundated by tidal flows:</p> <ol style="list-style-type: none"> <li>1. Installation of cofferdams and fish exclusion measures will be installed at low tide when the channel and project site are at their driest.</li> <li>2. It is preferable to not use any bypass pipes when work is being conducted on one side of the channel, if isolated by the cofferdam, and flows can continue on the other side of the creek channel without entering the project area.</li> <li>3. If downstream flows cannot be diverted around the project site, the creek waters will be transmitted around the site through cofferdam bypass pipes. Waters discharged through tidal cofferdam bypass pipes will not exceed 50 NTUs over the background levels of the tidal waters into which they are discharged. If necessary to prevent erosion, an energy dissipater will be constructed at the discharge point.</li> <li>4. Water diverted around work sites and water detained by coffer dams will be protected from maintenance activity-related pollutants, such as soils, equipment lubricants or fuels.</li> <li>5. If upstream flows are present, the entire streamflow will be diverted around the work area. This may occur in work areas straddling non-tidal and tidal reaches. In muted tidal reaches (e.g., systems with a downstream tide gate), timing of flow diversions will be coordinated with the completion of the dam structure to facilitate not drying up the downstream creek area and to minimize dry back conditions during low tide.</li> <li>6. Cofferdams in tidal areas may be made from earthen or gravel material. If earth is used, the downstream and upstream faces will be covered by a protected covering (e.g., plastic or fabric) if needed to minimize erosion. A protected covering or sheeting will be placed on the water side of an earthen coffer dam to protect water quality.</li> <li>7. When maintenance is completed, the cofferdams and bypass pipes will be removed as soon as possible but no more than 72 hours after work is completed. Flows will be restored at a reduced velocity to minimize erosion, turbidity, or harm to downstream habitat.</li> </ol>
GEN-35	Pump/Generator Operations and Maintenance	<p>When needed to assist in channel dewatering, pumps and generators will be maintained and operated in a manner that minimizes impacts to water quality and aquatic species:</p> <ol style="list-style-type: none"> <li>1. Pumps and generators will be maintained according to manufacturers' specifications to regulate flows to prevent dryback or washout conditions.</li> <li>2. Generators will be stored or operated with secondary containment.</li> <li>3. Pumps will be operated and monitored to prevent low water conditions, which could pump muddy bottom water, or high water conditions, which creates ponding.</li> <li>4. All pump intakes will be screened. Pumps in steelhead creeks will be screened according to NMFS criteria (<a href="http://www.swr.noaa.gov/sr/fishscrn.pdf">http://www.swr.noaa.gov/sr/fishscrn.pdf</a>) to prevent entrainment of steelhead.</li> </ol>

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**Public Safety**

<b>BMP Number</b>	<b>BMP Title</b>	<b>BMP Description</b>
GEN-36	Public Outreach	<p>The public will be informed of stream maintenance work prior to the start of work as part of the preparation of the NPW for all projects in the NPW:</p> <ol style="list-style-type: none"> <li>1. Each spring, a newspaper notice will be published with information on the NPW work sites, approximate work dates, and contact information.</li> <li>2. Neighborhood Work Notices will be distributed as part of the NPW preparation prior to the start of work.</li> <li>3. Local governments (cities and County) will be notified of scheduled maintenance work. The NPW will be submitted to the public works departments, local fire districts, and the District's Flood Protection and Watershed Advisory Committees.</li> <li>4. The District will post specific information on individual maintenance projects on the Stream Maintenance Web site: (<a href="http://valleywater.org/EkContent.aspx?id=379&amp;terms=stream+maintenance">http://valleywater.org/EkContent.aspx?id=379&amp;terms=stream+maintenance</a>)</li> <li>5. For high profile projects, at the District's discretion, signs will be posted in the neighborhood to notify the public at least one week in advance of maintenance schedules, trail closures, and road/lane closures as necessary and as possible. Signage used at work sites will include contact information for lodging comments and/or complaints regarding the maintenance activities.</li> </ol>
GEN-37	Implement Public Safety Measures	<p>The District will implement public safety measures during maintenance as follows:</p> <ol style="list-style-type: none"> <li>1. Construction signs will be posted at job sites warning the public of construction work and to exercise caution, as appropriate to public accessed areas.</li> <li>2. Where work is proposed adjacent to a recreational trail, warning signs will be posted several feet beyond the limits of work. Signs will also be posted if trails will be temporarily closed.</li> <li>3. If needed, a lane will be temporarily closed to allow for trucks to pull into and out of access points to the work site.</li> <li>4. Temporary fencing, either the orange safety type or chain link, will be installed above repair sites on bank stabilization projects. When necessary, District or contracted staff will provide traffic control and site security.</li> </ol>
GEN-38	Minimize Noise Disturbances to Residential Areas	<p>The District will implement maintenance practices that minimize disturbances to residential areas surrounding work sites:</p> <ol style="list-style-type: none"> <li>1. With the exception of emergencies, work will be conducted during normal working hours. Maintenance activities in residential areas will not occur on Saturdays, Sundays, or District observed holidays except during emergencies, or with approval by the local jurisdiction and advance notification of surrounding residents.</li> <li>2. Vehicles, generators and heavy equipment will be equipped with adequate mufflers. Idling of vehicles will be prohibited beyond 5 minutes unless operation of the engine is required to operate a necessary system such as a power take-off (PTO).</li> </ol>

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BMP Number	BMP Title	1. BMP Description
GEN-39	Planning for Pedestrians, Traffic Flow, and Safety Measures	<p>2. Work will be staged and conducted in a manner that maintains two-way traffic flow on public roadways in the vicinity of the work site. If temporary lane closures are necessary, they will be coordinated with the appropriate jurisdictional agency and scheduled to occur outside of peak traffic hours (7:00 – 10:00 a.m. and 3:00 – 6:00 p.m.) to the maximum extent practicable. Any lane closures will include advance warning signage, a detour route and flaggers in both directions. When work is conducted on public roads and may have the potential to affect traffic flow, work will be coordinated with local emergency service providers as necessary to ensure that emergency vehicle access and response is not impeded.</p> <p>3. Bicycle and pedestrian facility closures will be scheduled outside of peak traffic hours (7:00 – 10:00 a.m. and 3:00 – 6:00 p.m.) to the maximum extent practicable.</p> <p>4. Public transit access and routes will be maintained in the vicinity of the work site. If public transit will be affected by temporary road closures and require detours, affected transit authorities will be consulted and kept informed of project activities.</p> <p>5. Adequate parking will be provided or designated public parking areas will be used for maintenance-related vehicles not in use through the maintenance period.</p> <p>6. Access to driveways and private roads will be maintained. If brief periods of maintenance would temporarily block access, property owners will be notified prior to maintenance activities.</p>

**B. SECTION B—SEDIMENT REMOVAL BMPS**

This group of BMPs is intended to be implemented specifically during sediment removal activities to avoid potential impacts on biological resources.

BMP Number	BMP Title	BMP Description
SED-4	Berm Bypass	Where sediment removal is accomplished without a bypass by removing alternating cells, the berm between the work and the live channel will be wide enough to prevent introduction of turbid water from the cell into the live channel.
SED-5	Sediment Characterization	Projects involving sediment removal at stream gauges, outfalls, culverts, flap gates, tide gates, grade control structures, bridges, fish ladders, and fish screens in excess of 25 cubic yards shall be characterized in accordance with the SCVWD's Sediment Characterization Plans for SMP-2. These projects shall be reported in the annual summary report. Sediment removed will not be reused without pre-approval from appropriate regulatory agencies. See section 5.4 for information on the waiver process.

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**C. SECTION C—VEGETATION MANAGEMENT BMPS**

These BMPs provide specific and detailed guidance on the variety of vegetation management procedures implemented by the District. BMPs for the following maintenance techniques are included: tree pruning, tree removal, plant removal, woody debris management, herbicide application, mowing, discing, flaming, and grazing. Practices will be implemented by fully trained and qualified field crews.

BMP Number	BMP Title	BMP Description
VEG-1	Minimize Local Erosion Increase from In-channel Vegetation Removal	To minimize the potential effect of localized erosion, the toe of the bank will be protected by leaving vegetation to the maximum extent possible and consistent with the maintenance guidelines or original design requirements.
VEG-2	Non-native Invasive Plant Removal	Invasive species (e.g., cape ivy [ <i>Delairea odorata/Senecio mikanooides</i> ], arundo [ <i>Arundo donax</i> ]) will be disposed of in a manner that will not contribute to the further spread of the species. Cape ivy removed during a project shall be bagged and disposed of in a landfill. Arundo canes will be prevented from floating downstream or otherwise entering the creek or waterway.
VEG-3	Use Appropriate Equipment for Instream Removal	When using heavy equipment to cut or remove instream vegetation, low ground pressure equipment, such as tracked wheels will be utilized to reduce impacts to the streambed.
VEG-4	Standard Grazing Procedures	<ol style="list-style-type: none"> <li>1. Vegetation and areas to be preserved will be fenced off to exclude grazing animals.</li> <li>2. Grazing animals will be excluded from tidal areas and associated high marsh and stream channels, using fencing or other barriers.</li> </ol>

**D. SECTION D—BANK STABILIZATION BMPS**

These BMPs provide additional guidance during implementation of bank stabilization projects to avoid impacts on biological and cultural resources. Review of the Post-Project Restoration BMPs in Section E is recommended because those measures will be implemented after bank stabilization projects are complete. The BMPs included in this section are implemented by the field crew and site manager.

BMP Number	BMP Title	BMP Description
BANK-1	Bank Stabilization Design to Prevent Erosion Downstream	To further prevent potential downstream erosion impacts due to bank stabilization, the site design will be adjusted to provide proactive protection of vulnerable areas within the reach of the worksite. Such measures include, but are not limited to, appropriately keyed-in coir logs, riparian planting, strategic placement of rock, and flow deflectors. Bank stabilization will include appropriate transition designs upstream and downstream of the work site to prevent potential erosion impacts.



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BANK-2	Concrete Use Near Waterways	<p>Concrete that has not been cured is alkaline and can increase the pH of the water. Fresh concrete will be isolated until it no longer poses a threat to water quality using the following appropriate measures:</p> <ol style="list-style-type: none"> <li>1. Wet sacked concrete will be excluded from the wetted channel for a period of 30 days after installation. During that time, the wet sacked concrete will be kept moist (such as covering with wet carpet) and runoff from the wet sacked concrete will not be allowed to enter a live stream.</li> <li>2. Poured concrete will be excluded from the wetted channel for a period of 30 days after it is poured. During that time, the poured concrete will be kept moist, and runoff from the wet concrete will not be allowed to enter a live stream. Commercial sealants (e.g., Deep Seal, Elasto-Deck Reservoir Grade) may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If a sealant is used, water will be excluded from the site until the sealant is dry.</li> <li>3. Dry sacked concrete will not be used in any channel.</li> <li>4. An area outside of the channel and floodplain will be designated to clean out concrete transit vehicles.</li> <li>5. Temporary concrete washout facilities shall be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations. Concrete wasted shall be removed and disposed of appropriately.</li> <li>6. Where slurries containing Portland cement concrete or asphalt concrete are generated (such as from saw cutting, coring, grinding, etc.), slurry wastes shall not be allowed to enter storm drains or watercourses, and shall be removed and disposed of appropriately.</li> </ol>
BANK-3	Bank Stabilization Post-Construction Maintenance	<p>The District may maintain or repair bank stabilization projects that are less than 2 years old that are damaged by winter flows.</p> <p>The District will notify the regulatory agencies 24 hours prior to beginning the work and the work will be reported as part of the Post-Construction Report submitted by January 15 of each year or if necessary, the subsequent year. Appropriate BMPs will be applied during maintenance repairs.</p>

**E. SECTION E—POST-PROJECT RESTORATION BMPS**

These BMPs will be implemented, as appropriate, on all sites that involve ground disturbance.

BMP Number	BMP Title	BMP Description
REVEG-1	Seeding	<p>Sites where maintenance activities result in exposed soil will be stabilized to prevent erosion. Disturbed areas shall be seeded with native seed as soon as is appropriate after maintenance activities are complete. An erosion control seed mix may be applied to exposed soils, and down to the ordinary high water mark (OHWM).</p> <ol style="list-style-type: none"> <li>1. The seed mix should consist of California native grasses (e.g., <i>Hordeum brachyantherum</i>, <i>Elymus glaucus</i>, and <i>Vulpia microstachyes</i>) or annual, sterile seed mix.</li> <li>2. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable, or have other appropriate erosion control measures in place (GEN-20).</li> </ol>
REVEG-2	Planting Material	<p>Revegetation and replacement plantings will consist of locally collected native species. Species selection will be based on surveys of natural areas on the same creek that have a similar ecological setting and/or as appropriate for the site location.</p>

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**F. SECTION F—MANAGEMENT OF ANIMAL CONFLICT BMPS**

Methods of animal management included in the SMP are avoidance, biological controls, physical alterations, habitat alterations, and lethal controls. Of all these methods, implementation of lethal controls has the highest potential for environmental and biological impacts. Therefore, the animal management BMPs provided in this section focus on lethal controls. The application area for lethal controls will be identified during the annual planning process (see the Biological Resource Planning BMPs) and guided as directed by wildlife biologists. Species habitat areas are defined by the District's GIS species mapping, updated CNDDDB and known local biological information and are included in the SMP Update Subsequent EIR.

<b>BMP Number</b>	<b>BMP Title</b>	<b>BMP Description</b>
ANI-1	Surface Barrier Applications to prevent burrowing	Surface barrier applications installed as a method of animal conflict management, such as chain link fencing, woven geotextiles, and other similar materials, will be installed no longer than 300 feet and only above OHW. This area may include both inboard and outboard side of levee for 300 feet with at least an equal amount of open area prior to another linear installation; and only on one side of levee slopes. Inboard and outboard areas will only have installations set in an alternating pattern, such that no inboard and outboard levee faces would have erosion control blankets along the same levee stationing.
ANI-2	Prevent Harm to the Salt Marsh Harvest Mouse and California Clapper Rail	<ol style="list-style-type: none"> <li>1. No rodenticides or fumigants will be used within the range of the SMHM or CCR as identified on District range maps.</li> <li>2. Methods of rodent control within SMHM or CCR habitat will be limited to live trapping. All live traps shall have openings measuring no smaller than 2 inches by 1 inch to allow any SMHM that inadvertently enter the trap to easily escape. All traps will be placed outside of pickleweed areas and above the high tide line.</li> </ol>
ANI-3	Burrowing Owl, Bald Eagle and Golden Eagle Buffer Zone	Per the California Department of Fish and Wildlife's 2008 <i>Guidance for Burrowing Owl Conservation</i> , a 656-yard buffer will be established around known burrowing owl locations where no rodenticides or fumigants (including smoke bombs) will be used. A 0.5-mile buffer will be established around known bald eagle and golden eagle nesting locations where no rodenticides will be used.
ANI-5	Slurry Mixture near Waterways	All slurry type mixes used to fill rodent burrows will be prevented from entering any waterway by using appropriate erosion control methods and according to the manufacturer's specifications. If the creek bed is dry or has beendewatered, any material that has entered the channel will be removed. Staff will monitor the work activity.
ANI-6	Species requiring depredation permit	Animal Conflict Management will not include lethal control of species listed in California F&G Code Section 4181 including beaver and gray squirrel without first obtaining a depredation permit.

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**G. SECTION G—USE OF PESTICIDES**

Pesticides may be used for vegetation management or control of animal damage.

BMP Number	BMP Title	BMP Description
HM-4	Posting and Notification for Pesticide Use	<p>Posting of areas where pesticides are used will be performed in compliance with District Policy Ad-8.2 Pesticide Use as follows:</p> <ol style="list-style-type: none"> <li>1. Posting will be performed in compliance with the label requirements of the product being applied.</li> <li>2. In addition, posting will be provided for any products applied in areas used by the public for recreational purposes, or those areas readily accessible to the public, regardless of whether the label requires such notification. In doing this, the District ensures that exposure risk is minimized further by adopting practices that go beyond the product label requirements. (The posting method may be modified to avoid destruction of bait stations or scattering of rodenticide.)</li> <li>3. These postings will notify staff and the general public of the date and time of application, the product's active ingredients, and common name, and the time of allowable re-entry into the treated area.</li> <li>4. Signs will not be removed until after the end of the specified re-entry interval.</li> <li>5. Right-to-know literature on the product will be made available to anyone in the area during the re-entry period.</li> <li>6. A District staff contact phone number will be posted on the sign, including a cellular phone number.</li> <li>7. Notification of pesticide activities will be made as required by law. Also, the District will maintain records of neighbors with specific needs relative to notification before treatment of an adjacent area so that such needs are met.</li> </ol>

Source: Data compiled by Horizon Water and Environment in 2011