

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 2012 maintenance season:

- **Two Localized Sediment Removal Projects at:**
 - Laguna de Santa Rosa Reach 5: Downstream of East Cotati Ave
 - Russell Creek Reach 1: Remove Plug West of Range Ave.
- **Eight Reach Scale Sediment Removal Projects at:**
 - Coleman Creek Reach 1: Upstream of Snyder Lane
 - E. Washington Creek Reaches 1 & 2 : Clear Plugs below McGregor
 - Gossage Creek Reaches 1, 2 and 3: Lowell to Highway 116
 - Laguna de Santa Rosa Reach 1: Sta 70+00 to Sta 88+00
 - Lichau Creek Reaches 2 and 3: Between 101 and Old Redwood Highway
 - Lower East Fork Fryer Creek Reach 1: At Confluence with Fryer Creek
 - Santa Rosa Creek Reach 1: Downstream of Willowside Road
 - Santa Rosa Creek Reach 2: Upstream of 2011 work
- **Sediment Basin/Instream Basin Clearing at:**
 - Adobe Creek Sediment Basin: clearing sediment and vegetation at the Adobe Creek basin (Adobe Creek Reach 2)
 - Colgan Creek Reaches 3 & 4: Upstream and Downstream of Stony Point
 - 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, Reaches 3 & 4

- Copeland Creek at Snyder Ln.: sediment removal at the Copeland Creek in-stream basin located at the Snyder Lane crossing, Reaches 4 & 5
 - Five Creek at Snyder Ln: sediment removal at the Snyder Lane Crossing Reach 1
 - Hinebaugh Creek Reaches 1 & 2: At Labath Road
 - Hinebaugh Creek Reaches 3 & 4: Commerce Blvd.
 - Hinebaugh Creek Reaches 4 & 5: State Farm Drive
 - Hinebaugh Creek Reach 5: RR Tracks by golf course
 - Piner Creek Reaches 4 & 5: Remove Plugs at RR tracks
 - Piner Creek Reach 6: Remove Plugs at Piner Road
 - Piner Creek Reach 7: Remove Plugs at Hopper Ave.
 - Washington Creek Reach 5: Upstream of McDowell in Concrete Channel
 - Wilfred Creek: sediment removal at Wilfred Creek in-stream basin located on Reach 1, downstream of the culvert outfall at Snyder Lane
 - Windsor Creek Reach 1: Downstream of Windsor Road
- **Reservoir Inlet Clearing:**
- Brush Creek Reservoir
 - Matanzas Creek Reservoir
 - Piner Creek Reservoir
 - Santa Rosa Creek Reservoir (Spring Lake)
 - Fish ladder in Santa Rosa Diversion Structure, adjacent to Montgomery Drive.
- **Bank Repairs at the following location:**
- Russell Creek Reach 1: bank repair at Station 701+36

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 2012 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 | | | | | |
| Laguna de Santa Rosa at East Cotati Ave. | Laguna de Santa Rosa | Mark West Creek | Laguna 5 | Cotati Quad, T6N, R8W, Section 26/35 | 38° 19' 41.753"N/ 122° 42' 14.294"W |
| Russell Creek Station 701+36 | Russell Creek | Piner Creek | Russell 1 | Santa Rosa Quad, T7N, R8W, Section 10 | 38° 28' 15.755"N/ 122° 44' 4.068"W |
| Reach Scale Sediment Removal Projects | | | | | |
| Coleman Creek at Snyder Lane | Coleman Creek | Wilfred Ext. Wilfred Creek | Coleman 1 | Cotati Quad, T6N, R7W, Section 18/13 | 38° 22' 10.554"N/ 122° 41' 2.461"W |
| East Washington Creek below McGregor Avenue | East Washington Creek | Washington Creek | East Washington 1 & 2 | Glen Ellen Quad, T5N, R7W, Section 27 | 38° 15' 4.352"N/ 122° 37' 5.369"W |
| Gossage Creek Lowell Ave to 116 | Gossage Creek | Laguna de Santa Rosa | Gossage 1,2,3 | Cotati Quad, T6N, R8W, Section 27, 22, 28 | 38° 20' 14.138"N/ 122° 43' 54.940"W |
| Laguna de Santa Rosa at Stony Point Road | Laguna de Santa Rosa | Mark West Creek | Laguna 1 | Cotati and Two Rock Quads, T6N, R8W, Section 21 | 38° 21' 7.869"N/ 122° 44' 45.666"W |
| Lichau Creek Between 101 and Old Redwood Highway | Lichau Creek | Petaluma River | Lichau 2 & 3 | Cotati Quad, T5N, R7W, Section 18 | 38° 16' 42.662"N/122° 40' 12.409"W |
| Lower East Fryer Creek at confluence with Fryer Creek | Lower East Fork Fryer Creek | Fryer Creek | Lower East Fork Fryer 1 | Sonoma Quad, T5N, R5W, Section 7 | 38° 17' 10.766"N/ 122° 27' 47.781"W |
| Santa Rosa Creek Downstream of Willowside Road | Santa Rosa Creek | Laguna de Santa Rosa | Santa Rosa 1 | Sebastopol Quad, T7N, R9W, Section 13 | 38° 26' 42.795"N/ 122° 48' 36.327"W |

| Project Site | Creek | Tributary To | SMP Reach | USGS Quad Township, Range, Section | Latitude/ Longitude |
|---|------------------|----------------------|-----------------|--|--|
| Santa Rosa Creek Downstream of Fulton Road | Santa Rosa Creek | Laguna de Santa Rosa | Santa Rosa 2 | Sebastopol Quad, T7N, R8W, Section 18 | 38° 26' 43.957"N/ 122° 47' 9.951"W |
| Sediment Basin/ Instream Basin Clearing Projects | | | | | |
| Adobe Creek Sediment Basin | Adobe Creek | Petaluma River | Adobe 2 | Petaluma River Quad T5N, R7W, Section 35 | 38°13'59.03"N 122°35'57.63"W |
| Colgan Creek upstream and ds of Stony Point Rd | Colgan Creek | Laguna de Santa Rosa | Colgan 3 & 4 | Santa Rosa Quad, T6N, R8W, Section 4 | 38° 23' 19.785"/-122° 44' 30.425" |
| Cook Creek Sediment Basin | Cook Creek | Coleman Creek | Cook 2 | Cotati Quad, T6N, R7W, Section 17 | 38°21'57.19"N 122°39'59.80"W |
| Copeland Creek Basin at Country Club Drive | Copeland Creek | Laguna de Santa Rosa | Copeland 3 & 4 | Cotati Quad, T6N, R8W, Section 25 | 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, Section 25 | 38°20'35.73"N 122°41'07.82"W |
| Five Creek at Snyder | Five Creek | Crane Creek | Five 1 | Cotati Quad, T6N, R8W, Section 13 | 38°21'40.34"N 122°41'09.32"W |
| Hinebaugh Creek at Labath Road | Hinebaugh Creek | Laguna de Santa Rosa | Hinebaugh 1 & 2 | Cotati Quad, T6N, R8W, Section 23 | 38° 21' 1.496"/- 122° 43' 16.211" |
| Hinebaugh Creek at Commerce | Hinebaugh Creek | Laguna de Santa Rosa | Hinebaugh 3 & 4 | Cotati Quad, T6N, R8W, Section 23 | 38° 21' 1.814"/- 122° 42' 34.515" |
| Hinebaugh Creek at State Farm | Hinebaugh Creek | Laguna de Santa Rosa | Hinebaugh 4 & 5 | Cotati Quad, T6N, R8W, Section 23 | 38° 21' 1.954"N/ 122° 42' 21.722"W |
| Hinebaugh Creek at RR Tracks by Golf Course | Hinebaugh Creek | Laguna de Santa Rosa | Hinebaugh 5 | Cotati Quad, T6N, R8W, Section 23/24 | 38° 21' 2.002"N/ 122° 42' 11.384"W |
| Piner Creek at RR Tracks | Piner Creek | Santa Rosa Creek | Piner 4 & 5 | Santa Rosa Quad, T7N, R8W, Section 9 | 38° 27' 56.576"N/ 122° 44' 45.424"W |
| Piner Creek at Piner Road | Piner Creek | Santa Rosa Creek | Piner 6 | Santa Rosa Quad, T7N, R8W, Section 9 | 38° 28' 9.898"N/ 122° 44' 34.728"W |

| Project Site | Creek | Tributary To | SMP Reach | USGS Quad Township, Range, Section | Latitude/ Longitude |
|---|------------------|--------------------------|-------------------|---|--|
| Piner Creek at Hopper Ave. | Piner Creek | Santa Rosa Creek | Piner 7 | Santa Rosa Quad, T7N, R8W, Section 3 | 38° 28' 47.646"N/ 122° 44' 27.156"W |
| Washington Creek upstream of McDowell | Washington Creek | Petaluma River | Washington 5 | Petaluma, Cotati and Glen Ellen Quads, T5N, R7W, Section 27 | 38° 14' 59.791"N/ 122° 37' 31.519"W |
| Wilfred Channel at Snyder Lane | Wilfred Creek | Bellview-Wilfred Channel | Wilfred 1 | Cotati Quad, T6N, R7W, Section 13 | 38°22'20.05"N 122°41'09.67"W |
| Windsor Creek at Windsor Road | Windsor Creek | Mark West Creek | Windsor 1 | Healdsburg Quad, T8N, R9W, Section 23 | 38° 31' 42.942"N/ 122° 49' 32.689"W |
| Inlet Clearing | | | | | |
| Brush Creek Reservoir | Brush Creek | Santa Rosa Creek | N/A | Santa Rosa Quad, T7N, R7W, Section 6 | 38°29'12.57"N 122°40'16.83"W |
| Matanzas Creek Reservoir | Matanzas Creek | Santa Rosa Creek | N/A | Santa Rosa Quad, T6N, R7W, Section 6 | 38°27'55.89"N 122°42'22.52"W |
| Piner Creek Reservoir | Paulin Creek | Santa Rosa Creek | N/A | Santa Rosa Quad, T7N, R7W, Section 4 | 38°24'19.57"N 122°49'09.01"W |
| Santa Rosa (Spring) Creek Reservoir | Santa Rosa Creek | N/A | N/A | Santa Rosa Quad, T7N, R7W, Section 17 | 38°27'35.48"N 122°39'15.62"W |
| Fish ladder in Santa Rosa Creek Diversion Structure | Santa Rosa Creek | Spring Lake | Santa Rosa Div. 1 | Santa Rosa Quad, T7N, R7W, Section 16 | 38° 27' 25.704"N/-122° 38' 20.017"W |
| Bank Stabilization Projects | | | | | |
| Russell Creek Station 701+36 | Russell Creek | Piner Creek | Russell 1 | Santa Rosa Quad, T7N, R8W, Section 10 | 38° 28' 15.755"N/ 122° 44' 4.068"W |

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

Channel Characterization Sheets and Site Photos

Channel characterization sheets for the 2012 project sites were developed for, and included in, Chapter 4 of the Stream Maintenance Program (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 an overview of reach conditions.

Current photographs showing the specific location of maintenance activities for the 2012 project sites are provided in Appendix A.

Potential Habitat for Listed Species

Based on possible species occurrence as shown in the table below, the applicable species-specific Best Management Practices (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. Maps displaying the project location relative to known biological resources (California Natural Diversity Database) (CNDDB) are included in Appendix B.

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 salmon. The presence of California Coastal Chinook salmon has been documented in Santa Rosa Creek 1 and 2. Sixteen project reaches (Hinebaugh 1, 2 4 and 5, Laguna de Santa Rosa 1 and 5, Lichau 2 and 3, Santa Rosa 1 and 2, Windsor 1, Adobe 2, Copeland 3, 4, and 5, Santa Rosa Creek (Spring Lake) Reservoir, and Santa Rosa Div. 1) provide potential habitat or there is a known occurrence, at or adjacent to the reach, for Central California Coast Steelhead. In addition, the project reaches that show potential habitat for the western pond turtle include; Colgan 3 and 4, Hinebaugh 1, 2, 3, 4 and 5, Laguna 1 and 5, Piner 4 and 5, Washington 5, Windsor 1, East Washington 1 and 2, Gossage 1, 2 and 3, Lichau 2 and 3, Lower East Fork Fryer 1, Santa Rosa 1 and 2, Russell 1, Adobe 2, Cook 2, Copeland 3, 4 and 5, Five 1, Wilfred 1, Brush Creek Reservoir, Matanzas Creek Reservoir, Piner Creek Reservoir, Santa Rosa Creek (Spring Lake) Reservoir, and Santa Rosa Div. 1.

Several project areas may provide potential upland aestivation habitat for California Tiger Salamander (CTS). CTS Best Management Practices (BMPs) (BR-12, BR-13, and BR-14) are implemented for vegetation management activities and ground disturbing projects in these areas. Gossage 1, Laguna de Santa Rosa 1 and 5, Santa Rosa 2, Todd 3 and 4, Copeland 3, 4 and 5, and Wilfred 1, may contain potential upland habitat for CTS. Additional information

regarding potential effects on California tiger salamander, areas of disturbance and compensatory mitigation can be found in Section 3C of this notification.

2012 maintenance reaches potentially supporting California red-legged include Washington 5, Windsor 1, East Washington 1 & 2, Lichau 2 & 3, Lower East Fork Fryer 1, Adobe 2, Cook 2, Brush Creek Reservoir, Matanzas Creek Reservoir, Piner Creek Reservoir, Santa Rosa Creek (Spring Lake) Reservoir, and Santa Rosa Div. 1. In addition, Copeland 5, Cook 2, and Santa Rosa Div. 1 may include potential habitat for Foothill yellow-legged frog. Finally, Laguna 1 and 5, Santa Rosa 1 and 2, and Windsor 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 | | | | | | | | | |
| Laguna de Santa Rosa 5 | U | U | 2 | U | P | O(M) | U | U | P |
| Piner 4 | U | U | U | U | P | O* | U | U | U |
| Piner 5 | U | U | U | U | P | U | U | U | U |
| Piner 6 | U | U | U | U | U | U | U | U | U |
| Piner 7 | U | U | U | U | U | U | U | U | U |
| Russell 1 | U | U | U | U | P | U | U | U | U |
| Reach Scale | | | | | | | | | |
| Coleman 1 | U | U | U | U | U | U | U | U | U |
| East Washington 1 | U | P | U | U | P | U | U | U | U |
| East Washington 2 | U | P | U | U | P | U | U | U | U |
| Gossage 1 | U | U | 2(2483.8)** 3(157.3) | U | P | O* | U | U | U |
| Gossage 2 | U | U | 2 | U | P | U | U | U | U |
| Gossage 3 | U | U | 2 | U | P | U | U | U | U |
| Laguna de Santa Rosa 1 | U | U | 3 | U | P | O(M) | U | U | P |
| Lichau 2 | U | P | U | U | P | O(M) | U | U | U |
| Lichau 3 | U | P | U | U | P | O(M) | U | U | U |
| Lower East Fork Fryer 1 | U | P | U | U | P | U | U | U | U |
| Santa Rosa 1 | U | U | 3(2416) | U | P | O (M) | U | O (M/S/R) | P |
| Santa Rosa 2 | U | U | 3 | U | P | O (M/R) | U | O (M/S/R) | P |
| Sediment Basin/Instream Basin Clearing | | | | | | | | | |
| Adobe 2 | U | P | U | U | P | O (M) | U | U | U |
| Colgan 3 | U | U | 2 | U | P | U | U | U | U |
| Colgan 4 | U | U | 2(2305.3) | U | P | U | U | U | U |
| Cook 2 | U | P | U | P | P | U | U | U | U |
| Copeland 3 | U | U | 3(151.6) | U | P | O (M/R) | U | U | U |
| Copeland 4 | U | U | 3(2305.3) | U | P | O(M) | U | U | U |
| Copeland 5 | U | U | 3 | P | P | O (M/R) | U | U | U |
| Five1 | U | U | U | U | P | U | U | U | U |
| Hinebaugh 1 | U | U | 2(1430.2) | U | P/O | P(M) | U | U | U |

| 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 |
| | | | 3(3450.5) | | | | | | |
| Hinebaugh 2 | U | U | 1(678.3) 2(560.8) | U | P | P(M) | U | U | U |
| Hinebaugh 3 | U | U | 1(36.1) 2(1450.1) 3(142.7) | U | P | P(M) | U | U | U |
| Hinebaugh 4 | U | U | 3 | U | P | P(M) | U | U | U |
| Hinebaugh 5 | U | U | 3 | U | P | P(M) | U | U | U |
| Washington 5 | U | P | U | U | P | U | U | U | U |
| Wilfred 1 | U | U | 2(1851.6) 3(6025.9) | U | P | U | U | U | U |
| Windsor 1 | U | P | U | U | P | O (M/R) | U | U | P |
| Reservoir Inlet Clearing | | | | | | | | | |
| Brush Creek Reservoir | U | P | U | U | P | U | U | U | U |
| Matanzas Creek Reservoir | U | P | U | U | P | U | U | U | U |
| Piner Creek Reservoir | U | P | U | U | P | U | U | U | U |
| Santa Rosa Creek Reservoir | U | P | U | U | P | P | U | U | U |
| Santa Rosa Div. 1 | U | P | U | P | P | O* | U | U | U |
| Bank Stabilization | | | | | | | | | |
| Russell 1 | U | U | U | U | P | U | U | U | U |

Source: SMP Manual Table 7-4 as updated by the BO processes and new data (March 2012)

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)

**Distance of each mitigation rank occurring on reach

1D. Vegetation Management Activities

During the 2012 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 SMP Manual (*Vegetation Management Plan*) as well as the associated terms and conditions of all programmatic permits and biological opinions.

For 2012, 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. 2012 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 1 | | | | ✓ |
| Airport 2 | ✓ | | ✓ | |
| Starr 1 | ✓ | | | |
| Starr 2 | ✓ | | ✓ | |
| Windsor 1 | ✓ | | | |
| <i>Santa Rosa Creek Subbasin</i> | | | | |
| Abramson 2 | ✓ | | | |
| Austin 1 | | | | ✓ |
| Austin 2 | | | | ✓ |
| Austin 3 | | ✓ | | |
| Brush 1 | ✓ | | | |
| Brush 2 | ✓ | | | ✓ |
| Brush Creek Tributary 10 | | ✓ | ✓ | ✓ |
| Coffey 1 | ✓ | ✓ | | |
| College 2 | | | | ✓ |
| College 3 | ✓ | ✓ | | ✓ |
| Ducker 1 | | | | ✓ |
| Forestview 2 | ✓ | | | ✓ |
| Indian | | ✓ | | ✓ |
| Matanzas 1 | ✓ | | | ✓ |
| Oakmont 1 | ✓ | ✓ | | ✓ |
| Oakmont 2 | ✓ | ✓ | | ✓ |
| Oakmont 3 | ✓ | ✓ | | ✓ |
| Oakmont 4 | ✓ | ✓ | | ✓ |
| Oakmont 5 | ✓ | ✓ | | ✓ |
| Paulin 1 | ✓ | | | |
| Paulin 2 | ✓ | | | |
| Paulin 4 | | | | ✓ |

| Creek | Vegetation Management Activity | | | |
|--|--------------------------------|-------------------------|-------------------|-----------------|
| | Willow Pruning | Blackberry Hand Removal | Blackberry Mowing | Exotics Removal |
| Paulin 6 | ✓ | ✓ | | ✓ |
| Peterson 1 | ✓ | | | |
| Peterson 2 | ✓ | | | ✓ |
| Piner 2 | ✓ | | | |
| Piner 3 | ✓ | | | |
| Piner 4 | ✓ | | | |
| Piner 7 | ✓ | ✓ | | ✓ |
| Piner 8 | | ✓ | | ✓ |
| Russell 2 | ✓ | | | ✓ |
| Santa Rosa 1 | ✓ | | | |
| Santa Rosa 2 | ✓ | | | |
| Santa Rosa 4 | ✓ | | | |
| Santa Rosa 5 | ✓ | | | |
| Santa Rosa 6 | ✓ | | | |
| Spring 3 | | ✓ | | |
| Steele 1 | ✓ | ✓ | | ✓ |
| Steele 2 | | ✓ | | ✓ |
| Steele 3 | ✓ | ✓ | | ✓ |
| Steele 4 | ✓ | ✓ | | ✓ |
| Steele 5 | ✓ | ✓ | ✓ | ✓ |
| <i>Roseland and Colgan Subbasin</i> | | | | |
| Colgan 3 | | | ✓ | |
| Colgan 4 | ✓ | | | |
| Colgan 5 | ✓ | ✓ | | |
| Colgan 7 | | ✓ | | |
| Roseland 1 | ✓ | | | |
| Roseland 2 | ✓ | | | ✓ |
| Roseland 3 | ✓ | | ✓ | |
| Roseland 4 | ✓ | | | |
| <i>Upper Laguna Subbasin</i> | | | | |
| Bellevue-Wilfred 2 | | | ✓ | |
| Bellevue-Wilfred 3 | | | ✓ | |
| Bellevue-Wilfred 4 | | | ✓ | |
| Coleman 2 | ✓ | | | |
| Cook 1 | ✓ | | | ✓ |
| Copeland 1 | ✓ | | | |
| Copeland 3 | ✓ | | | |
| Cotati 2 | ✓ | ✓ | | |
| Crane 1 | ✓ | | | |
| Five 1 | ✓ | ✓ | | |
| Gossage 1 | ✓ | | | |
| Gossage 2 | ✓ | | | |
| Hinebaugh 1 | ✓ | | | |
| Hinebaugh 2 | ✓ | | ✓ | |
| Hinebaugh 3 | ✓ | | ✓ | |
| Hinebaugh 4 | ✓ | ✓ | | ✓ |
| Hinebaugh 5 | ✓ | ✓ | | ✓ |
| Hinebaugh 6 | ✓ | ✓ | | ✓ |
| Hinebaugh 7 | | ✓ | | ✓ |

| Creek | Vegetation Management Activity | | | |
|-----------------------------------|--------------------------------|-------------------------|-------------------|-----------------|
| | Willow Pruning | Blackberry Hand Removal | Blackberry Mowing | Exotics Removal |
| Hunter 2 | | ✓ | | |
| Hunter 3 | | ✓ | | |
| Kawana 1 | ✓ | | | |
| Laguna 1 | ✓ | | ✓ | |
| Laguna 2 | ✓ | ✓ | | |
| Laguna 3 | | ✓ | | |
| Laguna 4 | ✓ | ✓ | | |
| Laguna 5 | ✓ | ✓ | | |
| South Fork Copeland 1 | | ✓ | | ✓ |
| South Fork Copeland 2 | | ✓ | | ✓ |
| Todd 1 | ✓ | | | |
| Todd 2 | ✓ | ✓ | | |
| Todd 5 | ✓ | | ✓ | ✓ |
| Wilfred Extention1 | ✓ | ✓ | | |
| Wilfred 1 | ✓ | | | |
| Zone 2A- Petaluma Subbasin | | | | |
| Adobe 1 | ✓ | | | |
| Adobe 2 | ✓ | ✓ | | |
| Adobe 3 | ✓ | ✓ | | |
| Capri 4 | ✓ | | | |
| Corona Creek Tributary 1 | ✓ | ✓ | ✓ | |
| Corona 1 | ✓ | ✓ | | |
| Corona 3 | ✓ | | | |
| Corona 4 | ✓ | | | |
| Corona 5 | ✓ | | | |
| Corona 6 | ✓ | | | |
| Corona 7 | ✓ | | | |
| East Washington 1 | ✓ | ✓ | | ✓ |
| East Washington 2 | | ✓ | | ✓ |
| East Washington 3 | ✓ | | | ✓ |
| East Washington 4 | ✓ | ✓ | | |
| East Washington 5 | ✓ | | | |
| Jessie Lane 1 | | ✓ | | |
| Lichau 1 | | | | |
| Lichau 2 | ✓ | ✓ | ✓ | |
| Lichau 3 | ✓ | ✓ | ✓ | |
| Lynch 1 | ✓ | ✓ | | |
| Lynch 2 | ✓ | ✓ | ✓ | |
| Thompson 1 | ✓ | | | |
| Washington 1 | ✓ | | | |
| Washington 3 | | ✓ | | |
| Washington 6 | ✓ | ✓ | | |
| Washington 7 | ✓ | | | |
| Zone 3A- Sonoma Subbasin | | | | |
| Fryer 1 | ✓ | | | ✓ |
| Fryer 3 | | ✓ | | |
| Nathanson 1 | ✓ | ✓ | | ✓ |
| Zone 6A- Dry Creek | | | | |
| West Slough 1 | ✓ | ✓ | | |