

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

**SAN FRANCISCO BAY REGION**

**ORDER NO. R2-2011-XXXX**

**WASTE DISCHARGE REQUIREMENTS AND WATER QUALITY CERTIFICATION  
FOR:**

**SONOMA COUNTY WATER AGENCY  
STREAM MAINTENANCE PROGRAM  
SONOMA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Regional Water Board), finds that:

1. The Sonoma County Water Agency (Applicant or SCWA) has applied to the Regional Water Board for authorization to conduct routine stream maintenance activities, including sediment management, vegetation management, bank stabilization, and a group of other maintenance activities in streams within its maintenance jurisdiction. It is anticipated that routine maintenance activities will not only provide flood protection and maintain channel conveyance capacity but will also enhance natural resources and recreational opportunities.
2. This Order applies to two watersheds within Sonoma County that drain to the San Pablo Bay Basin. This includes the Petaluma River and Sonoma Creek watersheds which are located within the jurisdiction of the Regional Water Board. Therefore all descriptions, findings and provisions in this Order apply only to stream maintenance activities within the Petaluma River and Sonoma Creek watersheds
3. The Applicant developed a Stream Maintenance Plan Manual (SMP) dated September, 2009 with assistance of Regional Water Board staff. The SMP describes flood control channel maintenance activities, impact avoidance measures, best management practices (BMPs), program mitigation, program oversight and management, and program-area resources, including a characterization of channels to be maintained. The SMP Manual is the main guiding documents which includes: Sediment Sampling and Analysis Guidelines, Watershed Partnerships Program Memorandum of Agreement, Watershed Mitigation Project Descriptions, Vegetation Management Plan, and Outlines for Annual Reports.
4. The Applicant applied to the U.S. Army Corps of Engineers for a ten-year individual permit under Section 404 of the Clean Water Act (33 U.S.C. § 1344). On February 27, 2009, the Applicant filed an application for Water Quality Certification and Waste Discharge Requirements with the Regional Water Board. For the purposes of this Order, the SMP is a five-year program, with a major review/renewal at the end of the five-year period of implementation.

***SMP Description, Impacts, and Mitigation***

5. The Applicant's SMP is composed of three primary maintenance activities: sediment removal, vegetation management, and bank stabilization. These primary maintenance activities occur mainly in engineered flood control channels, but may also occur in other engineered structures, sediment basins, natural watercourses, or other facilities within the Applicant's jurisdiction on an as-needed basis. In addition to the primary maintenance activities, the SMP also includes other maintenance activities such as: road maintenance for accessibility and drainage; debris and trash removal; Himalayan blackberry removal; removing sediment around reservoir inlet structures; repairing fences along the channels; and removing or covering graffiti. The SMP also includes the transport and disposal of removed sediment and vegetation.
6. Natural channels are those channels that have not been engineered nor modified. Natural channels are not SCWA designated flood control channels. Maintenance work only occurs in natural channels if there is a specific problem blockage causing an imminent public safety threat.
7. Modified channels are channels that were natural channels but have been modified and or degraded over time. Modified channels are not SCWA designated flood control channels. Modified channels are those that have been graded, realigned, or significantly altered due to reach scale sediment, vegetation, and/or debris removal activities. Maintenance work only happens in modified channels if there is a specific problem blockage causing an imminent public safety threat.
8. Engineered channels are those channels that were built and designed to convey a specific discharge. They are typically trapezoidal channels.
9. Pursuant to the SMP, the Applicant conducts routine maintenance only in engineered channels and activities in modified and natural channels are limited to clearing impediments to flow. Therefore routine maintenance activities (i.e. targeted, localized, and other facilities sediment and vegetation removal projects) are only conducted in the engineered channels.
10. Sediment removal from channels maintained by the Applicant occurs when sediment accumulates and significantly reduces the capacity of the channel or prevents facilities or appurtenant structures from functioning as designed to control flood waters. The number of sediment removal projects undertaken annually and the quantity of sediment removed in a given year depends on past weather and hydrologic conditions, as well as the frequency and extent of past maintenance activities.
11. For most sediment removal projects, excavators are used from the top-of-bank. For projects where the use of excavators from the top-of-bank is not possible, or would cause major vegetation impacts, sediment removal equipment may be used within the channel.

For larger equipment, this requires the construction of temporary access ramps. Vegetation management techniques include removal using small hand tools and hand-held equipment, mechanical removal using heavy equipment like a flail mower attached to an excavator, and spot chemical control on tree stumps and along access roads. All staging will occur on adjacent access roads or previously disturbed areas. Soil and rip-rap will be staged in areas that have been previously disturbed (i.e., service road, turn-outs, etc). If repair activities affect the active channel, the work area will be isolated from flowing stream segments using silt fences, wattles, and/or cofferdams and restored to pre-project conditions after maintenance is complete.

12. Targeted sediment removal projects remove sediment from specific areas (< 500 linear channel feet) in engineered channels where sediment often accumulates. Conducting targeted sediment removal projects in channels that chronically accumulate sediment, reduces the need to conduct reach scale (1,000-3,000 linear feet of the channel) sediment removal downstream of the target area. In a channel, suspended sediments will tend to drop out or deposit if there is an abrupt decrease in channel gradient. Because sediment accumulation in these areas can be significant if these deposits are not routinely managed sediments will continue to make their way downstream impacting long reaches of channel. Areas identified as targeted sediment removal areas will be dredged on an on-going basis to reduce sedimentation further downstream and stabilize the channel. The SMP discusses this approach in Chapter 6 of the SMP (Section 6.3.2 Reach Scale Sediment Removal – Targeted Sediment Removal Areas).
13. Localized sediment removal projects remove sediment from within and adjacent to culverts and crossings located in engineered channels. This includes removing sediment immediately upstream, downstream, and/or from within a culvert or crossing. Localized sediment removal projects typically impact 400 linear feet or less of the channel. The SMP discusses this approach in Chapter 6 of the SMP (Section 6.3.3 Localized Sediment Removal).
14. The SMP includes the Sediment Sampling and Analysis Guidelines, Appendix B of the SMP. The purpose of these guidelines is to provide requirements for sampling, analysis, and characterization of removed sediment as part of SMP activities. Sediment disposal options are based on the chemical quality of the sediment removed. These Guidelines may be amended with the written approval of the Executive Officer.
15. The Applicant removes sediment and vegetation from non-channel areas such as reservoirs, sediment basins, and in-channel engineered concrete structures (not including culverts and/or crossings). The SMP discusses these infrastructure projects in Chapter 6 of the SMP (Section 6.3.5 Sediment Management at Other Facilities).
16. Vegetation management refers to maintaining, trimming, mowing, and removal of vegetation that constricts flows within the flood control channels and other constructed facilities. Vegetation management activities are conducted to maintain flow conveyance capacity, establish a canopy of native riparian trees and native understory plants, and

control invasive vegetation. Vegetation management and removal activities are relatively consistent from year to year, though locations change depending on recent growth and blockages. Vegetation management also includes planting of new trees and shrubs in engineered channels and application of approved herbicides. Applicant's vegetation management activities are covered by this Order, as these activities may have impacts to waters of the State. The Applicant will follow the Vegetation Management Plan dated September 2009, Appendix E in the SMP Manual.

17. Bank stabilization involves the repair and stabilization of stream or reservoir banks when a weakened, unstable, or failing bank: causes or threatens damage to an adjacent property; generates erosion which increases downstream sediment yields; impacts riparian habitat and/or other natural resource values; increases the flood hazard; threatens public safety; or impairs roads, transportation, or access. These activities occur in engineered channels and other facilities, including culvert outlets along stream banks or banks around reservoirs. Bank stabilization techniques defined in the SMP utilize bioengineering techniques to the maximum extent possible, and reduce the practice of bank hardening.
18. The following activities are not included in the SMP and therefore not covered in this Order: capital improvement projects; projects that would alter the designed flood conveyance capacity of a channel; and emergency activities and procedures. A situation is considered an "emergency" if it is a sudden, unexpected occurrence involving a clear and imminent danger that demands immediate action to prevent or mitigate loss of or damage to life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake or other soil or geologic movements, as well as such occurrences as riot, accident or sabotage. (California Public Resources Code Section 21060.3)
19. Maintenance activities addressed in the SMP involving ground disturbance activities occurring in the channel below top-of-bank (including sediment removal, bank stabilization, and some vegetation management) will take place during the low-flow or dry season, which will be considered between June 15 and October 31, unless an exception is requested and approved. Exceptions may be made on a project-by-project basis with advance approval of federal and state regulatory agencies as appropriate.
20. Non ground-disturbing work may be conducted in the channel zone, but outside the low-flow channel, at anytime. This includes pruning and removing select non-native invasive plant species, maintaining channel access roads for drainage and accessibility, conducting minor repairs of culverts, and repairing fences (along either side of access roads, including the upper portion of stream banks where access is from the service road) These maintenance activities may be done at any time, provided there is no discharge of waste that may have an adverse impact to water quality or beneficial uses. Planting of riparian vegetation may be done at any time. Debris removal *immediately* necessary to prevent flooding may also be done at any time.
21. The SMP includes an inventory and assessment of each stream reach in the program area that describes water quality, the geomorphology of the stream, habitat, and species

conditions. Conditions for each stream reach, including engineered sections, other engineered structures, sediment basins, natural watercourses, or other facilities within the Applicant's jurisdiction are characterized in the SMP and updated during the program period to reflect changes and progress in achieving the goals of the SMP. Understanding stream resources, their locations, and interactions is fundamental to the SMP's approach to avoid, minimize, and mitigate environmental impacts of routine maintenance activities. With input from the Regional Water Board and other regulatory agencies, the Applicant developed these channel characterizations to provide enough detail and photo documentation to support the review and approval of annual maintenance projects.

22. The SMP includes planning guidelines or principles to determine how, where, and when routine maintenance activities should occur. These principles are used in the development of each year's maintenance workplan, prior to any work. When applied, these principles consider the natural function of the system, provide an understanding of local physical constraints, identify sensitive habitats, consider watershed processes, determine when action is needed, identify maintenance activities needed, and strive to recognize and implement solutions to minimize the on-going need for maintenance activities. The SMP will implement adaptive management, and may be updated to include these solutions and changes beneficial to water quality.
23. The SMP has been crafted to minimize detrimental impacts to beneficial uses. The SMP proposes activities that, when compared with past practices, should result in long-term beneficial effects on riparian and aquatic habitat for a suite of fish and wildlife species. Strategic sediment reduction activities, such as stabilization of slide-prone areas and improved land use practices conducted in upper watersheds and along reaches currently delivering sediment, will reduce the amount of sediment delivered to maintained channels. These benefits will be realized through the reduction of maintenance over time, the reduction in the need to conduct reach-scale sediment removal in creeks, the removal of migratory barriers or impediments, and the creation of more natural stream channels and stream corridors. When considered collectively, the beneficial effects achieved through implementation of the SMP will help build a healthier and more naturally functional functional stream network and watershed.
24. Impacts on beneficial uses from SMP activities that cannot be entirely avoided through pre-maintenance planning will be mitigated through implementation of the mitigation measures and best management practices described within the SMP Manual.
25. The Applicant will implement on-site and off-site mitigation to mitigate for permanent and temporary impacts from stream maintenance activities covered under this Order. The mitigation approach is broken down into three tiers. Tier 1 includes on-site and in-kind mitigation that will mitigate for the loss of stream functions and riparian habitat from sediment removal and bank stabilization projects as described in the SMP Manual. On-site, in-kind mitigation may include planting of riparian trees, understory shrubs, or aquatic plants; removal of exotic and invasive species and corresponding riparian planting; construction of low-flow channels and other geomorphic features to enhance instream

habitat and hydrologic function; and removal of migration barriers. Additionally, if on-site in-kind mitigation is not possible at the work site area, then off-site, in-kind (Tier 2) mitigation will be implemented at a location within the Program area that would benefit from this type of mitigation. Temporal impacts will be mitigated by restoring/enhancing habitat and stabilizing eroded areas within the same watershed. This Tier 3 mitigation includes funding local watershed restoration projects within the impacted watershed that would increase riparian habitat and reduce the overall need to remove sediment in certain flood control channels. The Applicant will set-aside 10% of the projects costs for sediment removal and bank stabilization maintenance activities to fund specific watershed restoration projects.

26. This Order requires submittal of Annual Notification Reports (ANRs) acceptable to the Regional Water Board Executive Officer by April 30 of each year. The ANRs will describe the channel maintenance activities to be conducted during the upcoming maintenance season and the proposed mitigation and monitoring projects that would compensate for any unavoidable adverse impacts, as outlined in the SMP and the Stream Maintenance Program Draft Environmental Impact Report (DEIR).
27. This Order requires submittal of Sediment Sampling Reports (SSRs) acceptable to the Regional Water Board Executive Officer by May 15 of each year. The SSR will describe the sediment disposal locations, site specific disposal criteria, and the test results from sampling soils from proposed sediment removal projects.
28. This Order requires submittal of Annual Post-maintenance Reports (APRs) acceptable to the Regional Water Board Executive Officer by January 31 of the following year. The APRs will describe channel maintenance activities that were conducted, descriptions of mitigation implemented and the related monitoring results. The APRs will include any lessons learned and recommendations to update BMPs identified in the SMP if needed.
29. This Order requires that after each maintenance season, the Applicant and the Regional Water Board staff will meet to discuss the performance of the SMP, review lessons learned from the completed construction season, and determine the need to incorporate improved stream maintenance techniques and BMPs into the SMP. All improvements and modifications will be incorporated into the SMP upon written approval of the Executive Officer.
30. The Applicant is developing a Low Impact Development (LID) manual and they will incorporate the LID principles and techniques into their SMP activities to the extent practicable. Applicable LID activities may include installing/retrofitting stormwater/flood control basins and implementing stormwater treatment BMPs.
31. The Applicant is updating their Flood Control Design Criteria (FCDC) which will be consistent with the principals within the SMP.

32. A discharge of wastewater (also called effluent) into the channel, stream or groundwater could result from the handling and placement of removed sediment at a temporary stockpile site (if used). Any wastewater discharged during placement and temporary storage is referred to as “decant water.” This Order regulates decant water.
33. This Order is effective only if the Applicant pays all of the required fees under 23 CCR.
34. California Wetlands Portal: The Water Board tracks routine riparian repair and creek maintenance projects in an effort to detect potential systemic instabilities and document project performance in the creeks of the Bay Area. As such, the Applicant is required to submit a Riparian Repair and Maintenance (short) form describing Project size, type, and performance measures. An electronic copy of the short form and instructions can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. Project information will be made available at the web link: <http://www.californiawetlands.net/tracker/>.

### ***Regulatory Framework***

35. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes implementation plans to achieve water quality objectives. The Basin Plan was duly adopted by the Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the U.S. EPA, where required.
36. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) lists the following existing and potential beneficial uses for surface waters within the geographic scope of the SMP which includes surface waters within the Petaluma River and Sonoma Creek Watersheds. The Applicant conducts maintenance activities on seven creeks within the Petaluma River Watershed including the following creeks; Lichau, Corona, Capri, Washington, McDowell, Adobe, and Thompson. The Applicant only conducts maintenance on Fryer Creek and the Nathanson Bypass within the Sonoma Creek Watershed.
  - a. Navigation (NAV)
  - b. Water Contact Recreation (REC-1)
  - c. Non-contact Water Recreation (REC-2)
  - d. Warm Freshwater Habitat (WARM)
  - e. Cold Freshwater Habitat (COLD)
  - f. Wildlife Habitat (WILD)
  - g. Estuarine Habitat (EST)
  - h. Rare, Threatened, or Endangered Species (RARE)
  - i. Fish Migration (MIGR)

j. Fish Spawning (SPWN)

Sediment management, vegetation management, and bank stabilization activities under the SMP could temporarily impact beneficial uses of waters of the State for:

- a. Water Contact Recreation (REC-1)
  - b. Non-contact Water Recreation (REC-2)
  - c. Warm Freshwater Habitat (WARM)
  - d. Cold Freshwater Habitat (COLD)
  - e. Wildlife Habitat (WILD)
  - f. Estuarine Habitat (EST)
  - g. Rare, Threatened, or Endangered Species (RARE)
  - h. Fish Migration (MIGR)
  - i. Fish Spawning (SPWN)
37. The following groundwater basins support the beneficial uses listed below. This includes; the Petaluma Valley, Napa-Sonoma Valley, Wilson Grove Formation, Highlands, Kenwood Valley, and Napa-Sonoma Volcanic Highlands basins.
- a. Agricultural Supply (AGR)
  - b. Industrial Service Supply (IND)
  - c. Industrial Process Supply (PROC)
  - d. Municipal and Domestic Supply (MUN)
38. The Petaluma River including San Antonio Creek are identified as impaired on the Clean Water Act Section 303(d) list. These water bodies are listed as impaired for the following constituents: Diazinon, nutrients, pathogens, sedimentation/siltation, and trash. Only the tidal portion of the Petaluma River is listed for nickel.
39. Sonoma Creek and Calabazas Creek are identified as impaired on the Clean Water Act Section 303(d) list. These water bodies are listed as impaired for various constituents including; nutrients, pathogens, sediment, sedimentation/siltation, and Diazinon.
40. San Pablo Bay is identified as impaired on the Clean Water Act Section 303(d) list and is listed as impaired for Chlordane, DDT, Dieldrin, dioxin compounds, invasive Species, furan compounds, mercury, PCBs, and selenium.
41. The California Environmental Quality Act (CEQA) requires all discretionary projects approved by public agencies to be in full compliance with CEQA, and requires a lead agency (in this case, the Applicant) to prepare an appropriate environmental document for such projects. The Applicant prepared and certified the Stream Maintenance Program Final Environmental Impact Report (FEIR) on June 23, 2009, State Clearinghouse No. 2005 082131. The DEIR found significant impacts which are under the purview and jurisdiction of the Regional Water Board. The DEIR included a number of significant temporary impacts to (1) aquatic species including habitat for special status species; (2) water quality; and (3) hazardous materials. The DEIR also found that the mitigation measures would



mitigate all of these impacts to less than significant levels. The mitigation measures specified in the DEIR include a combination of compensatory mitigation and watershed level project funding to mitigate for any temporary disturbance or loss of aquatic habitat and specific BMPs to mitigate for the remaining maintenance activity related impacts.

42. The Regional Water Board, as a responsible agency under CEQA, has considered the DEIR, and finds that the significant environmental impacts of the proposed activities, which are within the Regional Water Board's purview and jurisdiction, have been identified and mitigated to less than significant levels. Specifically, significant impacts to aquatic species, water quality, and hazardous materials will be mitigated through implementation of the mitigation measures set forth in the DEIR and the mitigation identified in Finding #25 noted above and required by this Order.
43. Pursuant to Title 23, California Code of Regulations Sections 3857, 3859 the Regional Water Board is issuing Waste Discharge Requirements and Water Quality Certification for the activities proposed in the SMP.
44. The Regional Water Board has notified the Applicant and interested parties of its intent to issue Waste Discharge Requirements and Water Quality Certification for the activities proposed in the SMP.
45. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this Order.

IT IS HEREBY ORDERED that, the Regional Water Board certifies that the SMP described herein shall comply with Sections 301, 302, 303, 306, 307, and 401 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

**A. *Discharge Prohibitions***

1. The direct or indirect discharge of wastes, as defined in Section 13050(d) of the California Water Code, within or outside of the active project site, to surface waters or surface water drainage courses is prohibited, except as authorized in this Order.
2. The discharge shall not cause degradation of any water supply.
3. Excavated sediment shall remain within designated disposal areas at all times. The designated disposal areas are: (a) any off-site, authorized temporary or permanent location maintained in compliance with federal and state regulations, (b) any on-site, authorized temporary or permanent location, provided material shall be isolated and contained to prevent impacts to waters of the State and their beneficial uses, or (c) a permitted landfill.

4. The discharge of sediment and runoff/decant water that exceeds effluent limits, from excavated materials disposed of at any temporary or permanent disposal site, to waters of the State, is prohibited.
5. Maintenance activities subject to these requirements shall not cause a condition of pollution or nuisance as defined in Section 13050 (l) and (m), respectively, of the California Water Code.
6. Channel reconfigurations shall not be attempted on alluvial fan channels under this Order<sup>1</sup>.
7. Groundwater beneficial uses shall not be degraded as a result of the SMP.
8. No debris, soil, silt, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into waters of the State.

***B. Discharge Specifications***

1. Appropriate soil erosion control measures shall be undertaken and maintained to prevent discharge of sediment to surface waters or surface water drainage courses.
2. Excavated material shall be fully contained to prevent any wind transport, surface runoff or erosion into waters of the state. At no point within the containment area shall the elevation of sediment exceed that of the containment levees.
3. In accordance with Section 13260 of the California Water Code, the Discharger shall file a report with this Regional Board of any material change or proposed change in the character, location, or volume of the discharge. Any proposed material change in the operation shall be reported to the Executive Officer at least two weeks in advance of implementation of any such proposal.
4. The responsible representative of the Discharger shall immediately and in no case no more than 24 hours, notify the Regional Board staff by telephone whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this Order, significant spill of petroleum products or toxic chemicals, or damage to control facilities that could

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<sup>1</sup> San Francisco Bay Regional Water Quality Control Board,( 2009) ‘Maintenance, Management, and Monitoring Protocols for Stream Projects that Must Take Flood Risk into Consideration’ Technical Memorandum and Rapid Assess

affect compliance. Pursuant to Section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Regional Board within five days of occurrence. The written notification shall identify the adverse condition, describe the actions necessary to remedy the condition, and specify a timetable, subject to the modifications of the Regional Board, for the remedial actions.

**C. *Effluent Limitations***

Excavated material effluent (decant water) discharged from any permanent or temporary disposal site located on the project site or off the site shall not exceed the following numeric and narrative limits at any time:

1. Numeric Limits

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| i) pH                 | 6.5 – 8.5    |
| ii) Settleable Matter | <1.0 ml/l-hr |

2. Narrative Limits

- a. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses; and
- b. All water shall be free from dissolved sulfide concentrations above natural background levels. Concentrations of only a few hundredths of a milligram per liter can cause a noticeable odor or be toxic to aquatic life. Violation of the sulfide objective will reflect violation of dissolved oxygen objectives as sulfides cannot exist to a significant degree in an oxygenated environment.

**D. *Receiving Water Limitations***

1. The placement of sediments and/or decant water shall not cause the following conditions to exist in waters of the State at any place:
  - a. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.;
  - b. Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the

water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses;

- c. Waters shall not contain biostimulatory substances in concentration that promote aquatic growth to the extent that such growth cause nuisance or adversely affect beneficial uses;
- d. Waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life;
- e. There shall be no alteration of temperature beyond present natural background levels;
- f. Dissolved Oxygen, with the following beneficial use designations, shall not be reduced below the following minimums in the receiving water from the point of discharge;
  - o WARM 5.0 mg/l minimum
  - o COLD 7.0 mg/l minimum

Dissolved oxygen levels in spawning areas should ideally approach saturation levels. Free movement of water is essential to maintain well-oxygenated conditions around eggs deposited in sediments. Water temperature, size distribution and organic content of sediments, water depth, and current velocity are also important determinants of spawning area adequacy; and

- g. There shall be no violation of any water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board.

- 2. The placement of excavated material shall not cause the following limits to be exceeded in waters of the State at any point:
  - a. Dissolved Oxygen: 5.0 (WARM) or 7.0 (COLD) mg/l minimum. When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.

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| b. Dissolved Sulfide:  | All water shall be free from dissolved sulfide concentrations above natural background levels. Concentrations of only a few hundredths of a milligram per liter can cause a noticeable odor or be toxic to aquatic life. Violation of the sulfide objective will reflect violation of dissolved oxygen objectives as sulfides cannot exist to a significant degree in an oxygenated environment. |
| c. pH:                 | A variation of natural ambient pH by more than 0.5 pH units.   |
| d. Toxicity:           | All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.   |
| e. Un-ionized Ammonia: | 0.025 mg/L as N, annual median; and 0.16 mg/L as N, maximum.   |
| f. Salinity:           | The project shall not increase total dissolved solids or salinity to adversely affect beneficial uses  |
| g. Turbidity           | Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU.   |
3. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards

#### ***E. Provisions***

##### ***Management of Removed Sediment***

1. The Applicant shall implement the Sediment Sampling and Analysis Guidelines in the SMP.

2. The Applicant may temporarily stockpile excavated sediment prior to disposal or reuse, provided that appropriate state and federal regulations are met and BMPs are implemented to protect water quality and beneficial uses. The excavated sediment may be stockpiled on-site so that it can be loaded into trucks for off-site disposal within three working days. The excavated sediment may also be temporarily stockpiled at an off-site location so that runoff, sediment, or decant water from the excavated materials shall not contact waters of the State.
3. Sediment removed as part of maintenance activities must be properly characterized through laboratory analytical testing, as described in the Sediment Sampling and Analysis Guidelines, Appendix B of the SMP and be hauled off-site to suitable upland disposal sites, to the Sonoma County Central Landfill, or another approved location. Proposed disposal locations shall be submitted by Applicant annually in the SSRs and approved by the Regional Water Board Executive Officer.
4. The Applicant must have equipment and supplies on-site (or readily available nearby) that could be quickly deployed to provide additional filtration if turbidity is observed.
5. All staging shall occur on adjacent access roads or previously disturbed areas. Soil and rip-rap shall be staged in areas that have been previously disturbed (i.e., service road, turn-outs, etc). If repair activities affect the active channel, the work area shall be isolated from flowing stream segments using silt fences, wattles, and/or cofferdams and restored to pre-project conditions after maintenance is complete.
6. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 27, Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations shall be conducted in accordance with applicable state and federal regulations.
7. The Applicant shall cleanup, remove and relocate any wastes that are discharged in violation of this Order.
8. The Applicant shall ultimately dispose of dewatered material at a permitted landfill, approved upland sediment disposal site, or at an approved reuse site in accordance with applicable state and federal regulations, including applicable provisions of this Order.
9. The Applicant shall demonstrate compliance with all permitting and CEQA review requirements for off-site sediment disposal sites proposed for the SMP and for any alternative off-site sediment disposal sites. If requested by the Executive Officer, a delineation of existing jurisdictional waters of the State and United States at any temporary or permanent sediment disposal site, verified according to U.S. Army Corps of Engineers delineation standards, shall be conducted prior to the preparation for disposal and submitted for the Executive Officer's acceptance prior to the disposal of sediment.

### **Sediment and Vegetation Removal**

10. Targeted and localized sediment removal in engineered channels shall occur in limited areas that do not exceed 500 linear feet of channel length. Targeted and localized vegetation removal areas shall not exceed 100 feet of channel length.
11. For all proposed sediment and vegetation removal and snagging and clearing projects implemented after May 2015, SCWA shall justify the need for such actions based on the analysis of channel capacity, hydraulic constrictions and roughness. The analysis shall include, but not be limited to, an evaluation of whether in-stream vegetation and/or sediment are contributing to the problem and the short and long term benefits of the proposed removal actions.

### ***Vegetation Management***

12. All vegetation management activities that could result in the runoff of pesticides that are not registered for aquatic use into waters of the State are prohibited.
13. Vegetation management activities that could result in the destabilization of stream banks or increase sediment input into waters of the State are prohibited.
14. Vegetation management and replanting shall be conducted using a strategy which maximizes the functions of the vegetation to shade the active channel, stabilize active channel banks, and provide in stream habitat<sup>2</sup>.
15. The Applicant shall follow the vegetation removal and management guidelines described in the Vegetation Management Plan dated September 2009, Appendix E of the SMP Manual accept as required under Provision #14.
16. Vegetation management activities shall not adversely impact the riparian zone, shade, canopy coverage, or habitat. Overall impacts of vegetation management activities shall improve beneficial uses.

### ***Bank Stabilization***

17. The Applicant shall use the bank stabilization methods described within the SMP Manual. Changes to the bank repair methods shall be proposed in the Annual Notification of Proposed Projects package, or equivalent document, and approved in writing by the Executive Officer before implementation.

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<sup>2</sup> San Francisco Bay Regional Water Quality Control Board,( 2009) 'Maintenance, Management, and Monitoring Protocols for Stream Projects that Must Take Flood Risk into Consideration" Technical Memorandum and Rapid Assess (See the case studies for Wildcat Creek and the San Lorenzo River)

18. The use of soil bioengineering systems as presented in the Natural Resource Conservation Service ( NRCS) and Army Corps (USACE) manuals shall be used as the first and primary strategy for stream bank stabilization projects. Rock and riprap installation shall be limited to only those areas experiencing shear stresses that exceed the performance of vegetation based soil bioengineering systems as designated in NRCS and USACE shear stress tables<sup>3</sup>.

### ***Other Maintenance Activities***

19. Other stream maintenance activities shall not result in direct or cumulative significant impacts to water quality or beneficial uses of waters of the State.
20. Maintenance activities that may result in modifications to stream cross-sections and or profiles shall be implemented to achieve sustainable and appropriate channel geometries.

### **Quantitative Assessments**

21. By May 2013, the SCWA shall develop a work plan and an implementation schedule for developing channel capacity objectives, and estimates of stage-discharge relationships and channel dimensions. The work plan shall provide information on SCWA's approach to meeting the quantitative requirements including the rationale for taking that approach. The work plan and its associated support documentation shall be submitted to the Water Board and will require approval by the Executive Officer.
  - a) The Applicant shall develop channel capacity objectives for all major channels contained in the SMP and determine the tolerance for loss of freeboard in engineered flood control channels.
  - b) The Applicant shall provide preliminary estimates of stage-discharge relationships for channel reaches most likely subject to maintenance (including those areas and channels identified in the inventories for targeted, and localized sediment and vegetation removal projects). These estimates should be based on actual field measurements. For those channels lacking sufficient high flow data, SCWA shall implement a program for developing stage-discharge relationships for larger magnitude flows.

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<sup>3</sup> Fischenich, J.C. (2001) Stability Thresholds for Stream Restoration Materials , EMRRP Technical Notes Collection (ERDC TN-EMRRP-SR-29), U.S. Army Engineer Research and Development Center, U.S. Army Corps of Engineers, Vicksburg, MS.

San Francisco Bay Regional Water Quality Control Board,( 2009) "Rapid Permit Assessment Checklist," located at the Regional Board website: Protecting Streams and Wetlands. Reference Tab M – Table TS141-4.

Bentrup, Gary, J.Chris Hoag, ( 1998)The Practical Streambank Bioengineering Guide, User's Guide for Natural Streambank Stabilization techniques in the Arid and Semi-Arid Great basin and Intermountain West USDA NRCS, Was. D.C



- c) The Applicant shall develop estimates of channel dimensions which may indicate the best potential for establishing quasi-equilibrium conditions to avoid future excessive erosion of or deposition within an active channel. These dimensions can be established using a combination of information from regional stream restoration curves, reference reach data, computation of effective discharges, shear stresses and other assessments. These estimations of active channel dimensions should guide the management approaches contained in the maintenance plans and be used in implementing the maintenance activities in order to achieve more sustainable channel shapes and floodplains<sup>4</sup>.

***Best Management Practices***

22. The Applicant shall implement the BMPs contained within the SMP Manual and the FEIR (or alternative BMPs of comparable effectiveness) to prevent pollutants from draining, being washed, or otherwise discharged into waters of the State during SMP activities.
23. The Applicant shall follow the procedures and protocols in the Fishnet 4C Manual when removing large woody debris for maintenance purposes<sup>5</sup>. Large woody debris shall not be removed or be managed in a channel if it potentially functions as habitat for salmonids and or other threatened and endangered species. If the large woody debris poses a credible risk of blocking a culvert, bridge, or otherwise obstructing flow or causing structural damage it may be relocated, repositioned, and or cabled to a streambank in a manner to protect existing habitat. For channels designated by the SMP to not have potential salmonid and or other threatened and endangered species habitat, large woody debris can be immediately removed or relocated to a more suitable location if the large woody debris is posing a significant and imminent threat of structural damage
24. The Applicant shall divert any flow at the site around the active maintenance site in a non-erosive manner.
25. The Applicant shall halt work activities if dead or dying fish (fish, amphibian or other aquatic organism) or fish exhibiting stress are observed within 1,000 feet of work activity or discharge. The Applicant shall immediately assign a qualified biologist to investigate the cause of the problem and define an acceptable corrective action plan, and determine if the cause is related to SMP activities. The Applicant shall immediately report all incidents involving dead or dying fish or fish exhibiting stress, as well as prescribed

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<sup>4</sup> A.L. Riley, "Rapid Permit Checklist for Streams and Floodplains, A User's Guide," (2009) Technical Assistance Document, San Francisco Bay Regional Water Quality Control Board

<sup>5</sup> Fishnet 4C, MFG, Inc, Prunuske Chatham, Inc., Pacific Watershed Associates, ( 2004) Guidelines For Protecting Aquatic Habitat and Salmon Fisheries for County Road Maintenance, prepared for: Fishnet 4c Counties, California Department of Fish and Game, National Marine Fisheries Service, California Resources Agency

action plans to the Regional Water Board and the California Department of Fish and Game.

***Compensatory Mitigation***

26. The Applicant shall implement the Mitigation Monitoring and Reporting Program included in the SMP Manual and within the FEIR. Any substantive changes to this program must be approved in writing by the Executive Officer.
27. The Applicant shall mitigate for both permanent and temporary impacts from its stream maintenance activities by implementing in-kind and on-site mitigation (Tier 1 mitigation), and shall only implement in-kind off-site mitigation if there is no opportunity to mitigate on-site (Tier 2 mitigation).
28. The Applicant shall mitigate for the temporal loss of beneficial uses by funding off-site watershed level projects (Tier 3 mitigation) that would address watershed level issues such as erosion to reduce the overall need to conduct stream maintenance activities.
29. Tier 3 watershed mitigation projects may include such activities as headwater area erosion control, revegetation of riparian corridors, invasive plant removal, or other stream restoration practices. Watershed-based mitigation shall provide restorative and mitigating watershed solutions by partnering with local non-profit agencies, municipalities, restoration organizations, creek groups, schools, and resource conservation districts. There also may be post-construction stormwater treatment/LID projects that are not required by the Phase II Municipal Stormwater Permit that would provide improvements to water quality, and which may be considered as Tier 3 mitigation projects. This additional mitigation option shall be given consideration by the Executive Officer after the Applicant's LID manual is complete.
30. The Applicant shall implement Tier 3 mitigation to compensate for the impacts to engineered channels from targeted and localized sediment and vegetation removal projects.
31. The Applicant shall submit proposed mitigation sites to the Regional Water Board Executive Officer for approval as part of the ANR. In the event that a proposed mitigation activity is denied, or a site is rescinded for any reason, an alternative mitigation proposal that provides comparable levels of mitigation shall be submitted to the Executive Officer for concurrence no later than 90 days following denial or rescission. The Applicant shall implement those alternative mitigation proposals that the Executive Officer has approved.
32. The Applicant shall mitigate for impacts to water quality and beneficial uses from its vegetation management activities. Mitigation shall be by revegetation with native

vegetation, and other methods, as described in the Vegetation Management Plan, Appendix E of the SMP Manual.

***Monitoring and Reporting***

33. The Applicant shall monitor all active project sites according to the Monitoring and Reporting Program, attached to this Order.
34. The Applicant shall notify the Water Board and other applicable agencies on an annual basis and submit the ANR package that includes information on the projects that will be conducted in the upcoming year. In addition, in the ANR, SCWA shall determine if any of the proposed projects would impact any channels identified as functioning as potential habitat for threatened or endangered species and/or provides habitat for different life cycles for salmonids (i.e. migration, spawning, rearing, or refugia).
35. The Applicant shall submit annual reports according to the SMP Annual Report Outlines.
36. All annual maintenance plans and the ANR shall be developed by an interdisciplinary team with expertise in fisheries biology, hydrology, and fluvial geomorphology. The team's expertise shall be documented in the ANR.
37. The ANRs shall be submitted by April 15 of each year. The Regional Water Board Executive Officer will approve the ANR for that year's projects and provide a notice to proceed, or indicate needed modifications to the ANR, within 45 days of receiving it.
38. The SSR shall be submitted with the ANR package.
39. The APRs shall be submitted by January 31 of the following year. The Applicant is required to use the Riparian Repair and Maintenance (short) form to provide individual project information reported in the APR. The completed short form and map showing the project boundaries shall be submitted electronically to [habitatdata@waterboards.ca.gov](mailto:habitatdata@waterboards.ca.gov).
40. To support annual program implementation, the Applicant shall submit the following documents and reports annually to the Regional Water Board:
  - a) ANR package of Proposed Projects,
  - b) SSR,
  - c) Any other Self-Monitoring Reports required or deemed necessary.
41. The Applicant shall submit the inventories noted below. The purpose of the inventory is to guide assessments and determine specific causes of maintenance problems and to develop priority maintenance prevention projects. The inventory and its associated

support documentation shall be submitted to the Water Board and approved by the Executive Officer.

- a) Inventory of engineered channels shall be submitted with the 2012 ANR.
    - i. A list of all areas and channels identified as engineered channels and all channels that are subject to routine maintenance activities. Include the specific location of the areas and channels identified.
  - b) Inventories for the following types of projects shall be submitted with the ANR when these types of projects are included in the ANR.
    - i. An inventory of targeted sediment and vegetation removal areas.
    - ii. An inventory of localized sediment and vegetation removal areas where activities occur on an on-going basis. Localized projects that are newly discovered and not listed in the inventory, shall be included in the ANR for that year.
  - c) The following inventories shall be submitted with the 2013 ANR.
    - i. An inventory of the stream reaches with hydraulic constrictions (e.g. under-sized culverts, bridge abutments, rail road trestles, utility crossings, and other natural or human caused obstructions) potentially causing backwater conditions, increased water surface elevations, bank instabilities, and/or fish passage barriers.
    - ii. An inventory of stream reaches that are a priority for maintenance based on chronic problems such as sediment accumulation, flooding, and/or excessive erosion. The inventory should include an assessment of the causes of the chronic problems and a corrective action plan.
    - iii. An inventory of those reaches that potentially function as migration, spawning, and or high flow refugia habitat for salmonids.
42. The following activities are exempt from annual notification requirements and may occur any time at the discretion of the Applicant: maintenance of existing access roads located along the top-of-bank where there shall be no impact on waters of the State; maintenance of V-ditches along existing service roads where all work is above the level of top-of-bank of the adjacent stream, and there is no impact to waters of the State; and removal of debris (trash, shopping carts, etc.) accumulations using hand labor and not involving the removal of vegetation or large woody debris
43. Maintenance activities on engineered channels which are identified as localized, targeted, or other facilities maintenance activities shall be reviewed during the ANR process and

will not require project specific notification to the Water Board. All other activities in engineered channels require project specific notification.

44. Maintenance activities on any channels identified as modified or natural in the SMP shall require project specific notification to the Water Board. See Provision #45 for information about project specific notification requirements.
45. Project specific notification on all channels shall include photo documentation of existing conditions, a description of the project and an assessment of the need for the proposed maintenance activities. The Applicant shall also provide post-maintenance photo documentation. SCWA shall determine if any of the proposed projects would impact any channels identified as functioning as potential habitat for threatened or endangered species and/or provides habitat for different life cycles for salmonids (i.e. migration, spawning, rearing, or refugia).
46. For maintenance work in engineered channels, the Water Board staff will review and comment on the project specific notification information within 45 days of receiving the notification. If the Water Board staff has not contacted the SCWA within this 45 day time period, then SCWA can proceed with the maintenance work as documented in the project specific notification.
47. For maintenance work in modified or natural channels, the project specific notification information will be reviewed by Water Board staff and will require approval of the Executive Office before work is initiated.
48. Before June 15 of each year, the Applicant shall organize a meeting and field tour with the agencies listed in Provision #60 of this Order, to discuss the projects scheduled for that year.
49. After each maintenance season, the Applicant and the Regional Water Board staff shall meet to discuss the performance of the SMP, review lessons learned from the completed construction season, and determine the need to incorporate improved stream maintenance techniques and BMPs into the SMP. All improvements and modifications shall be incorporated into the SMP upon written approval of the Executive Officer. If such changes, however, deviate from the SMP activities specifically authorized by this Order, then this Order will need to be re-opened and amended by the Regional Water Board.
50. After five years of SMP implementation, the Applicant and Regional Water Board, along with other regulatory agencies, shall review the SMP to evaluate its overall effectiveness, and the Regional Water Board shall consider reissuing the 401 Water Quality Certification and WDR for an additional five (5) years to allow continuation of SMP implementation for another five (5) years. The review shall include an assessment of maintenance activities conducted to date, BMPs, adequacy of the SMP mitigation program, SMP data management, adaptive updates and revisions of the SMP, and overall program coordination and communication between the Applicant and regulatory

agencies. The SMP, the water quality certification and the WDRs, may be revised or updated based on this review.

51. The SMP shall be amended no later than May 1, 2015 to include the following information. All amendments shall be subject to approval by the Executive Officer of the Water Board:

- a) Definitions (compatible with resource agency definitions) of: active channel, low flow channel, floodplain, terrace, and top of bank. These definitions are intended to clarify where and how maintenance activities will occur.
- b) Identification of priority watershed projects aimed at increasing storm water infiltration and thus reducing sediment and/or runoff discharges which can reduce chronic sediment and/or vegetation removal projects and/or improve water quality.
- c) Salmonid and fresh water shrimp management plans for those reaches potentially functioning as migration, spawning, or high flow refugia habitat for salmonids or fresh water shrimp habitat. The management plans are intended to guide maintenance activities in these reaches and be consistent with USFWS and NMFS biological opinions.
- d) Revised Appendix E Vegetation Management Plan to include the management options described in the Water Board's 2009 Technical Memorandum: "Maintenance, Management, and Monitoring Protocols for Stream Projects That Must Take Flood Risk into Consideration." For example, maximize the functional values of vegetation by maintaining and planting vegetation by the active channel. Also add a section which addresses options to include some environmental quality features to concrete and or grouted flood control channels, such as modification of channel and floodplain dimensions and or incorporation of some vegetation<sup>6</sup>. Some sections of the Santa Rosa Creek Prince Greenway can serve as a model for this.
- e) A list of high priority stream maintenance related capital improvement projects that address chronic maintenance problems.

## *Fees*

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<sup>6</sup> San Francisco Bay Regional Water Quality Control Board.( 2009) 'Maintenance, Management, and Monitoring Protocols for Stream Projects that Must Take Flood Risk into Consideration' Technical Memorandum

52. This Order combines Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certification provisions. The annual fee shall reflect this, and consist of the following:

The fee amount for the Waste Discharge Requirements portion shall be in accordance with the current fee schedule, per California Code of Regulations, Division 3, Chapter 9, Article 1, section 2200(a)(1), based on the discharge's Threat to Water Quality and Complexity rating of the Discharge to Land or Surface Waters, plus applicable surcharge(s). The Threat and Complexity rating shall be rated as 3B, and shall remain at this level throughout the period of this Order. After the initial year, this portion of the fee shall be billed annually to the Applicant and shall be paid separately from the Clean Water Act Section 401 Water Quality Certification portion. The fee payment shall indicate the Order number, WDID number, and the applicable season.

### ***Records Provisions***

53. The Applicant shall maintain a data management system to monitor stream maintenance activities, natural resources in the program area, permitting requirements, and mitigation efforts.
54. The Water Board Executive Officer may request that data be provided to the Water Board at times outside of the reporting requirements specified in this order.
55. Applicant shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time.
56. The Applicant shall submit electronic versions of any submitted reports or documents.

### ***General Provisions***

57. All provisions in this order apply to all channels and activities identified in the SMP
58. The following activities are not included in the SMP and therefore not covered in this Order: capital improvement projects; projects that would alter the designed flood conveyance capacity of a channel; and emergency activities and procedures. A situation is considered an "emergency" if it is a sudden, unexpected occurrence involving a clear and imminent danger that demands immediate action to prevent or mitigate loss of or damage to life, health, property, or essential public services. Emergency includes such

occurrences as fire, flood, earthquake or other soil or geologic movements, as well as such occurrences as riot, accident or sabotage. (California Public Resources Code Section 21060.3)

59. The Applicant shall comply with all the Prohibitions, Effluent and Receiving Water Limitations, and Provisions of this Order immediately upon adoption of this Order or as provided in this Order.
60. The Applicant shall comply with all necessary approvals and/or permits for the SMP and its mitigation projects from applicable government agencies, including, but not limited to, San Francisco Bay Regional Water Quality Control Board, California Department of Fish and Game, United States Army Corps of Engineers, United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration - National Marine Fisheries Service, and local agencies. The Applicant shall submit copies of such approvals and/or permits to the Regional Water Board's Executive Officer prior to SMP implementation.
61. The Applicant shall implement the SMP in accordance with the conditions described in the SMP Manual and the findings herein, and shall comply with all applicable water quality standards.
62. Any change to the SMP operation that would have a significant or material effect on the findings, conclusions, or conditions of this Order shall be submitted to the Executive Officer for review and written approval.
63. SMP activities occurring within the channel below the ordinary high water mark shall only occur from June 15th to October 31st or the first significant rainfall after October 15th, whichever occurs first (significant rainfall is defined as 0.5 inch of rain in a 24 hour period). No new instream sediment removal or bank stabilization work shall start after October 15th of any year, but work already underway shall have until October 31<sup>st</sup> to be completed. Disturbed soil related to SMP activities shall be stabilized and winterized. Required planting shall be performed no later than the fall/winter planting season in the year following project installation.
64. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any water quality problem arises, the associated SMP activities shall cease immediately until corrective actions have been implemented including insuring that adequate BMPs are implemented to eliminate the discharge and clean up and remediate any recoverable pollutants. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
65. All mitigation activities shall be completed as described in the Mitigation Monitoring and Reporting Program and the SMP as approved by the Regional Board Executive Office.



66. This water quality certification and issuance of WDRs is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code Section 13330 and Title 23, California Code of Regulations, Section 3867.
67. This water quality certification is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to Title 23, California Code of Regulations, Section 3855, Subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
68. The Regional Water Board may add to or modify conditions of this Order, as appropriate, to implement any new or revised TMDL requirements.
69. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or Section 303 of the Clean Water Act.
70. The Applicant shall maintain a copy of this Order, and all relevant plans and BMPs at SMP work sites so as to be available at all times to site operating personnel.
71. The Applicant shall correct any and all problems that arise from a SMP maintenance activity, including a failure to meet the conditions of this Order that results in an unauthorized release of pollutants, including sediment.
72. The Applicant shall permit the Regional Water Board staff or its authorized representative, upon presentation of credentials:
  - a. Entry on to the premises on which maintenance activities are planned or underway, wastes are located, or in which records are kept.
  - b. Access to copy any records required to be kept under the terms and conditions of this Order.
  - c. Access to inspect any treatment equipment, monitoring equipment or monitoring method required by this Order.
  - d. Access to sample any discharge or surface water covered by this Order.
73. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements

incorporated into this Order. In response to a suspected violation of any condition of this Order, the Regional Water Board may require the holder of any federal permit or license subject to this Order to furnish, under penalty of perjury, any technical or monitoring reports the Regional Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this Order, the Regional Water Board may add to or modify the conditions of this Order as appropriate to ensure compliance.

74. The Applicant shall comply with the Monitoring and Reporting Program attached to this Order, and the SMP and its maintenance related appendices including: the Sediment Sampling and Analysis Guidelines, and the Vegetation Management Plan and any modifications to these documents as specified by the Executive Officer.
75. This Order is not transferable.
76. The authorization of this Order for the SMP activities expires on April 13, 2015. Mitigation and monitoring requirements that extend beyond the term of this Order are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

I, Bruce Wolfe, Executive Officer, do hereby certify that the foregoing is a full, complete and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 13, 2011.

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Bruce H. Wolfe  
Executive Officer

Attachments:

Monitoring and Reporting Program