

April 28, 2010

Keenan Foster
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 94506

Subject: Annual Notification for Sonoma County Water Agency's 2010 Stream Maintenance Projects

Dear Participating Agency,

Enclosed is the Sonoma County Water Agency's (SCWA) Stream Maintenance Program's (SMP) Annual Notification information for the 2010 stream maintenance activities. The following information is provided in this notification packet:

1. Project List and Locations
2. Project Designs
3. Summary of Maintenance Project Sizes, Extents, and Potential Effects
4. Annual Mitigation Plan
5. Annual Sediment Disposal Plan

Overview of 2010 Maintenance Projects

Five localized sediment removal projects, three reach-scale sediment removal projects, and four bank stabilization and repair projects are planned for 2010. The 2010 activities also include clearing of sediment from six sediment basin structures. These maintenance projects are necessary to restore conveyance capacity and maintain proper function of SCWA facilities. All of the projects will be conducted in accordance with the impact avoidance and minimization approaches described in the SMP Manual (Chapter 5) and with the application of program BMPs as described in Chapter 7 of the SMP Manual. The 2010 maintenance projects include the following:

Localized Scale Sediment Removal Projects

Ducker Creek near Middle Rincon Road, Santa Rosa
Hinebaugh Creek near Dawn Court, Rohnert Park
Paulin Creek in several locations from Steele Lane to Cleveland Avenue, Santa Rosa
Russell Creek at Range Ave crossing, Santa Rosa
Todd Creek at Todd Road, north of Rohnert Park

Reach Scale Sediment Removal Projects

Corona Creek Reach 1, upstream of Capri Creek, Petaluma

Laguna de Santa Rosa Creek from west of Wilfred Avenue to Llano Rd, west of Rohnert Park
Lorna Dell Creek at Tacheva Drive (entirely within concrete channel)

Sediment Basin or Instream Basin Clearing

Adobe Creek Reach 2, Petaluma
Cook Creek Reach 2, west of Rohnert Park
Copeland Creek at Country Club Lane, Rohnert Park
Copeland Creek at Snyder Lane, Rohnert Park
Santa Rosa Div1, just upstream of Spring Lake, Santa Rosa
Wilfred Creek at Snyder Lane, in northern Rohnert Park

Bank Stabilization Projects

Hunter Creek near Hunter Lane, north of Rohnert Park
Moorland Creek at downstream terminus of Moorland Creek, north of Rohnert Park
Santa Rosa Creek, upstream of Guerneville Road crossing, west of Santa Rosa
Todd Creek near confluence with Hunter Creek, north of Rohnert Park

Sections 1 through 3 of this Annual Notification packet contain project descriptions, project maps, site plans, site photographs, and additional documentation and reference materials.

In addition to these 2010 maintenance activities, several projects that were previously permitted in 2009 will be completed in 2010. These on-going projects include:

- 2 localized sediment removal projects (at Starr Creek Tributary and Washington Creek);
- 2 reach scale sediment removal projects (Colgan/Kawana Creeks and Crane/Five Creeks);
- 4 bank repair projects (at Peterson 2 and 1, Piner 6, and College 3 creeks); and
- 4 reservoir clearing projects (Brush Creek, Matanzas Creek, Piner, and Santa Rosa Creek reservoirs).

On-Site and Off-Site Mitigation for Maintenance Projects

Section 4 of the Annual Notification Packet includes detailed information for both on-site (Tier 1) and off-site (Tiers 2 and 3) mitigation actions. Details of the on-site (Tier 1) restoration approaches and methods are provided in Chapters 5 and 8 of the SMP Manual. Existing conditions at the maintenance project sites are described in the channel characterizations of Chapter 4 of the SMP Manual.

In terms of off-site mitigation for temporal impacts, three stream restoration projects in Zone 1A and one in Zone 2A have been identified to mitigate for the 2010 maintenance activities. These restoration projects are being conducted by the Bay Institute as part of their Students and Teachers Restoring a Watershed (STRAW) Project. The off-site mitigation projects for 2010 include ecologic enhancement and restoration activities at Petaluma River, Roseland Creek, Copeland Creek, and Matanzas Creek. More detail describing these projects is included in Section 4. These off-site watershed based restoration projects are consistent with the expressed goals of the off-site mitigation program to restore impacted habitats, but to also address larger watershed factors related to stream maintenance such as controlling upstream and upland erosion and sediment sources.

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As described in the SMP Manual, the combination of on-site and off-site restoration activities represents a holistic approach to address the impacts from maintenance activities by addressing both the impacts of stream maintenance while also addressing/reducing the ongoing need for such maintenance. The off-site mitigation projects provide mitigation for the temporal impacts occurring between the time that maintenance activities occur, and the point at which on-site (Tier 1) restoration activities have become established and provide ecological function equivalent to or greater than the pre-maintenance condition. This year's mitigation approach directly addresses project impacts on-site and also provides important habitat improvements and erosion source reductions in the broader watershed through the off-site (Tier 3) projects.

In addition to the Tier 1 and Tier 3 mitigation efforts, SCWA will also be conducting compensatory mitigation for ESA and CESA listed species impacted by the 2010 maintenance projects. For 2010, 0.034 acres of mitigation for California tiger salamander will be purchased from an approved bank in the program area to offset impacts to this species. Mitigation banking standards for the SMP follow the guidelines in the SMP Biological Opinion with the USFWS (complete) and Section 2080.1 Consistency Determination by CDFG (in-process) for the SMP.

Closing

On April 28th the IAWG and SCWA project team will tour the 2010 project sites, including visiting some past maintenance sites and watershed mitigation sites. This will be a valuable opportunity for the IAWG members to get a field-based perspective on the projects, ask questions, and confirm conditions right in the field.

SCWA invites each agency to comment on planned maintenance activities, confirm activities, and/or provide a notice to proceed with the 2010 maintenance projects. If SCWA receives no comment at the conclusion of 30 days, it will be understood that this represents a notice to proceed.

Please feel free to contact me, Keenan Foster (kfoster@scwa.ca.gov / (707) 547-1941), directly at SCWA, or contact my associate Jon Niehaus (jon@scwa.ca.gov / 707-5467-1947). You may also wish to contact our consultants Ken Schwarz (ken@horizonh2o.com / 510-986-1851), or Sandy Devoto (sandy@horizonh2o.com / 510-986-1853).

Sincerely,



Keenan Foster
Sr. Environmental Specialist and SMP Permit Manager

Attachments

cc: Jon Niehaus
Ken Schwarz
Sandy Devoto
Jim Robins

Section 1

PROJECT LIST AND LOCATIONS

Section 1

Project List and Locations

1A. Sediment Removal and Bank Stabilization Project List and Type

The following sediment removal and bank stabilization projects are anticipated for the 2010 maintenance season:

■ Five Localized Sediment Removal Projects at:

- Ducker 2: sediment removal in downstream area of Middle Rincon Road crossing.
- Hinebaugh 5: sediment removal near Dawn Court.
- Paulin Creek: several small sediment removal locations (7-20 ft each) between Steele Lane and Cleveland Ave.
- Russell 1: sediment removal at Range Avenue crossing.
- Todd 4: sediment removal upstream and downstream of Todd Road crossing.

■ Three Reach Scale Sediment Removal Projects at:

- Corona Creek Reach 1: between Corona Creek Reach 2 and Capri Creek Reach 2.
- Laguna de Santa Rosa Reach 1: from west of Wilfred Avenue to Llano Road.
- Lorna Dell 1: sediment removal from concrete-lined channel from Tachevah Dr. crossing to 1,260 ft upstream.

■ Sediment Basin/Instream Basin Clearing at:

- Adobe Creek Sediment Basin: clearing sediment and vegetation at the Adobe Creek basin (Adobe Creek Reach 2).
- Cook Creek Sediment Basin: clearing sediment and debris at the basin (Cook Creek Reach 2).
- Copeland Creek at Country Club Dr.: clearing sediment and debris along the instream Copeland Creek basin located at the crossing at Country Club Road.
- Copeland Creek at Snyder Ln.: sediment removal at the Copeland Creek instream basin located at the Snyder Lane crossing.

- Santa Rosa Creek Sediment Basin: clearing sediment and debris at the Santa Rosa Creek Diversion structure.
- Wilfred Creek: sediment removal at Wilfred Creek instream basin located on Reach 1, downstream of the culvert outfall at Snyder Lane.
- **Bank Repairs at the following four locations:**
 - Hunter Creek Reach 2: 14 ft long bank repair located approx 1280 ft downstream from Hunter Lane crossing.
 - Moorland Creek Reach 1: one 20ft long and one 15 ft long bank repair located at downstream terminus of Moorland Creek.
 - Santa Rosa Creek Reach 1: 30 ft long bank repair located approx 3,600 ft upstream from Guerneville Road crossing.
 - Todd Creek Reach 4: 73 ft long bank repair located approx 160 ft upstream of Hunter Creek confluence.

1B. Sediment Removal and Bank Stabilization Project Site Locations and Other Geographic Information

The following table presents location and geographic information for each of the 2010 project sites.

Table 1-1: Location and Other Geographic Information for Project Sites

Project Site	Creek	Tributary To	SMP Reach	USGS Quad Township, Range, Section	Latitude/ Longitude
Localized Sediment Removal Projects					
Ducker near Middle Rincon	Ducker Creek	Austin Creek	Ducker 2	Santa Rosa Quad T7N, R7W, Section 6	38°28'23.18"N 122°40'15.92"W
Hinebaugh near Dawn Court	Hinebaugh Creek		Hinebaugh 5	Cotati Quad T6N, R8W	38°21'02.48"N 122°41'51.52"W
Paulin Creek from Steele Lane to Cleveland Ave.	Paulin Creek	Piner Creek	Paulin 2,3,4,6	Santa Rosa Quad T7N, R8W, Section 3	38°27'46.47"N 122°42'32.49"W
Russell Creek at Range Ave	Russell Creek	Piner Creek	Russell 1	Santa Rosa Quad T7N, R8W, Section 3	38°28'15.82"N 122°43'57.85"W
Todd Creek near Todd Road	Todd Creek	Hunter Lane	Todd 4	Santa Rosa Quad T6N, R8W, Section 11	38°23'11.97"N 122°42'39.73"W
Reach Scale Sediment Removal Projects					
Corona Creek upstream of Capri	Corona Creek	Capri Creek	Corona 1	Cotati Quad T5N, R7W	38°27'46.47"N 122°42'32.49"W

Project Site	Creek	Tributary To	SMP Reach	USGS Quad Township, Range, Section	Latitude/ Longitude
Laguna de Santa Rosa	Laguna de Santa Rosa Creek	Russian River	Laguna 1	Two Rock Quad T6N, R8W	38°21'41.21"N 122°45'36.69"W
Lorna Dell upstream of Tacheva Drive	Lorna Dell Creek	Santa Rosa Creek	Lorna Dell 1	Santa Rosa Quad T7N, R7W	38°25'50.57"N 122°40'23.22"W
Sediment Basin/ Instream Basin Clearing Projects					
Adobe Creek Sediment Basin	Adobe Creek	Petaluma River	Adobe 2	Petaluma Quad T5N, R7W	38°13'59.03"N 122°35'57.63"W
Cook Creek Sediment Basin	Cook Creek	Coleman Creek	Cook 2	Cotati Quad T6N, R7W Section 17	38°15'38.49"N 122°39'08.63"W
Copeland Creek Basin at Country Club Drive	Copeland Creek	Laguna de Santa Rosa	Copeland 3 & 4	Cotati Quad T6N, R8W	38°20'35.74"N 122°41'42.68"W
Copeland Creek Basin at Snyder Lane	Copeland Creek	Laguna de Santa Rosa	Copeland 4 & 5	Cotati Quad T6N, R8W	38°20'35.84"N 122°41'17.58"W
Santa Rosa Creek Diversion	Santa Rosa Creek	Laguna de Santa Rosa	SR Div 1	Santa Rosa Quad T7N, R7W	38°27'25.86"N 122°38'23.36"W
Wilfred Creek Basin at Snyder	Wilfred Creek	Bellview-Wilfred Channel	Wilfred 1	Cotati Quad T6N, R7W	38°22'20.18"N 122°41'10.03"W
Bank Stabilization Projects					
Hunter Lane Channel	Hunter Creek	Todd Creek	Hunter 2	Santa Rosa Quad T6N, R8W, Section 11	38°22'53.03"N 122°41'58.74"W
Moorland Channel	Moorland Creek	Todd Creek	Moorland 1	Santa Rosa Quad T6N, R8W	38°22'55.01"N 122°43'06.44"W
Todd Channel	Todd Creek	Bellview-Wilfred Channel	Todd 4	Santa Rosa Quad T6N, R8W, Section 11	38°22'55.71"N 122°42'40.65"W
Santa Rosa Creek	Santa Rosa Creek	Laguna de Santa Rosa	Santa Rosa 1	Sebastopol Quad T7N, R8W, Section 14	38°26'53.31"N 122°49'26.51"W

1C. Sediment Removal and Bank Stabilization Project Settings and Resources

Channel Characterization Sheets and Site Photos

Channel characterization sheets for the 2010 project sites were developed for, and included in, Chapter 4 of the SMP Manual. The channel characterization sheets contained within the Manual provide baseline information on the maintenance reach's setting, physical

processes, geomorphic conditions, biologic conditions, and management considerations. The channel characterization sheets also include photographs depicting typical conditions of the reach. Program reviewers are directed to viewing the reach characterization sheets in the Manual (Chapter 4) to provide a good overview of reach conditions.

Current photographs showing the specific location of maintenance activities for the 2010 project sites are provided in Section 2.

Potential Habitat for Listed Species

Based on possible species occurrence as shown in the table below, the applicable species-specific BMPs (identified in Table 7-1 of the SMP Manual) will be applied when conducting maintenance activities. Specifically, the BMPs which will be applied according to maintenance activity type are listed in Table 1-2. This table is an excerpt of Table 7-2 from the SMP Manual.

Table 1-3 presents habitat potential for listed species by reach. As shown in the table, none of the project reaches are known to support or provide suitable habitat for California freshwater shrimp or Central California Coast Coho. The presence of California Coastal Chinook has been documented in a Santa Rosa Creek Reach 1, and nine project reaches (Copeland 3-5, Hinebaugh 5, Paulin 2, Laguna 1, Santa Rosa 1, Adobe 2, and Santa Rosa Diversion 1) show potential habitat or known occurrence, at or adjacent to the reach, for Central California Coast Steelhead. All project reaches show habitat potential for the western pond turtle.

Hinebaugh Reach 5, Todd Creek Reach 4, Laguna 1, Hunter Creek Reach 2, Moorland 1, Santa Rosa Creek Reach 1, Cook Creek Reach 2, Copeland Reaches 4 and 5, Santa Rosa Div 1, and Wilfred 1 may contain potential upland habitat for CTS, but these reaches are not within 500 ft. of a known occurrence. Nonetheless, SCWA is coordinating with the U.S. Fish and Wildlife Service and the California Department of Fish and Game regarding compensatory mitigation for activities in suitable upland habitat in 2010 project areas. Additional information regarding potential effects on California tiger salamander, areas of disturbance and compensatory mitigation can be found in Section 3C of this notification.

Of the project reaches, Adobe Creek Reach 2, Cook Creek Reach 2, Corona Creek Reach 1, Santa Rosa Div.1, and Ducker Creek 2 are the only 2010 maintenance reaches that are thought to potentially support California red-legged frog. In addition, Adobe Creek Reach 2, Copeland Reach 5 and Santa Rosa Diversion 1, also include potential habitat for Foothill yellow-legged frog. Finally, Upper Laguna Reach 1 and Santa Rosa Creek Reach 1 have the potential to support special-status plant species.

Table 1-2: Best Management Practices by Activity

BMP	Name	Sediment Removal	Bank Stabilization	Vegetation Management							Other Activities	
				Willow Removal	Blackberry Removal	Cattail Removal	Tree Pruning and Exotics Removal	Tree Removal and Relocation	Mowing	Nursery Stock Tree Planting	Reservoir Debris Removal	Sediment Disposal
General Impact Avoidance and Minimization												
GEN-1	Work Window	X	X	X	X	X	X	X	X	X	X	X
GEN-2	Staging and Stockpiling of Materials	X	X	X	X	X	X	X	X	X	X	X
GEN-3	Channel Access	X	X	X	X	X	X	X	X	X	X	X
Air Quality Protection												
AQ-1	Dust Management	X	X	X	X	X	X	X	X	X	X	X
AQ-2	Enhanced Dust Management	X	X	X	X	X	X	X	X	X	X	X
Biological Resources Protection												
BR-1	Area of Disturbance	X	X	X	X	X	X	X	X	X	X	X
BR-2	Pre-maintenance Educational Training	X	X	X	X	X	X	X	X	X	X	X
BR-3	Biotechnical Bank Stabilization		X									
BR-4	Impact Avoidance and Minimization During Dewatering	X	X									
BR-5	Fish and Amphibian Species Relocation Plan	X	X									
BR-6	On-Call Wildlife Biologist	X	X	X	X	X	X	X	X	X	X	X
BR-7	Special Status Plants	X	X	X	X	X	X	X	X	X	X	X
BR-8	Nesting Migratory Bird and Raptor Pre-maintenance Surveys	X	X	X	X	X	X	X	X	X	X	X
BR-10	California Red-legged Frog Avoidance and Impact Minimization Measures for Ground-Disturbing Activities	X	X								X	X
BR-11	California Red-legged Frog Avoidance and Impact Minimization for Vegetation Management			X	X	X	X	X	X	X		
BR-12	California Tiger Salamander Avoidance and Impact Minimization Measures for Sediment and Debris Removal	X		X		X					X	X

BMP	Name	Sediment Removal	Bank Stabilization	Vegetation Management						Other Activities			
				Willow Removal	Blackberry Removal	Cattail Removal	Tree Pruning and Exotics Removal	Tree Removal and Relocation	Mowing	Nursery Stock Tree Planting	Reservoir Debris Removal	Sediment Disposal	
BR-13	California Tiger Salamander Avoidance and Impact Minimization Measures for Bank Stabilization		X										
BR-14	California Tiger Salamander Avoidance and Impact Minimization Measures for Vegetation Management			X	X		X	X	X	X		X	
BR-15	Foothill Yellow-legged Frog Avoidance and Impact Minimization Measures for Ground-Disturbing Activities	X	X									X	X
BR-16	Foothill Yellow-legged Frog Avoidance and Impact Minimization Measures for Vegetation Management			X	X	X	X	X	X	X			
BR-17	Western Pond Turtle Pre-maintenance Surveys for Ground-Disturbing Activities	X	X	X	X	X	X	X	X	X		X	
BR-18	Zone 1A Salmonid Avoidance and Impact Minimization Measures	X	X	X		X				X			
Cultural Resources Protection													
CR-2	Cultural Resources Investigation		X										
CR-3	Previously Undiscovered Cultural Resources	X	X	X	X	X	X	X	X	X		X	X
CR-4	Previously Undiscovered Palentological Resources	X	X	X	X	X	X	X	X	X		X	X
CR-5	Staff Cultural Resources Training	X	X	X	X	X	X	X	X	X		X	X
CR-7	Ecosystem Restoration Program			X	X	X	X	X	X	X			
Hazardous Materials Safety													
HAZ-1	Spill Prevention and Response Plan	X	X	X	X	X	X	X	X	X		X	X
HAZ-2	Equipment and Vehicle Maintenance	X	X	X	X	X	X	X	X	X		X	X
HAZ-3	Equipment and Vehicle Cleaning	X	X	X	X	X	X	X	X	X		X	X
HAZ-4	Refueling	X	X	X	X	X	X	X	X	X		X	X
HAZ-5	On-Site Hazardous Materials Management	X	X	X	X	X	X	X	X	X		X	X
HAZ-6	Existing Hazardous Sites or Waste	X	X	X	X	X	X	X	X	X		X	X
HAZ-7	Fire Prevention	X	X	X	X	X	X	X	X	X		X	X

BMP	Name	Sediment Removal	Bank Stabilization	Vegetation Management							Other Activities	
				Willow Removal	Blackberry Removal	Cattail Removal	Tree Pruning and Exotics Removal	Tree Removal and Relocation	Mowing	Nursery Stock Tree Planting	Reservoir Debris Removal	Sediment Disposal
HAZ-8	Testing and Disposal of Spoils	X	X								X	X
Vegetation Management												
VEG-1	Removal of Existing Vegetation	X	X	X			X	X		X		
VEG-2	Use of Herbicides			X	X	X	X	X				
VEG-3	Planting and Revegetation After Soil Disturbance	X	X				X	X		X		
Water Quality and Channel Protection												
WQ-1	Apply Erosion Control Fabric to or Hydroseeding of Exposed Soils	X	X	X	X	X	X	X			X	X
WQ-2	Prevent Scour Downstream of Sediment Removal	X										
WQ-3	In-Channel Grading	X	X									
Good Neighbor Policies												
GN-1	Work Site Housekeeping	X	X	X	X	X	X	X	X	X	X	X
GN-2	Public Outreach	X	X	X	X	X	X	X	X	X	X	X
GN-3	Noise Control	X	X	X	X	X	X	X	X	X	X	X
GN-4	Traffic Flow, Pedestrians, and Safety Measures	X	X	X	X	X	X	X	X	X	X	X
GN-5	Odors	X	X								X	X

Table 1-3: Habitat Potential for Listed Species by Reach

Reach	Listed Species								
	California Freshwater Shrimp	California Red-legged Frog	California Tiger Salamander	Foothill Yellow-legged Frog	Western Pond Turtle	Central California Coast Steelhead	Central California Coast Coho	California Coastal Chinook	Plants
Localized Scale									
Ducker 2	U	P	U	U	P	U	U	U	U
Hinebaugh 5	U	U	3	U	P	P(M)	U	U	U
Paulin 2	U	U	U	U	P	O*	U	U	U
Paulin 3	U	U	U	U	P	U	U	U	U
Paulin 4	U	U	U	U	P	U	U	U	U
Paulin 6	U	U	U	U	P	U	U	U	U
Russell 1	U	U	U	U	P	U	U	U	U
Todd 4 ^a	U	U	3	U	P	U	U	U	U
Reach Scale									
Corona 1	U	P	U	U	P	U	U	U	U
Laguna 1	U	U	3	U	P	O(M)	U	U	P
Lorna Dell 1	U	U	U	U	P	U	U	U	U
Bank Stabilization									
Hunter 2	U	U	2	U	P	U	U	U	U
Moorland 1	U	U	2	U	U	U	U	U	U
Santa Rosa 1	U	U	4	U	P	(M/R)O	U	(M/S/R)O	P
Sediment Basin/Instream Basin Clearing									
Adobe 2	U	P	U	U	P	O(M)	U	U	U
Cook 2	U	P	4	P	P	U	U	U	U
Copeland 3	U	U	U	U	P	O(M/R)	U	U	U
Copeland 4	U	U	3	U	P	O(M)	U	U	U
Copeland 5	U	U	3	P	P	O(M/R)	U	U	U
Santa Rosa Div. 1	U	P	4	P	P	O*	U	U	U
Wilfred 1	U	U	3	U	P	U	U	U	U

Source: SMP Manual Table 7-1 as updated by the BO processes and new data (Aug 2009)

^aNote – the maintenance activities at Todd Creek Reach 4 include both a bank stabilization near the Hunter Creek confluence and a localized sediment removal near the upstream terminus of the reach (see project descriptions and locations in Section 1A and 1B above)

Legend

- O Known occurrence in reach
- O* Presence documented within adjacent reach or tributary; not applicable for fish if known barrier or reach goes dry
- P Potential habitat (includes areas rated potential or marginal)
- A Aestivation/Upland habitat
- M Migration corridor
- S Known or potential spawning habitat
- U Unsuitable habitat, unlikely to occur and/or no known occurrence

CTS Habitat Rankings

- 1 - Within 500 ft of a known occurrence
- 2 - Between 500ft-2200ft of a known occurrence
- 3 - Between 2200 ft and 1.3 mi of a known occurrence
- 4 - Greater than 1.3 mi, but within SRPCS range (no mitigation required)

Site Surveys for Presence of Special-Status Plants

A qualified botanist is required to conduct appropriately-timed botanical surveys for special-status species for projects located in areas where state and federally-listed plant species have been identified as potentially occurring (see SMP Manual Table 7-3). For the 2010 project sites, only two reaches have the potential to provide habitat for state and federally-listed plant species: Laguna de Santa Rosa Reach 1 and Santa Rosa Creek Reach 1 (SMP Manual Table 7-3 [version dated August 2009], and Table 1-3 above).

In accordance with BMP BR-7: *Special Status Plants* of the SMP Manual, SCWA will conduct a survey for special-status plants during their blooming season. The recommended blooming season for state and federally-listed plants in the SMP program area is May-June. The Laguna de Santa Rosa Creek Reach 1 and Santa Rosa Creek Reach 1 project sites will be evaluated for potential federally-listed plants during the recommended blooming season. The survey will document the presence of special-status plants and the results will be relayed to the pertinent regulatory agencies through an addendum notification to this Annual Notification.

As specified in BMP BR-7 of the SMP Manual, state and federally listed plant populations identified during the field surveys with potential to be impacted will be enumerated, photographed and conspicuously flagged to maximize avoidance, and determine the total number of individuals affected. If feasible, the projects will be redesigned or modified to avoid direct and indirect impacts on special-status plant species. If impacts to state or federally listed plants are unavoidable, SCWA will coordinate with the appropriate resource agencies and local experts to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure a transplantation plan will be developed and implemented in coordination with the appropriate agencies.

Results of Site Surveys for Cultural Resources

Several of SCWA's 2010 projects would involve excavation into native soils. As identified in the SMP Manual, and more specifically in the BMPs for Cultural Resources (SMP Table 7-1), a cultural resources investigation is required prior to performing any such activity. As specified in the Cultural Resources BMPs, this investigation must include a background research and Native American consultation, a pedestrian survey, documentation, and application of management requirements (as required). The Cultural Resources Constraints Report prepared for the SMP was consulted to fulfill the requirements regarding background research and Native American consultation. In addition, SCWA has conducted a pedestrian survey for the four bank stabilization sites on April 22, 2010. These investigations concluded that there are no known cultural resources within the APE of the project sites. However, prior to the commencement of ground-disturbing activities, all SCWA personnel will be briefed on the importance of protecting cultural resources (BMP CR-5: *Staff Cultural Resources Training Program*), and if buried resources are accidentally discovered during ground-disturbing activities, appropriate measures will be implemented. These measures (BMPs CR-3: *Previously Undiscovered Cultural Resources* and CR-4: *Previously Undiscovered Paleontological Resources*) are described in detail in Chapter 7 of the SMP Manual.

1D. Vegetation Management Activities

During the 2010 maintenance season, vegetation maintenance will include tree and brush thinning, and removal of exotic species and other vegetation blockages to improve hydraulic capacity and retain or enhance appropriate habitat. Vegetation maintenance will be completed according to Appendix E of the Stream Maintenance Program Manual (*Vegetation Management Plan*) as well as the associated terms and conditions of all programmatic permits and biological opinions.

For 2010, vegetation maintenance will be completed in the locations as shown below. Note that maintenance generally occurs in only a portion of the identified reach, not the entire reach length. An addendum will be sent out in August to supplement this list if any subsequent requests for vegetation management are made for areas not shown below. The submission and approval of such an addendum is specified in the DFG Streambed Alteration Agreement (No. 1600-2009-0399-R3) for the SMP.

Table 1-4. 2010 Vegetation Management Activities

Creek	Vegetation Management Activity			
	<i>Willow Pruning</i>	<i>Blackberry Hand Removal</i>	<i>Blackberry Mowing</i>	<i>Exotics Removal</i>
Zone 1A				
<i>Windsor Creek Subbasin</i>				
Airport 2	✓		✓	✓
Starr 2	✓			
Windsor1	✓		✓	
<i>Santa Rosa Creek Subbasin</i>				
Austin 1	✓			
Austin 2	✓			✓
Austin 3	✓	✓		✓
Brush 1	✓			
Brush 2	✓		✓	✓
Brush Creek Tributary 10				✓
Coffey 1	✓		✓	
College 1		✓		✓
College 2				
College 3		✓		✓
Ducker 1				✓
Ducker 2				✓
Forestview 2	✓			✓
Oakmont Creek	✓	✓		
Paulin 3	✓	✓		
Paulin 4		✓		✓
Paulin 5		✓		✓
Paulin 6		✓		✓
Peterson 2		✓		✓
Piner 4		✓		✓
Piner 5	✓	✓		✓

Creek	Vegetation Management Activity			
	Willow Pruning	Blackberry Hand Removal	Blackberry Mowing	Exotics Removal
Piner 6		✓	✓	✓
Piner 7	✓			
Russell 1		✓		✓
Santa Rosa 2	✓		✓	
Santa Rosa 4	✓		✓	✓
Santa Rosa 5	✓			
Sierra Park 1				✓
Sierra Park 3	✓	✓	✓	✓
Spring 1	✓	✓		
Steele 1	✓		✓	✓
Steele 3		✓		✓
Steele 4		✓		✓
Steele 5	✓			✓
<i>Roseland and Colgan Subbasin</i>				
Colgan 1	✓			
Colgan 2	✓		✓	
Colgan 5	✓	✓	✓	
Colgan 6	✓	✓		✓
Colgan 7		✓		
Kawana 1	✓	✓		✓
Roseland 3			✓	
Roseland 4			✓	
<i>Upper Laguna Subbasin</i>				
Bellevue-Wilfred 1	✓			
Bellevue-Wilfred 2	✓		✓	
Bellevue-Wilfred 3	✓		✓	
Bellevue-Wilfred 4	✓	✓		
Coleman 1	✓	✓		✓
Cook 1	✓			
Copeland 1	✓			
Copeland 2	✓		✓	✓
Copeland 3	✓		✓	
Copeland 5		✓		
Cotati 2	✓			
Crane 1	✓			
Five 1	✓			
Gossage 3	✓			
Hinebaugh 1	✓		✓	
Hinebaugh 2	✓			
Hinebaugh 3	✓			✓
Hinebaugh 4	✓		✓	✓
Hinebaugh 5			✓	
Hinebaugh 6	✓			✓
Hinebaugh 7			✓	✓
Hunter 1		✓		
Hunter 2	✓	✓		
Hunter 3		✓		✓

Creek	Vegetation Management Activity			
	Willow Pruning	Blackberry Hand Removal	Blackberry Mowing	Exotics Removal
Laguna 1	✓			
Laguna 2	✓		✓	
Laguna 3	✓		✓	
Laguna 4	✓	✓	✓	
Laguna 5	✓	✓		
South Fork Copeland 1	✓			
Todd 1	✓	✓		
Todd 2	✓	✓		
Todd 3	✓	✓		✓
Todd 4	✓			
Todd 5	✓			
Wilfred Extention1	✓			
Zone 2A- Petaluma Subbasin				
Adobe 1	✓			
Adobe 2	✓			
Adobe 3	✓	✓	✓	✓
Adobe 4	✓	✓		
Capri 1	✓			
Capri 4	✓			
Corona 3	✓			
Corona 5	✓			
Corona 6	✓			
Corona 7	✓			
Corona Creek Trib1	✓			
East Fork McDowell Creek 1				✓
East Washington 2	✓			✓
East Washington 3				✓
East Washington4	✓		✓	
Lichau 1	✓			
Lichau 2	✓	✓	✓	
Lichau 3	✓	✓	✓	
Lynch 1	✓		✓	
Washington 1	✓			
Washington 2	✓			
Washington 3	✓			
Washington 4	✓			
Washington 5	✓			
Washington 6	✓	✓		
Washington 7	✓			
Zone 3A- Sonoma Subbasin				
Fryer1		✓		
Fryer3	✓			
Lower East Fork Fryer1	✓			
Lawndale Creek	✓	✓		
Nathanson Creek	✓	✓		
Zone 5A- Russian River Subbasin				
Fife Creek	✓	✓		

Creek	Vegetation Management Activity			
	<i>Willow Pruning</i>	<i>Blackberry Hand Removal</i>	<i>Blackberry Mowing</i>	<i>Exotics Removal</i>
Zone 6A- Dry Creek				
West Slough 1	✓		✓	
Zone 8A				
Bloomfield1	✓		✓	