



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Bay Delta Region  
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Napa, CA 94558  
(707) 944-5500  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

EDMUND G. BROWN, Jr., Governor  
CHARLTON H. BONHAM, Director



August 25, 2015

Richard Marovich  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688  
[rmarovich@scwa2.com](mailto:rmarovich@scwa2.com)

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SOLANO COUNTY WATER AGENCY

Subject: Final Lake or Streambed Alteration Agreement  
Notification No. 1600-2014-0265-R3  
Lower Putah Creek and Tributaries Maintenance Project

Dear Mr. Marovich:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Lower Putah Creek and Tributaries Maintenance Project (Project). Before the California Department of Fish and Wildlife (Department) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, the Department, acting as a responsible agency, determined your project is exempt from CEQA and filed a notice of exemption (NOE) on the same date it signed the Agreement.

Under CEQA, filing a NOE starts a 35-day period within which a party may challenge the filing agency's approval of the project. You may begin your project before the 35-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Ms. Lorie Hammerli, Environmental Scientist, at (707) 944-5568 or [lorie.hammerli@wildlife.ca.gov](mailto:lorie.hammerli@wildlife.ca.gov).

Sincerely,

Craig J. Weightman  
Environmental Program Manager  
Bay Delta Region

cc: Mark Snyder: [Msnyder@scwa2.com](mailto:Msnyder@scwa2.com)  
Lieutenant Longwell  
Warden Bolla







**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

BAY DELTA REGION  
7329 SILVERADO TRAIL  
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[www.wildlife.ca.gov](http://www.wildlife.ca.gov)



**STREAMBED ALTERATION AGREEMENT**

NOTIFICATION NO. 1600-2014-0265-R3  
Putah Creek and Tributaries to Putah Creek

SOLANO COUNTY WATER AGENCY  
LOWER PUTAH CREEK AND TRIBUTARIES

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Solano County Water Agency (Permittee) as represented by Richard Marovich.

**RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on July 7, 2014, and additional information submitted on September 12, 2014, that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

**PROJECT LOCATION**

The project is located on Putah Creek and its tributary streams between the Monticello Dam and the confluence of Putah Creek with the Yolo Bypass in Solano and Yolo Counties (Exhibit A). Project activities will be conducted at work sites located on Putah Creek, Thompson Canyon Creek, Bray Canyon Creek, Cold Canyon Creek, Pleasants Creek, Dry Creek, McCune Creek, and three unnamed drainages (Project area). Refer to Exhibit B for a map of the Project area.



## PROJECT DESCRIPTION

Under this Agreement, Permittee will conduct "routine maintenance activities," generally defined as periodic, reoccurring, activities necessary to maintain the water transport capacity of stream channels, maintain the structural and functional integrity of existing facilities (culverts, crossings, roads and trails, etc.), bank stabilization activities necessary for erosion prevention, and watercourse restoration/enhancement.

Routine maintenance activities authorized under this Agreement include: sediment removal; maintenance and repair of existing culverts, ford crossings, roads and trails; maintenance of existing bank protection; bank stabilization; trash, vegetation, and debris removal; invasive plant management and native plant revegetation/restoration. These activities are described in more detail below. Refer to Exhibit C for definitions of terms used in this Agreement.

### *Sediment Removal*

- Removal of sediment from natural channels for the purpose of minimizing flood risk. Sediment removal is limited to 50 linear feet per site; 150 linear feet per stream, per year; and 150 cubic yards per stream, per year.
- Removal of sediment around facilities, such as bridges, culverts, storm drain outlets, trash racks, and water diversion inlets for the purpose of minimizing flood risk. Sediment removal around facilities is limited to 50 linear feet per site; 150 linear feet per stream, per year; and 150 cubic yards per stream, per year.

### *Trash and Detritus Removal*

- Detritus (organic material) Removal: Removal of woody and herbaceous plants, fallen trees, trunks or limbs that could inhibit flows or damage structures within or crossing streams. Root structures will be left in place. Removal of detritus is limited to the minimum amount necessary to mitigate potential damage to structures and maintain flow.
- Trash removal: Trash (tires, appliances, car parts, etc.) imbedded in the stream that require mechanical equipment for removal will be removed during periods of low or no flow. The disturbed bank will be recontoured and stabilized with native materials. Non-imbedded trash, not requiring mechanical removal, may be removed at any time with no limits. Imbedded trash removal is limited to 20 linear feet per site and 60 linear feet per stream, per year.

Except as specifically stated in this Agreement, materials embedded in the bed, bank, or channel are subject to the provisions of Fish and Game Code section 1600 et seq.



### *Maintenance, Repair and Rehabilitation of Structures*

- Culverts: Existing culverts will be maintained, modified or repaired to minimize or arrest erosion. This is limited to two culverts, per stream, per year.
- Maintenance of Existing Bank Protection: Repair or replacement of bank stabilization structures with in-kind structures or materials, using the method of least impact to accomplish the repair; with an emphasis on bioengineering technology. The amount of material will not exceed the footprint of the existing bank stabilization. This is limited to five work sites within the Project area with no greater than two work sites in any given stream per year.
- Fords: Existing ford crossings will be maintained, modified or repaired. This is limited to 10 cubic yards of replacement rock per ford and three work sites per year.
- Existing Access Roads and Trails: Road and trail maintenance may include the removal of encroaching vegetation and storm debris and minor grading to repair storm washouts. Trails will be maintained to minimize erosion and maximize habitat connectivity, such as, revegetating with low growing native grasses and forb/herbs.

### *Bank Stabilization and Erosion Control*

- Stabilization of stream banks will occur where failing banks are composed of earthen materials and the stabilization activity uses biotechnical stabilization techniques. This is limited to 200 linear feet per site, three sites per stream, per year.

### *Temporary Access Roads, Trails or Structures*

- Temporary Access Trails: An excavator or compact bobcat will be used to remove vegetation to create an approximate 8-foot wide trail for light duty equipment access. No grading or ground leveling will occur and active trails will be treated with erosion control measures. Abandoned trails will be revegetated with native vegetation.
- Temporary Access Roads: Temporary roads may be created for equipment access to specific work sites. Permittee will submit Temporary Access Road requests for review and acceptance on a site specific basis. This is limited to three sites per stream, per year.
- Temporary Cross-stream Access: Placement of temporary materials such as crane mats or gravel fords (with underlayment material) during periods of low or no flow. Permittee will submit Cross-stream Access requests for review and acceptance on a site specific basis. This is limited to three sites per stream, per year.

New, permanent, access roads or trails will require a separate Notification of Lake and Streambed Alteration.



*Invasive Plant Management and Native Plant Revegetation/Restoration*

- Mechanical Control: Mechanical equipment will be used to remove invasive vegetation and other nuisance vegetation.
- Chemical Control: Herbicides that are approved by the California Department of Pesticide Regulation will be used in accordance with their labels to control invasive vegetation and other nuisance vegetation.
- Revegetation/Restoration: Only locally sourced native plant material will be used for revegetation/restoration. Select areas may be overplanted for future source material. Site preparation may include clearing, grubbing and disking. This is limited to areas less than five acres, work sites must be separated by a minimum distance of 0.25 miles to be considered separate work sites, for a total of 25 acres per year.



## PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- western pond turtle (State Species of Special Concern (SSC))
- Central Valley Steelhead, distinct population segment (Federal Threatened (FT))
- Chinook Salmon; Central Valley fall and late fall-run, Evolutionary Significant Unit (SSC, Federal Species of Concern)
- giant garter snake (FT and State Threatened (ST))
- Swainson's hawk (ST)
- Willow flycatcher (ST)
- bank swallow (ST)
- least Bell's vireo (Federal and State Endangered)
- tricolored blackbird (State SSC and Candidate Species)
- valley elderberry longhorn beetle (FT)
- nesting birds
- bats
- riparian habitat
- aquatic and terrestrial species

The adverse effects the project could have on the fish or wildlife resources identified above include:

- loss of natural bed or bank
- change in contour of bed, channel or bank
- change in gradient of bed, channel or bank
- change in channel cross-section (widening)
- degradation or aggradation of channel
- loss of bank stability during construction
- increase of bank erosion during construction
- change in composition of channel materials (Large Woody Debris and substrate particle size)
- soil compaction or other disturbance to soil layer
- restriction or increase in sediment transport
- debris transport impedance
- Increased turbidity
- loss or decline of riparian and/or emergent habitat
- loss or decline of instream woody material
- change to, or loss or decline of natural bed substrate
- disruption to nesting birds and other wildlife
- direct take of terrestrial species
- diversion of flow water from, or around, activity site
- direct loss of resources for aquatic organisms
- dewatering



## MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

### 1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 Inspections. CDFW personnel or its agents may inspect the routine maintenance activities performed at any of the work sites at any time. As a result of field inspection, CDFW, at its sole discretion, may require that additional measures be applied to specific activities to protect sensitive biological resources. Such measures may be amended into this Agreement with the agreement of both parties, or if an exception to authorized activities is identified, Permittee may be asked to submit separate written notification to CDFW Bay Delta Region pursuant to Measure 1.7, below.
- 1.6 Authorized Routine Maintenance Activities. Only those activities specifically described in the Project Description shall be conducted under this Agreement.



- 1.7 Exceptions to Authorized Activities. Permittee shall submit separate written notification (Forms FG 2023 and FG 2024) pursuant to Section 1602 of the California Fish and Game Code, together with the required fee prescribed in the current CDFW Streambed Alteration Agreement fee schedule, and otherwise follow the normal notification process prior to the commencement of work activities in all cases where one or more of the following conditions apply:
- The proposed work does not meet the criteria established for routine maintenance activities in the Project Description of this Agreement;
  - The nature of the proposed work is substantially modified from the work described in the Project Description of this Agreement;
  - CDFW advises Permittee that conditions affecting fish and wildlife resources have substantially changed at a specified work site or that such resources would be adversely affected by the proposed maintenance activity; and/or
  - The proposed work would adversely impact a State of California (State) Species of Special Concern or State or federally listed rare, threatened, endangered or candidate species or its habitat.
- 1.8 Separate Notification Sediment. Any sediment removal projects impacting greater than 50 feet of channel or removing greater than 150 cubic yards of material may require a separate CDFW notification. CDFW may accept the project as part of this RMA or may require separate notification and 1602 Agreement.
- 1.9 Separate Notification-Replacement Structures. In-kind replacement of structural features is subject to a separate Lake and Streambed Alteration Agreement and further environmental review if there is a reasonable possibility that the project will have a significant impact on the environment (refer to CEQA Guidelines section 15300.2).
- 1.10 No Trespass. To the extent that any provisions of this Agreement provide for activities that require the Permittee to traverse another owner's property, such provisions are agreed to with the understanding that the Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.
- 1.11 Notify CDFW Staff Before Beginning Work. Permittee shall notify CDFW, in writing, at least five (5) calendar days prior to initiation of construction (project) activities and at least five (5) calendar days prior to completion of construction (project) activities. Notification shall be emailed to Lorie Hammerli, Environmental Scientist, at [lorie.hammerli@wildlife.ca.gov](mailto:lorie.hammerli@wildlife.ca.gov).



## **2. Avoidance and Minimization Measures**

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each Measure listed below.

### **Work Periods and Planning**

- 2.1 Work Periods. The work period for completing activities within the stream zone shall be limited to the following:
- 2.1.1 Work within the flowing stream, requiring dewatering or site isolation, shall be limited to May 15 to October 30.
  - 2.1.2 Work occurring outside the flowing stream, but within the riparian corridor, shall be limited to May 1 to November 30.
  - 2.1.3 Minor debris removal that does not require excavation, and that is immediately necessary to prevent flooding, may be conducted at any time.
  - 2.1.4 Invasive Weed Control may be conducted year-round in compliance with Measure 2.1.6.
  - 2.1.5 Revegetation work may occur year-round.
  - 2.1.6 The work period within the project area shall be restricted to periods of low rainfall (less than  $\frac{1}{4}$ " per 24 hour period) and periods of dry weather (with less than a 40% chance of rain). All erosion control measures shall be initiated prior to all storm events. Permittee shall monitor the National Weather Service (NWS) 72-hour forecast for the project area. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented and presented upon request.
- 2.2 Work Period Modification. If Permittee needs more time to complete the Project activity, the work may be permitted outside of the work period and extended on a week-to-week basis. Permittee shall submit a written request for a work period variance to [lorie.hammerli@wildlife.ca.gov](mailto:lorie.hammerli@wildlife.ca.gov). The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should consider the effects of increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work period variances are issued at the discretion of CDFW and additional measures to protect fish and wildlife resources as a condition for granting the variance may be required.



## **Sediment, Trash, and Detritus Removal**

### **2.3 Sediment Removal Definitions and Limits**

- 2.3.1 **Channels:** Removal of sediment from natural channels for the purpose of minimizing flood risk. Sediment removal is limited to 50 linear feet per site; 150 linear feet per stream, per year; and 150 cubic yards per stream, per year.
- 2.3.2 **Facilities:** Removal of sediment around facilities such as bridges, culverts, storm drain outlets, trash racks, and water diversion inlets for the purpose of minimizing flood risk. Sediment removal around facilities is limited to 50 linear feet per site; 150 linear feet per stream, per year; and 150 cubic yards per stream, per year.

### **2.4 Trash and Detritus Removal Definition and Limits**

- 2.4.1 **Detritus (organic material):** Removal of woody and herbaceous plants, fallen trees, trunks or limbs that could inhibit flows or damage structures within or crossing streams. Root structures shall be left in place. Removal of detritus is limited to the minimum amount necessary to mitigate potential damage to structures and maintain flow.
- 2.4.2 **Trash:** Trash (tires, appliances, car parts, etc.,) imbedded in the stream that require mechanical equipment for removal will be removed during periods of low or no flow. Non-imbedded trash, not requiring mechanical removal, may be removed at any time with no limits. Imbedded trash removal is limited to 20 linear feet per site; 60 linear feet per stream, per year.



## Maintenance and Repair of Existing Structures

### 2.5 Maintenance and Repair Definitions and Limits

- 2.5.1 **Culverts:** Existing culverts shall be maintained, modified or repaired to minimize or arrest erosion. This is limited to two culverts, per stream, per year.
- 2.5.2 **Maintenance of Existing Bank Protection:** Repair or replacement of bank stabilization structures with in-kind structures or materials with less hardened alternatives; with an emphasis on bioengineering technology. The amount of riprap shall not exceed the footprint of the existing bank stabilization. This is limited to five work sites within the Project area with no greater than two work sites in any given stream per year.
- 2.5.3 **Fords:** Replacement of exiting fords or repair/maintenance by replacing rock and removing sediment and woody debris. This is limited to 10 cubic yards of replacement rock per ford and three work sites per year.
- 2.5.4 **Existing Access Roads and Trails:** Road and trail maintenance may include the removal of encroaching vegetation and storm debris and minor grading to repair storm washouts. Trails shall be maintained to minimize erosion and maximize habitat connectivity; such as, revegetating with low growing native grasses and forbs/herbs.
- 2.5.5 **Bank Stabilization and Erosion Control:** Stabilization of stream banks where failing banks are composed of earthen materials and the stabilization activity uses biotechnical stabilization techniques. This is limited to 200 linear feet per site, three sites per stream, per year.
- 2.5.6 **Temporary Access Trails:** No grading or ground leveling shall occur and active trails shall be treated with erosion control measures. Abandoned trails will be revegetated with native vegetation within the same year as abandonment.
- 2.5.7 **Temporary Access Roads:** Temporary Access Roads that may impact the bed, bank or channel are not authorized without prior approval. Permittee shall submit Temporary Access Road requests for review and acceptance on a site specific basis. Roads shall be constructed using best management practices and construction methodology, such as, *Handbook for Forest, Ranch & Rural Roads, Weaver et al, January 2014*. Areas adjacent to drainage features shall be restored to pre-existing conditions within the same year of disturbance. Temporary Access Roads are limited to three sites per stream, per year.
- 2.5.8 **Temporary Cross-stream Access:** Temporary Cross-stream Access activities require prior approval in writing. Permittee shall submit Temporary Cross-stream Access requests for review and acceptance on a site specific basis. Materials placed in the stream channel shall be removed prior to November 30. Fish passage (all life stages) shall not be impeded by temporary stream crossing structures. Cross-stream access is limited to three sites per stream, per year.



## **Vegetation**

### **2.6 Invasive Plant Management and Native Plant Revegetation/Restoration**

- 2.6.1 **Mechanical and Herbicide Control:** Mechanical equipment and herbicides shall be used to remove invasive and other nuisance vegetation. This is limited to 75 acres per year.
- 2.6.2 **Revegetation/Restoration:** Only locally sourced native plant material shall be used for revegetation/restoration. Select areas may be overplanted for future source material. Site preparation may include clearing, grubbing, disking, and the addition of soil amendments. To minimize disturbance on saturated soils, low ground pressure equipment such as, wide or high flotation tires, tracked machines or lightweight equipment shall be used. Limit: Less than five acres in size, and work sites must be separated by a minimum distance of 0.25 miles to be considered separate work sites. This is limited to 25 acres per year.

## **Culvert and Riprap Repair and Replacement**

- 2.7 Culverts appropriately sized and designed. Storm drains lines/culverts shall be adequately sized to carry peak 100-year storm flows for the drainage to one outfall structure. The storm drain lines/culverts and the outfall structure shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure resistance to washout, and erosion of the stream bed, stream banks and/or fill. Water velocity shall be dissipated at the outfall, to reduce erosion. Culverts shall be long enough to extend completely beyond the toe of fill (unless both the up and downstream sides of fill are substantially armored with rock up to the maximum high water mark).
- 2.8 Culvert Inlets, Outlets. Culvert inlets, outlets (including the outfall area) and fill faces shall be armored where stream flow, road runoff or rainfall energy is likely to erode fill material and the outfall area. Fill faces shall not exceed 1.5 to 1 in slope ratio (67 percent slope), unless armored with rock slope protection (RSP).
- 2.9 Culverts Shall be Kept Open. To the extent possible, the Permittee shall ensure that the permanent culverts are maintained and kept open year round.
- 2.10 Rock Slope Protection. Permittee shall install un-grouted energy dissipating RSP that will withstand wash out. Only clean material such as, rock riprap that is free of trash, debris, and deleterious material shall be used as bank stabilization. Asphalt shall not be considered an acceptable material. RSP slopes shall be supported with competent boulders keyed into a footing trench with a depth sufficient to properly seat the footing course boulders and prevent instability (typically at least 1/3 diameter of footing course boulders).



- 2.11 Adequately Sized Material. Stabilization materials shall be adequately sized to withstand peak storm flows for the drainage. Material shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure resistance to washout, and erosion of the stream bed, stream banks and/or fill.
- 2.12 Rock Slope Protection Underlayment. RSP slopes and footing trenches shall be evaluated for the necessity of an underlayment of appropriate grade geo-textile fabric, on slopes less than 1:1, or gravel blanket, on slopes greater than 1:1.
- 2.13 Back-fill RSP with Topsoil. Streambank areas receiving RSP shall be back-filled with appropriate topsoil above ordinary high water. The topsoil fill should be placed to fill the voids in the RSP and provide a substrate for revegetation efforts.
- 2.14 Do Not Transfer Erosive Forces. The Permittee shall ensure that bank stabilization design does not transfer the erosion force of the stream to the opposite bank, or to another area downstream.
- 2.15 Alluvium Fill. Fill construction materials other than on site alluvium, shall consist of clean, silt free gravel or river rock.
- 2.16 Imported Materials. Rock, gravel, and/or other materials shall not be imported to, taken from or moved within the beds or banks of the stream except as otherwise addressed in this Agreement.
- 2.17 Spoils. Spoil material shall not be placed where it could enter the stream. Spoil shall not be placed over vegetation except as specifically noticed to and accepted by CDFW, in writing. Plastic sheeting or visquine shall be readily available to cover exposed spoil piles and exposed areas. These covering materials shall be applied when it is evident rainy conditions threaten to erode loose soils into sensitive habitats.
- 2.18 Bank Stabilization. Permittee shall construct bank stabilization with suitable non-erodible materials that will withstand wash out. The bank stabilization shall extend above the normal high-water mark. Only clean material such as, rock riprap that is free of trash, debris and deleterious material shall be used as bank stabilization. Asphalt shall not be considered an acceptable material.
- 2.19 Only clean rocks and boulders. Only clean rocks and boulders shall be used for the Project unless specified otherwise with the design plans and Project Description. No broken concrete, asphalt or other construction waste materials shall be used as rock slope protection. Existing broken concrete, asphalt or other construction waste materials shall be removed from the site and properly disposed of.



### **Rock Ford Maintenance**

- 2.20 Rock Ford – Materials. The rock ford shall be designed, sized, installed, and maintained to assure resistance to washout and erosion of the streambed, stream banks, and/or fill.
- 2.21 Rock Ford – Materials. Large rock (large enough to remain in place during the 100-year storm reoccurrence interval) shall be installed in the toe of the upstream and downstream crossing's rock fill slopes. Mid-sized rock (on average greater than 3 inches in diameter) shall be installed where the majority of water flow within the crossing is anticipated (larger rocks provide larger interstitial spaces that result in increase flow passage), and smaller rock should be used to fill the interstitial spaces to prevent piping around the larger rock. Durable and angular rock shall be used on the road surface to a depth of at least 6 inches.
- 2.22 Rock Ford – Critical dip. The hollowed-out depression (critical dip) for the rock ford crossing shall be graded into the road at the axis of the stream channel. The critical dip shall be constructed to accommodate the estimated 100-year flood flow (when armored with rock) including debris, sediment loads (including sediment accumulation in the crossing), and prevent diversion of stream flow down the road.
- 2.23 Rock Ford – Spillway. The outboard rock fill slope shall be dished-out to form a spillway. The spillway shall be armored with well graded rock (large and small sizes) to remain in place during high flows and prevent piping around the rock and extend from the rock ford's road surface break-in-slope down to the natural channel where it shall be keyed-in to firm native soils at the base of the rock fill slope.
- 2.24 Rock Ford – Spillway slope. The outside fill face slope (spillway) ratio shall be no steeper than 1:1 in slope ratio (100 percent slope).

### **Biotechnical Bank Stabilization**

- 2.25 Biotechnical Repair. Unless otherwise approved by CDFW, bank stabilization shall use biotechnical methods. Installation of riprap, and other hardened structures, shall only be considered after biotechnical approaches have been determined to be insufficient. In general, biotechnical approaches shall be considered those that incorporate live plants, large woody debris, geotextiles, mechanically stabilized soil and the rock slope protection necessary for scour protection and ballast. Methods described in the CDFW *California Salmonid Stream Habitat Restoration Manual* are generally acceptable.



### **Imbedded Trash and Debris Removal**

- 2.26 Large Debris – Appliance/Car Body Removal. The debris and all its pieces shall be removed from the stream zone and taken to a lawful disposal site.
- 2.27 Fill depression by specified time period. At the completion of large debris removal, areas disturbed by removal activities shall be graded to ensure that no pits or depressions are left where fish entrapment may occur. The pit shall be at grade with both upstream and downstream ends. Grading shall be completed no later than October 15.
- 2.28 Alluvium Fill. Depression fill materials other than on site alluvium, shall consist of clean silt free gravel or river rock.



## **Project Staging and Implementation**

- 2.29 No Equipment in Stream During Periods of Flow. No mechanized equipment shall be operated in the active channel when flow is present. Only the bucket of the excavator may enter the active channel during periods of flow provided the work area has been isolated per Measure 2.39. Equipment shall be staged and operated from the top of bank of the stream. Once the streambed has completely dried, limited access is permitted.
- 2.30 Project Limits. The Permittee shall use temporary construction fencing, barriers, and/or flagging to identify the agreed limits of disturbance within the stream. All temporary fences, barriers, and/or flagging shall be completely removed from the work site and properly disposed of upon completion of Project activities.
- 2.31 Staging and Site Access. Staging areas shall be located at least 30 feet from the top of bank. Vegetation disturbance shall be limited to the immediate construction footprint and a single access pathway.
- 2.32 Staging and Storage. Staging and storage areas for equipment, materials, fuels, lubricants and solvents shall be located outside of the stream channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located adjacent to the stream, shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated in proximity to the stream must be checked and maintained daily. Vehicles must be moved away from the stream prior to refueling and lubrication.

## **Wildlife Protection and Prevention- General**

- 2.33 Designated Biologist. At least fifteen (15) days before initiating Project activities, including conducting special status species surveys, Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information for a Designated Biologist. The Designated Biologist shall be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the project site. Permittee shall obtain CDFW's written approval of the Designated Biologist prior to the commencement of Project activities in the stream. The Designated Biologist shall be responsible for monitoring all Project activities, including construction and any ground- or vegetation-disturbing activities in areas subject to this Agreement and compliance with required surveys.
- 2.34 Biological Monitoring. The Designated Biologist may assign a Biological Monitor (a staff person who has up-to-date training in special status species protective measures and who has been designated as an appropriate monitor by the Designated Biologist) to assist with monitoring and Agreement compliance.



- 2.35 Designated Representative. At least five (days) before initiating Project activities, including conducting special status species surveys, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this Agreement. The Permittee shall submit to CDFW in writing the name, business address, and contact information for the Designated Representative. Permittee shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this Agreement.
- 2.36 Site Assessment. Prior to conducting Project activities at a work site, a Designated Biologist shall assess physical site features to determine whether the site and/or surrounding areas are likely to support special-status species. Permittee shall also consult a current map of California Natural Diversity Database (CNDDB) occurrences in the Project area and determine whether the work site is within reasonable dispersal distance (see definition in Exhibit C) of a known species occurrence.
- 2.37 Annual Staff Training. The Designated Biologist shall hold an annual training session for staff responsible for performing activities subject to this Agreement. Staff will be trained to recognize special status species and their habitats. Staff will also be trained to use protective measures to ensure that such species are not adversely impacted by project activities. The training program shall be updated at least annually to reflect current special status species management practices. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work within the Project area.
- 2.38 On-Site Designated Biologist or Biological Monitor. The Designated Biologist or Biological Monitor shall supervise Project activities to ensure that appropriate protective measures are implemented. Prior to commencement of Project activities, the Designated Biologist or Biological Monitor shall inspect the work site, including holes and excavated areas, to ensure that special status species are not present within the work site. Work can commence after the site has been cleared for Project activity by the Designated Biologist or Biological Monitor.



## **Wildlife Protection and Prevention – Aquatic Resources**

- 2.39 Isolation From Flowing Stream. Construction activities (bank stabilization, culvert installation, RSP installation, etc.) must be performed in isolation from the flowing stream. To isolate the work site, water tight coffer dams shall be constructed upstream of the work site and water diverted through a suitably sized pipe from upstream of the coffer dam and discharged downstream of the work site. Coffers shall be constructed of a non-erodible material which does not contain soil or fine sediment. Coffers and the stream diversion system shall remain in place and functional throughout the construction period. If the coffer dams or stream diversion fail, they shall be repaired immediately. Normal flows shall be restored to the affected stream immediately upon completion of work at that location. Diversion shall be conducted such that water at the downstream end does not scour the channel bed or banks. No other diversion method shall be used without authorization of CDFW. If another diversion method is preferred, the Permittee must submit a plan detailing the desired diversion method. Authorization of any other diversion method shall be at the discretion of CDFW.
- 2.40 Dewater Work Site. Once water has been diverted around the work site the work site shall be dewatered. The site shall be dewatered as necessary to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to settling ponds or bakers tanks prior to re-entering the stream. Work site dewatering may be accomplished using pumps and or siphons.
- 2.41 Screen According to Existing Standards. The inlets of the dewatering pump structure shall be fitted with fish screens meeting the “fry-size” criteria of CDFW and the National Marine Fisheries Service before water is pumped from within the coffer dams (see screening criteria at: [http://www.westcoast.fisheries.noaa.gov/publications/reference\\_documents/reference\\_documents.html](http://www.westcoast.fisheries.noaa.gov/publications/reference_documents/reference_documents.html))
- 2.42 Stranded Aquatic Life. The Permittee shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. This condition does not allow for the take or disturbance of any State or federally listed species, or State listed Species of Special Concern.



## **Wildlife Protection and Prevention- Special Status Species**

2.43 Unauthorized Take. The Project area has been identified as an area that is potentially inhabited by state or federally listed species or State Species of Special Concern (special status species). Permittee is required to comply with all applicable state and federal laws, including the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA). This Agreement does not authorize the take of any State or federal endangered or threatened species (listed species). Liability for any take or incidental take of such listed species remains the responsibility of Permittee for the duration of the Project. Any unauthorized take of such listed species may result in prosecution and nullification of the Agreement.

2.44 Breeding Bird Survey Before Commencement. If Project activities are scheduled during the nesting season of protected raptors and migratory birds (typically February 15 to August 15), a focused survey for active bird nests shall be conducted by a Designated Biologist within 15 days prior to the beginning to project activities. The results of the survey shall be submitted to CDFW (Measure 3.6). If active nests are found, the Permittee shall consult with CDFW and the U.S. Fish & Wildlife Service (FWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the Fish & Game Code, section 3503. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with CDFW and FWS, will be required before Project activities can be reinitiated.

This Agreement does not allow the Permittee, any employees, or agents to destroy or disturb any active bird nest (Section 3503 Fish and Game Code) or any raptor nest (Section 3503.5) at any time of the year.

2.45 Swainson's hawk (*Buteo swainsoni*) Survey Protocol. If Project activities are scheduled during the Swainson's hawk nesting season (typically, March 1 to August 31) a survey for active nests shall be conducted by a Designated Biologist. Surveys shall follow the *Swainson's hawk Technical Advisory Committee's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (available at [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html)).

To complete the required surveys prior to the authorized Work Periods (Measure 2.1) surveys shall be initiated on or before March 1, with a minimum of three (3) surveys conducted in Survey Period's II and III. If active nests (defined as occupied within the past ten (10) years) are found, the Permittee shall consult with CDFW and the U.S. Fish & Wildlife Service (FWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and Fish and Game Code sections 3503 and 3503.5. This Agreement does not authorize the removal of an active Swainson's hawk nest tree.



- 2.46 Willow Flycatcher (*Empidonax traillii*). If Project activities are scheduled during the Willow flycatcher (WIFL) nesting season (typically May 1 through August 31) a survey for active nests shall be conducted by the Designated Biologist. The currently accepted survey protocol is: *A Willow Flycatcher Survey Protocol for California*, developed by Helen L. Bombay, Teresa M. Ritter and Brad E. Valentine, June 6, 2000. If current-year surveys (per the protocol) determine the presence of WIFL, the following additional Measures shall be followed: No operations shall occur during the breeding season (May 1 through August 31) in and within 300 feet of the WIFL habitat where WIFL have been found present. Any operations conducted within or adjacent to suitable WIFL habitat where WIFL have been found shall not damage or destroy willows or other riparian shrubs, unless agreed on through consultation with CDFW.
- 2.47 Bat Avoidance. The Designated Biologist shall conduct a habitat assessment for bats at work sites where culverts, structures and/or trees would be removed or otherwise disturbed. The habitat assessment shall include a visual inspection of features within 50 feet of the work site for potential roosting features (bats need not be present) no more than 48 hours prior to disturbance of such features. Habitat features found during the survey shall be flagged or marked. If bat habitat is detected during the habitat assessment, CDFW shall be notified immediately. CDFW reserves the right to provide additional provisions to this agreement in the event that roosting bats are found. Permittee shall not attempt to directly disturb (e.g. shake, prod) roosting features, as such disturbance constitutes "harassment" under Fish and Game Code.
- 2.48 Pre-Construction Surveys General. Prior to ground disturbing activities the Designated Biologist shall conduct surveys for special-status species. The surveys shall be appropriately timed and of a sufficient duration to maximize the potential to detect if species are present and implement avoidance measures.
- 2.49 Special-Status Species Encountered During Work. If CDFW determines or Permittee finds, that any special-status species are present at the work site, Permittee shall stop all Project activities and Permittee or the Designated Biologist shall notify CDFW and other agencies such as the USFWS as may be appropriate. If there is imminent danger of injury to special-status species from project related activities, and the special-status species individual(s) do not move out of the work area on their own, the Designated Biologist shall contact the appropriate agency. Through consultation with CDFW, additional Measures may be developed to protect special-status species.
- 2.50 Special Status Species Sighting. If a special status species enters the work site, all Project activities shall stop until it leaves of its own volition. Any sightings and/or injuries of these species shall be reported to CDFW within 24 hours.
- 2.51 Clearance Surveys. The Designated Biologist shall conduct clearance surveys at the beginning of each day within or adjacent to suitable special-status species



habitat and regularly throughout the workday when Project activities are occurring within or adjacent to suitable special-status species habitat. If a special-status species enters the work site, all work shall stop until it leaves of its own volition. Any sightings and/or injuries of these species shall be reported to CDFW within 24 hours.

2.52 Vehicle Inspection. If special-status species are found in the work site, any vehicle parked on site for more than 15 minutes shall be inspected by the project personnel before it is moved to ensure that special-status species have not moved under the vehicle.

2.53 Authority to Stop Work. The Designated Biologist and the Biological Monitor shall have the authority to halt work activities that may affect special-status species, at any life stage.

### **Vegetation Protection and Prevention**

2.54 Habitat Protection. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Vegetation outside the construction corridor shall not be removed or damaged without prior consultation and approval of a CDFW representative.

2.55 Protect Banks and Vegetation. Care shall be taken during placement or movement of materials on the stream banks to prevent any damage to stable stream banks and to minimize damage to any streamside vegetation. Native streamside vegetation overhanging into the channel shall not be removed, trimmed, or otherwise modified.

2.56 Live Tree Removal. Live trees may be removed from the stream only if they are blocking flow or restricting the capacity of the stream; no other trees shall be removed. Any trees greater than 4 inches, which must be cut from stream banks shall be cut at ground level, leaving the root mass in place to maintain bank stability. Permittee shall notify CDFW for written approval for the removal of the root mass of trees greater than 4 inches. Any trees removed shall be replaced according to Measure 2.65, and exposed/ disturbed areas shall be revegetated.

2.57 Limits of Material Removal. Except as explicitly described in this Agreement, the removal of native soils, rock, gravel, vegetation, and vegetative debris from the stream is prohibited. Embedded pieces of large woody debris or stumps that potentially serve as basking sites or that encourage pool formation shall be left in place.

2.58 Minimum Disturbance. The disturbance or removal of native vegetation shall not exceed the minimum necessary. Precautions shall be taken to avoid other damage to vegetation by people or equipment. Branches and/or limbs overhanging the channel and impacting water flows shall be properly pruned. Woody and



herbaceous plants, fallen trees, or trunks or limbs lodged in the bed or bank causing flow restriction shall be cut off at the bed or bank invert with small tools and removed with winch and cable or other equipment operated from top of bank. Root structures are not to be disturbed. Large woody debris that does not obstruct the flow of water shall be left in place.

2.59 Vegetation Marked for Protection. Permittee shall clearly mark all vegetation within the project area that shall be avoided during project activities.

2.60 No Introduction of Invasive Plants. Permittee shall not knowingly plant, seed, or otherwise introduce any plants listed in the California Invasive Plant Council's Invasive Plant Inventory: <http://www.cal-ipc.org/ip/inventory/index.php>.

2.61 Sudden Oak Death. Permittee shall not move the plant species, including their plant parts, plant products (including dried wreaths), and unprocessed wood and wood products (including, but not limited to bark chips, mulch, and firewood – except when completely free of bark) listed in Section 3700 of the *California Department of Food and Agriculture Plant Quarantine Manual* from work sites located in Sudden Oak Death (*Phytophthora ramorum*) quarantine counties, which include Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma counties, except as provided by that section. Permittee shall implement best management practices (BMPs) during Project activities in Sudden Oak Death quarantine counties to prevent the spread and introduction of Sudden Oak Death to new areas. BMPs specific to the preventing the spread of Sudden Oak Death are available at the California Oak Mortality Task Force website: <http://www.suddenoakdeath.org/diagnosis-and-management/best-management-practices/>.

2.62 Invasive Plant Control/Eradication. To minimize the spread of invasive plant species to uninfested areas within and outside of the Project area, Permittee shall implement control and eradication activities prior to the initiation of ground-disturbing activities. Permittee shall utilize control and eradication methods that are specific to the target species, avoid the spread and proliferation of other invasive plant species, and minimize damage to and/or removal of native plant species. All nonnative and invasive plants controlled or eradicated at the work site shall be removed and disposed of in a manner that prevents the introduction and establishment of those species to new areas.

2.63 Treat exposed areas. All exposed/disturbed areas and access points within the stream zone left barren of vegetation as a result of Project activities shall be restored with native grasses and forbs/herbs (Exhibit D). Restored areas shall be mulched as appropriate. Revegetation shall be completed as soon as possible after Project activities in those areas cease. Seeding placed after October 30 shall be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.



- 2.64 Native Plant Materials Required. Revegetation shall include only trees and shrubs native to the Project area.
- 2.65 Vegetation Replacement. All native trees between 4 and 6 inches in diameter (at breast height) removed as a result of Project activities shall be replaced at a 3:1 ratio with a combination of native trees and/or appropriate understory and lower canopy plantings. Native trees greater than 6 inches in diameter and non-native trees greater than 24 inches shall be replaced with native trees at a 6:1 ratio. Non-native trees greater than 4 inches in diameter shall be replaced at a 1:1 ratio. Native trees greater than 24 inches in diameter shall be replaced on an inch-for-inch basis. Replacement plantings shall consist of locally-collected seeds, stakes, or other suitable nursery stock, as appropriate and shall be native species adapted to the lighting, soil and hydrological conditions at the replanting site. If replanting within the work site is unfeasible due to slope steepness or other physical constraints, replacement trees may be planted at an alternate location along the stream corridor as approved by CDFW.
- 2.66 Revegetation Criteria. To ensure a successful revegetation effort, all Vegetation Replacement (Measure 2.65) plantings shall be monitored and maintained over a minimum five (5)-year monitoring period with a minimum of two (2) consecutive years (two growing seasons) of monitoring after the removal of irrigation. All plantings shall have a minimum of 75% survival at the end of the five year monitoring period. Invasive plant species shall be manually removed within the replanting area. If the survival and/or cover requirements are not meeting these goals, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other corrective actions, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for five (5) years after planting. Mitigation shall be performed until CDFW determines that the revegetation area has met all the success/performance criteria. If the revegetation effort fails to meet the revegetation criteria, then CDFW shall require additional mitigation that is appropriate to compensate for the temporal loss of habitat.
- 2.67 Irrigation. When supplemental watering shall be used to establish and maintain plant growth in order to meet success criteria, irrigation shall be done in the most water efficient manner possible, such as using hand watering, drip/microirrigation or through the use of a time release system.



## **Herbicide Use**

- 2.68 Herbicides. Permittee shall only use herbicides registered with the California Department of Pesticide Regulation (DPR). All herbicides shall be applied in accordance with regulations set by DPR, and used according to labeled instructions. Labeled instructions for the herbicide used shall be made available to CDFW upon request. No impacts shall occur to any adjacent native vegetation. Use of herbicides within the riparian corridor shall conform to limitations in the DPR PRESCRIBE database for protection of State and/or federally listed species- <http://www.cdpr.ca.gov/docs/endspec/prescint.htm>. Pesticide mixing sites shall be located at existing road sites outside of jurisdictional waters and sensitive habitats.
- 2.69 Pesticide Buffer Zones. Permittee shall implement pesticide buffer zones adjacent to salmon supporting waters per the January 22, 2004 U.S. District Court Order in the case of Washington Toxics Coalition, et al. v. EPA. Prior to initiating any ground or aerial applications of pesticides within and adjacent to the Project area, Permittee shall review the Order for buffer zone requirements at the California Department of Pesticide Regulation's website: <http://www.cdpr.ca.gov/docs/endspec/salmonid.htm>
- 2.70 Use of Pesticides in Potential Endangered Species Habitat. Prior to applying pesticides, Permittee shall verify that selected pesticides are not on an endangered species bulletin issued by the U.S. EPA. Bulletins are posted at: <http://www.epa.gov/oppead1/endanger/bulletins.htm>
- 2.71 Rodenticides and Insecticides. Permittee shall not use rodenticides and/or insecticides (except personal insect repellent) in the stream zone.

## **Erosion and Sediment Control**

- 2.72 Prohibition Against Use of Plastic Netting in Erosion Control Measures. Permittee shall not use temporary or permanent erosion control devices containing plastic netting, including photo- or bio-degradable plastic netting.
- 2.73 Erosion control. Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter the stream or be directed to where it may enter the stream. Erosion control measures shall be monitored for effectiveness and shall be repaired or replaced as needed.
- 2.74 Disposal and Removal of Materials. All removed spoils and construction debris shall be moved outside the work site prior to inundation by water. Spoil sites shall not be located within the stream or areas that may be subjected to stream flows, where spoil may be washed back into a stream, or where it may impact streambed habitat, aquatic or riparian vegetation. All removed material shall be disposed of according to State and local laws and ordinances.



## **Equipment and Vehicles**

- 2.75 Operating Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.
- 2.76 Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.
- 2.77 Clean Up Equipment. Clean up equipment such as extra boom, absorbent pads, skimmers, shall be on site prior to the start of work within the stream zone.
- 2.78 Equipment Storage. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream.
- 2.79 Stockpiled Materials. Building materials and/or construction equipment shall not be stockpiled or stored where they may be washed into the water or cover aquatic or riparian vegetation. Stockpiles shall be covered when measurable rain is forecasted.

## **Debris Materials and Waste**

- 2.80 No Dumping. Permittee and all contractors, subcontractors, and employees shall not dump any litter or construction debris within the stream, or where it may pass into the stream.
- 2.81 Pick Up Debris. Permittee shall pick up all debris and waste daily.
- 2.82 Wash water. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.



## **Toxic and Hazardous Materials**

- 2.83 Toxic Materials. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into the stream or its tributaries shall be contained in water tight containers or removed from the work site.
- 2.84 Hazardous Substances. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter the stream by Permittee or any party working under contract, or with the permission of Permittee, shall be removed immediately.
- 2.85 Hazardous Materials. Debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the Project related activities shall be prevented from contaminating the soil and/or entering the stream.

## **Spills and Emergencies**

- 2.86 Spill Cleanup. Permittee shall begin the cleanup of all spills immediately. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures. The Permittee shall have all spill clean-up equipment on site during construction.
- 2.87 Spill Containment. All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean-up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean-up activities. CDFW shall be notified by the Permittee and consulted regarding clean-up procedures.



### 3. Reporting Measures

Permittee shall meet each reporting requirement described below.

3.1 Annual Pre-Project Written Notification. The Permittee shall provide to CDFW Bay Delta Region written notification of proposed routine maintenance activities to be performed that year by **June 1** of each year. The written notification of proposed routine maintenance activities shall include:

- Detailed description of Project activity including length and width of impact area; square footage of areas of vegetation to be removed; number and species of trees to be removed; size or dimensions of culverts, riprap, and other materials; volume and type of material to be placed or removed, indicate if the work site is subject to recurring invasive vegetation management.
- Site location, including stream name.
- Site map with project impacts clearly delineated, such as, ingress, egress, and staging areas.
- The earliest commencement date and estimated completion date.
- Potential presence of special status species.
- Surveys to be conducted; include protocols and/or methodology to be used (see Measures 3.6 and 3.7).
- Spatially referenced pre-project photos.
- Re-vegetation plan. Where active restoration is warranted, in addition to the standard information required under the *Annual Pre-Project Written Notification*, a plan shall be submitted detailing the quantity; species; size class; location and type of replacement planting; installation methodology; and irrigation specifications.

3.2 Additional Project Notifications: Permittee may notify CDFW of additional proposed routine maintenance activities after June 1. Notification shall be submitted per Measure 3.1 and the proposed work must fit the definition of routine maintenance. CDFW will review and accept on a project by project basis.

3.3 Post-Project Written Notification. The Permittee shall provide CDFW Bay Delta Region written notification of maintenance Projects completed each year. The report shall include a tabulated sum of all Projects and associated impacts itemized by site and summarized by stream. Spatially referenced before/after photographs shall be included. Each annual report shall include the appropriate fee determined by the current CDFW Streambed Alteration Agreement Fee Schedule for work completed under this Agreement based upon the number of Projects completed in the reporting period. Reports and annual fees are due by **January 31**. CDFW may terminate this Agreement if reports and applicable fees are not submitted within 30 days of the due date.



- 3.4 Biennial Vegetation Replacement Status Report. The Permittee shall provide a biennial (every two years) monitoring report to CDFW by January 31 of the appointed year until the end of the CDFW required monitoring period (Measure 2.66). The report shall include monitoring results (including methods and discussion of modifications since the previous monitoring period); analysis of the monitoring results, including evaluation of conditions relative to success criteria; discussion of remedial measures identified and implemented following the previous monitoring period; overall site progress; any remedial actions taken during the year; and a summary of the general successes and failures of revegetation efforts. The report shall include plant counts, plant growth condition (dead, stressed, or vigorous), site photos, maintenance activities, and overall site conditions (garbage, vandalism, and invasive weed growth). Any proposed changes to the performance criteria or timelines shall require CDFW written acceptance.

The Biennial Report shall itemize the number of trees removed and replacement plantings completed, per Measure 2.65.

- 3.5 Notification to the California Natural Diversity Database. If any sensitive species are observed in project surveys, Permittee shall submit California Natural Diversity Database (CNDDDB) forms to the CNDDDB within five working days of the sightings, and provide CDFW Bay Delta Region with copies of the CNDDDB forms and survey maps.
- 3.6 Biological Surveys. The results of any biological surveys conducted shall be submitted prior to commencement of Project activities. Permittee is encouraged to combine survey results for multiple sites and multiple species into a single document.
- 3.7 Submission of Notifications, Reports and Surveys. Permittee shall submit all required Notifications, Reports and Surveys to the CDFW representative identified in the Contact Information; email is acceptable. All fees associated with completed maintenance activities shall be mailed to Department of Fish and Wildlife, Bay Delta Region, 7329 Silverado Trail, Napa, CA 94558. The Notification Number (1600-2014-0265-R3) shall be included on all correspondence with CDFW.



## CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

### To Permittee:

Richard Marovich  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 94568  
(707) 451-6090  
[rmarovich@scwa2.com](mailto:rmarovich@scwa2.com)

### To CDFW:

Department of Fish and Game  
Bay Delta Region  
7329 Silverado Trail  
Napa, California 94558  
Attn: Lake and Streambed Alteration Program – Lorie Hammerli  
Notification #1600-2014-0265-R3  
(707) 944-5568  
Fax: (707) 944-5553  
[lorie.hammerli@wildlife.ca.gov](mailto:lorie.hammerli@wildlife.ca.gov)

## LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.



## **SUSPENSION AND REVOCATION**

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

## **ENFORCEMENT**

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

## **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.



## **AMENDMENT**

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **TRANSFER AND ASSIGNMENT**

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **EXTENSIONS**

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605(f)).



## **EFFECTIVE DATE**

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.wildlife.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html).

## **TERM**

This Agreement shall expire on December 31, 2019, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

## **EXHIBITS**

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- A. Project Overview Map
- B. Work Location Map: Lower Putah Creek and Tributaries
- C. Definition of Terms
- D. Project Specific California Native Plant Species
- E. Annual Pre-Project Written Notifications (Reserved for future exhibits)



## **AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

## **AUTHORIZATION**

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

## **CONCURRENCE**

The undersigned accepts and agrees to comply with all provisions contained herein.

### **FOR SOLANO COUNTY WATER AGENCY**

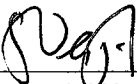


Richard Marovich  
SCWA Streamkeeper

8-11-15

Date

### **FOR DEPARTMENT OF FISH AND WILDLIFE**



Craig J. Weightman  
Environmental Program Manager

8/25/15

Date

Prepared by: L. Hammerli  
Environmental Scientist

Date Submitted: February 5, 2015

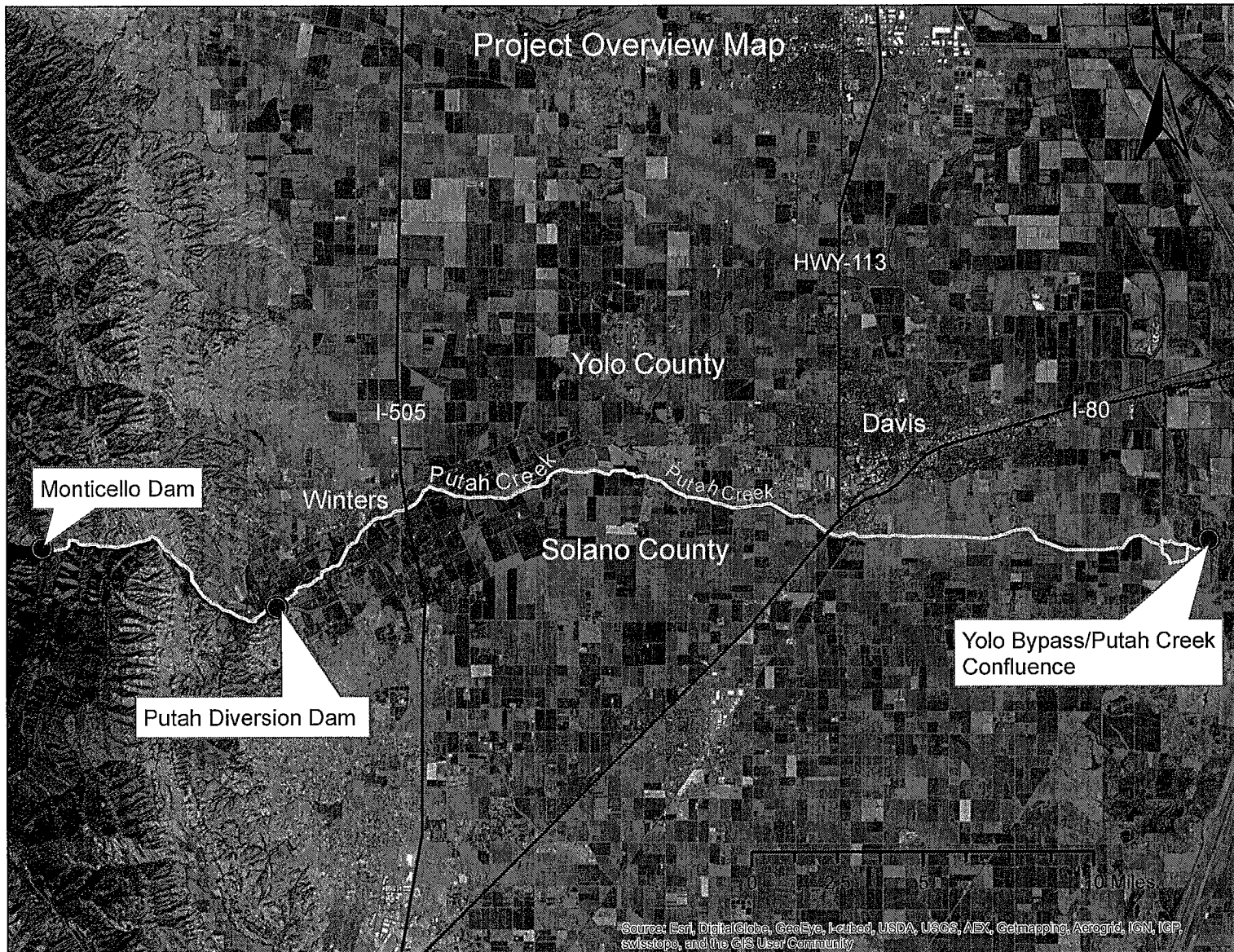
Date Revised: July 28, 2015; August 4, 2015; August 6, 2015



**EXHIBIT A**  
**PROJECT OVERVIEW MAP**



# Project Overview Map



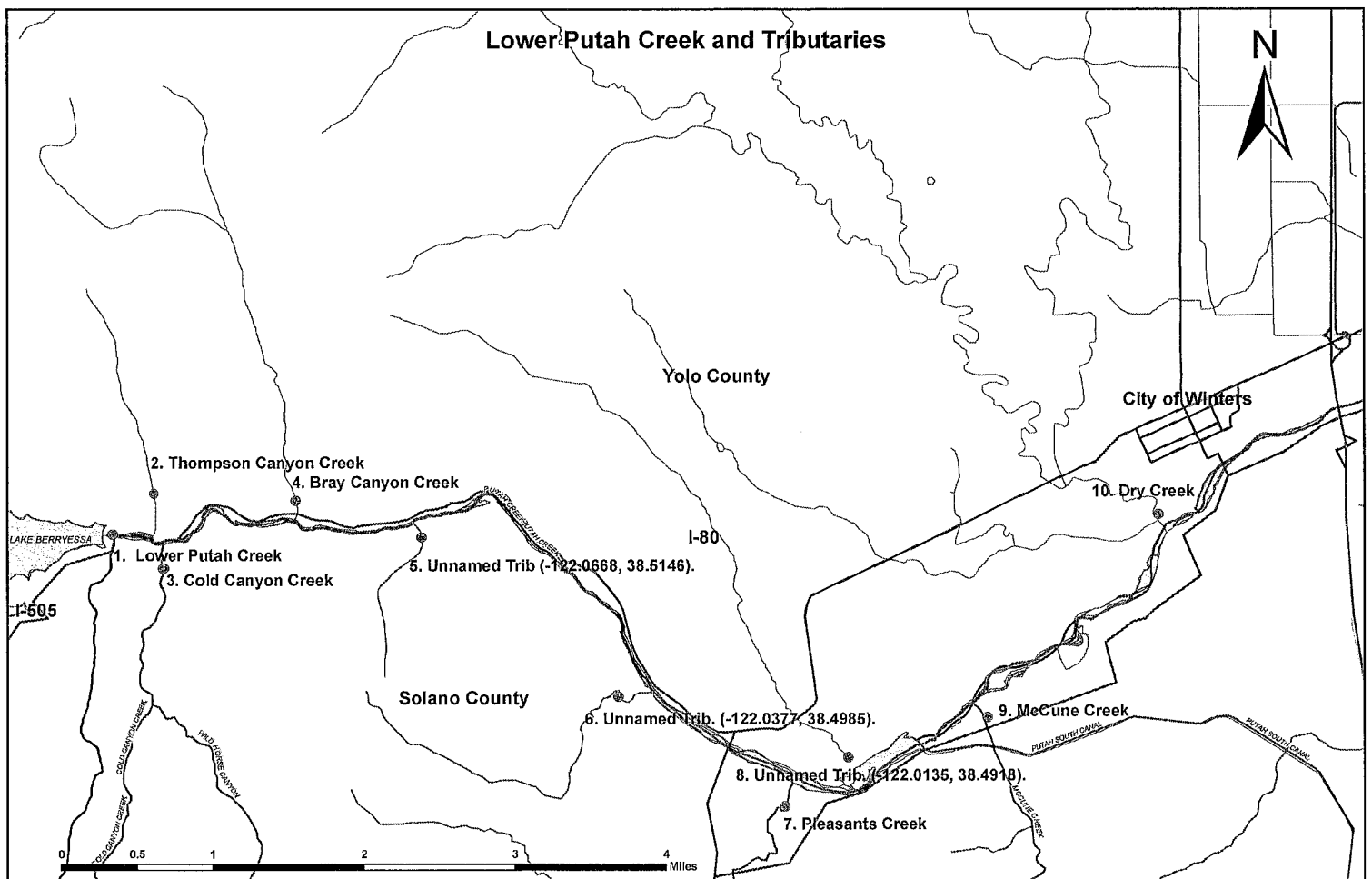


**EXHIBIT B**

**WORK LOCATION MAP: LOWER PUTAH CREEK AND TRIBUTARIES**



## Lower Putah Creek and Tributaries





## **EXHIBIT C**

### **DEFINITION OF TERMS**



## **EXHIBIT C DEFINITION OF TERMS**

As used herein and for purposes of the Agreement

Biological monitor: a person employed by the Permittee who has undergone training in avoidance and minimization measures specific to special-status species potentially present at a given site. The biological monitor is responsible for ensuring that such measures are properly performed to protect against take. The biological monitor must have attended the most recent annual training conducted by the Permittee's designated biologist and must demonstrate basic familiarity with species biology, avoidance measures, and the terms of the Agreement, if asked. If the biological monitor is to perform pre-work habitat assessments, s/he must be familiar with applicable habitat assessment methodology for listed species.

Channel: the area of a stream through which water flows perennially, intermittently, or ephemeraly.

Designated biologist: a person with a combination of academic training and professional experience in the biological sciences, and shall be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the project site.

Emergency project: is defined in the State Fish and Game Code, section 1600.

Facilities: storm drain outfalls, culverts, revetments, bank protection, energy dissipaters, grade structures, sediment basins, weirs, diversion structures, trash racks, stream gauge structures, utility line crossings, bridge piers.

Heavy equipment: any equipment that exceeds 14,000 pounds.

Invasive plant species: A non-native (adventitious) species that is capable of moving aggressively into a habitat and monopolizing resources such as light, nutrients, water, and space to the detriment of other species.

Light duty equipment: any equipment less than 14,000 pounds.

Project: a routine maintenance activity performed by the Permittee during a given year.

All maintenance Projects are defined by the calendar year, location, and limits outlined in the Agreement. The following Project activities shall be construed as one Project for the purpose of Post-Project Written Notification and the submission of post-project fees per Measure 3.3.

- Sediment Removal - per stream
- Trash and Detritus - per stream
- Culverts - per work site
- Maintenance of Existing Bank Protection - per work site
- Fords - per work site
- Bank Stabilization and Erosion Control - per work site
- Temporary Roads - per work site
- Invasive Plant Mechanical and Herbicide Control - per stream - includes temporary access trails and maintenance of existing access roads and trails.
- Revegetation/Restoration- per stream-includes temporary access trails and maintenance of existing access roads and trails.



If Invasive Plant Mechanical and Herbicide Control activities are conducted for the purpose of Revegetation/Restoration work, then for the purpose of fee submission, both activities are defined as one Project: Invasive Plant Mechanical and Herbicide Control and Revegetation/Restoration. Maximum yearly limits apply.

Each work area subject to Invasive Plant Mechanical and Herbicide Control Activities shall be reported in the Pre-project Written Notification; the first treatment year is subject to post-project fees. Year two at the same work site is exempt from post-project fees. Subsequent treatment in the same work site beyond year two shall be construed as a new project if the treatment area is greater than five acres.

A Project does not include minor non-imbedded trash removal or maintenance of revegetation/restoration sites.

Reasonable dispersal distance: the distance from a particular location, such as a CNDDDB occurrence location or a critical habitat location, that a given species would be expected to disperse for mating, breeding, foraging, nesting, and other activities. The reasonable dispersal distance can be determined on a species-by-species level based on current scientific literature. For example, CNDDDB occurrences of California red-legged frog in a given creek indicate a high likelihood that this species also occurs downstream within the same creek system because flows provide easy downstream dispersal. As another example, current literature indicates that California tiger salamanders are commonly found in upland habitat within a 1.3-mile radius of breeding ponds.

Special-status species: any species identified as a candidate or sensitive species in local or regional plans, policies or regulations, or by CDFW or the U.S. Fish and Wildlife Service. Plants on Lists 1A, 1B, or 2, published by the California Native Plant Society, are also considered special-status species for the purposes of this Agreement.

Stream: a watercourse within which water flows perennially, intermittently, or ephemerally. Streams include a channel, banks, bed, and floodplains where these features exist.

Take: as defined in Section 86 of the California Fish and Game Code, and for federally listed species, as defined in Section 9 of the U.S. Endangered Species Act.



## **EXHIBIT D**

### **Project Specific California Native Plant Species**



## **Solano County Water Agency: Lower Putah Creek and Tributaries to Putah Creek**

### **Project specific California native plant species**

#### **Graminoid (grass or grass-like)**

Creeping wild rye (*Leymus triticoides*)  
Slender wheatgrass (*Elymus trachycaulus*)  
Meadow barley (*Hordeum brachyantherum*)  
Blue wild rye (*Elymus glaucus*)  
California oatgrass (*Danthonia californica*)  
Purple needle grass (*Stipa pulchra*)  
Red fescue (*Festuca rubra*)  
Deergrass (*Muhlenbergia rigens*)  
Squirreltail (*Elymus elymoides*)  
Smooth-stemmed brome (*Bromus laevipes*)  
Nodding needle grass (*Stipa cernua*)  
Small fescue/three week fescue (*Festuca microstachys*)  
California melicgrass (*Melica californica*)  
One-sided blue grass (*Poa secunda* ssp. *Secunda*)  
California brome (*Bromus carinatus*)

#### **Forb/herb**

Gumweed (*Grindelia camporum*)  
Yarrow (*Achillea millefolium*)  
Narrow leaf milkweed (*Asclepias fascicularis*)  
California mugwort (*Artemisia douglasiana*)  
Tomcat clover (*Trifolium willdenovii*)  
Maiden clover (*Trifolium microcephalum*)  
Bull clover (*Trifolium fucatum*)  
Pinole clover (*Trifolium bifidum*)  
Tree clover (*Trifolium ciliolatum*)  
Pinpoint clover (*Trifolium gracilentum*)  
California poppy (*Eschscholzia californica*)  
Red maids (*Calandrinia ciliate*)  
Dove weed (*Eremocarpus setigerus*)  
Annual lupine (*Lupinus bicolor*)  
Sky lupine (*Lupinus nanus*)  
Hollowleaf lupine (*Lupinus succulentus*)  
Spanish lotus (*Acmispon americanus* alt. *Lotus purshianus*)  
Small fescue (*Festuca microstachys* alt. *Vulpia microstachys*)  
Dove weed (*Croton setigerus* alt. *Eremocarpus setigerus*)



**EXHIBIT E**

**ANNUAL PRE-PROJECT WRITTEN NOTIFICATIONS**

(Reserved for future exhibits)



*\* Remind \**

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
7/7/14	\$1474.25	\$		1600-2014-0265-3



*✓ # 24497*  
*Solano County*  
*Water Agency*

STATE OF CALIFORNIA  
 DEPARTMENT OF FISH AND WILDLIFE

**NOTIFICATION OF LAKE OR STREAMBED ALTERATION**

*Hammerli*  
*H. Longwell*  
*Wdn Bolla*



Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

**Fish & Wildlife**

**1. APPLICANT PROPOSING PROJECT**

**SEP 12 2014**

Name	Richard Marovich		
Business/Agency	Solano County Water Agency		<b>Napa</b>
Street Address	810 Vaca Valley Parkway, Suite 203		
City, State, Zip	Vacaville, CA 95688		
Telephone	707-455-1107	Fax	707-451-6099
Email	rmarovich@scwa2.com		

**2. CONTACT PERSON** (Complete only if different from applicant)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

**3. PROPERTY OWNER** (Complete only if different from applicant)

Name	Varies annually. Applicable information will be included with Annual RMA Proposed Activities letter.		
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

**4. PROJECT NAME AND AGREEMENT TERM**

A. Project Name		Lower Putah Creek and Tributaries		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2014	2018	9/1	8/31	260 days/year







# NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)	
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A)	Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B)	THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C)	SWRCB Number: _____
E.	<input checked="" type="checkbox"/> Routine Maintenance (Attachment D)	
F.	<input type="checkbox"/> CDFW Fisheries Restoration Grant Program (FRGP)	FRGP Contract Number: _____
G.	<input type="checkbox"/> Master	
H.	<input type="checkbox"/> Master Timber Harvesting	

## 6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. **Note: The Department may not process this notification until the correct fee has been received.**

	A. Project	B. Project Cost	C. Project Fee
1	Lower Putah Creek and Tributaries		
2			
3			
4			
5			
		D. Base Fee (if applicable)	1,474.25
		E. TOTAL FEE ENCLOSED	1,474.25

## 7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?	
<input checked="" type="checkbox"/> Yes (Provide the information below) <input type="checkbox"/> No	
Applicant: <u>Richard Marovich</u>	Notification Number: <u>1600-2002-0357-R2</u> Date: <u>8/30/2002</u>
B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)	
<input type="checkbox"/> Continued on additional page(s)	







# NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 8. PROJECT LOCATION

<b>A. Address or description of project location.</b> <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i>					
Putah Creek and tributaries, located in Yolo and Solano Counties. Please see the attached RMA Description and maps.					
<input checked="" type="checkbox"/> Continued on additional page(s)					
<b>B. River, stream, or lake affected by the project.</b>		Putah Creek and tributaries (see attached project description and map)			
<b>C. What water body is the river, stream, or lake tributary to?</b>		Prospect Slough			
<b>D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?</b>			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		
<b>E. County</b>	Yolo and Solano				
<b>F. USGS 7.5 Minute Quad Map Name</b>	<b>G. Township</b>	<b>H. Range</b>	<b>I. Section</b>	<b>J. ¼ Section</b>	
See attached maps					
<input type="checkbox"/> Continued on additional page(s)					
<b>K. Meridian (check one)</b>	<input type="checkbox"/> Humboldt <input checked="" type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino				
<b>L. Assessor's Parcel Number(s)</b>					
Varies annually. New Parcel numbers will be included with the Annual RMA Proposed Activities letter.					
<input type="checkbox"/> Continued on additional page(s)					
<b>M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)</b>					
Latitude/Longitude	Latitude: see attached map		Longitude:		
	<input type="checkbox"/> Degrees/Minutes/Seconds		<input checked="" type="checkbox"/> Decimal Degrees		<input type="checkbox"/> Decimal Minutes
UTM	Easting:	Northing:		<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 or WGS 84			







# NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 9. PROJECT CATEGORY AND WORK TYPE *(Check each box that applies)*

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other (specify):</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>







# NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

Please see the attached RMA Description.

☐ Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

Excavators, skid-steers, articulating front-loaders, utility tractors, backhoe, discs, seed drills, augers, 6x6 trucks, dump trucks, utility trailers, equipment trailers, water trucks, chippers, mowers, ATVs, spray equipment, and pick-up trucks. The type of equipment used will depend on the activity.

☐ Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

☒ Yes    ☐ No (Skip to box 11)

D. Will the proposed project require work in the wetted portion of the channel?

☒ Yes (Enclose a plan to divert water around work site)  
☐ No







# NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Impacts will vary annually and with each activity. Common impacts are temporary loss of vegetation cover, soil disturbance, and activities such as scarification will temporarily disturb the cemented gravel in the channel bed. Please see the attached list of activities for annual limits of length, area, or material volume related to each activity.

☐ Continued on additional page(s)

B. Will the project affect any vegetation?

☒ Yes (Complete the tables below) ☐ No

Vegetation Type	Temporary Impact	Permanent Impact
Native and non-native riparian veg.	Linear feet: _____ Total area: <u>Varies Annually</u>	Linear feet: _____ Total area: <u>Varies Annually</u>
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
non-native trees, and native trees under 4 inches DBH	varies annually	

☐ Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

☒ Yes (List each species and/or describe the habitat below) ☐ No ☐ Unknown

Desmocerus californicus dimorphus, Buteo swainsoni, Thamnophis gigas, Emys marmorata, and Oncorhynchus tshawytscha

☐ Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

CNDDDB; UC Davis Museum of Wildlife and Fish Biology

☐ Continued on additional page(s)

E. Has a biological study been completed for the project site?

☐ Yes (Enclose the biological study) ☒ No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

☐ Yes (Enclose the hydrological study) ☒ No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.







**12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES**

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Disturbed soil will be seeded with a native grass seed mix, and covered with straw. Native straw will be used when available locally. A typical seed mix will consist of *Elymus triticoides* (creeping wildrye), *Hordeum brachyantherum* (meadow barley), and *Elymus trachycaulus* (slender wheatgrass).

Additional BMPs, such as fiber rolls, may be used when deemed appropriate.

Equipment will not be operated from within a flowing watercourse.

All activities will take place during periods of dry weather and unsaturated soil conditions.

☐ Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Work requiring heavy equipment will only take place during the construction season (April 1-November 30). Activities that require heavy equipment operation for consecutive work days will not take place during Lower Putah Creek's observed nesting bird season (Feb. 15 – Aug. 15) without qualified personnel surveying the work area for nesting birds. All activities will be appropriately timed and executed to minimize disturbance to fish, wildlife, and their native habitat.

☐ Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

The purpose of the proposed activities are to improve fish and wildlife habitat; therefore, no mitigation measures are proposed.

☐ Continued on additional page(s)

**13. PERMITS**

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. \_\_\_\_\_ ☐ Applied ☐ Issued

B. \_\_\_\_\_ ☐ Applied ☐ Issued

C. \_\_\_\_\_ ☐ Applied ☐ Issued

D. Unknown whether ☐ local, ☐ state, or ☐ federal permit is needed for the project. (Check each box that applies)

☐ Continued on additional page(s)







## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 14. ENVIRONMENTAL REVIEW

<p>A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?</p> <p><input checked="" type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each)</p> <p><input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)</p>			
<input checked="" type="checkbox"/> Notice of Exemption <input type="checkbox"/> Initial Study <input type="checkbox"/> Negative Declaration <input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigated Negative Declaration <input type="checkbox"/> Environmental Impact Report <input type="checkbox"/> Notice of Determination (Enclose) <input type="checkbox"/> Mitigation, Monitoring, Reporting Plan	<input type="checkbox"/> NEPA document (type): _____ <input type="checkbox"/> CESA document (type): _____ <input type="checkbox"/> ESA document (type): _____	
<p>B. State Clearinghouse Number (if applicable) _____</p>			
<p>C. Has a CEQA lead agency been determined? <input type="checkbox"/> Yes (Complete boxes D, E, and F) <input type="checkbox"/> No (Skip to box 14.G)</p>			
<p>D. CEQA Lead Agency</p>		<p>Solano County Water Agency</p>	
<p>E. Contact Person</p>		<p>Mark Snyder</p>	
		<p>F. Telephone Number</p>	<p>707-455-1108</p>
<p>G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.</p> <p>Habitat restoration projects along Lower Putah Creek are ongoing. The attached spread sheets lists proposed projects that are not yet funded. A 1,100 linear feet channel re-alignment and floodplain restoration project along Putah Creek at the City of Winters is schedule to begin summer 2014.</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>			
<p>H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?</p> <p><input type="checkbox"/> Yes (Enclose proof of payment) <input checked="" type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)</p> <p>A Notice of Exemption will be filed.</p> <p>Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.</p>			

### 15. SITE INSPECTION

<p>Check one box only.</p>	
<p><input type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.</p>	
<p><input checked="" type="checkbox"/> I request the Department to first contact (insert name) <u>Richard Marovich</u>          at (insert telephone number) <u>707-455-1107</u> to schedule a date and time          to enter the property where the project described in this notification will take place. I understand that this may          delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or          the Department's issuance of a draft agreement pursuant to this notification.</p>	







## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

☐ Yes (Please enclose the information via digital media with the completed notification form)

☒ No

### 17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.



Signature of Applicant or Applicant's Authorized Representative

6-30-14

Date

RICHARD A. MAROVICH

Print Name



