



---

**San Francisco Bay Regional Water Quality Control Board**

April 29, 2013  
CIWQS Place No. 728678

*Sent via electronic mail--no hard copy to follow*

California Department of Transportation  
Attn: Mr. Nicolas Endrawos  
[Nicolas\\_Endrawos@dot.ca.gov](mailto:Nicolas_Endrawos@dot.ca.gov)  
111 Grand Ave.  
Oakland, CA 94612-3717

**Subject: Water Quality Certification for the Interstate 80/Interstate 680/State Route 12 Interchange Project, Phase 1, City of Fairfield, Solano County**

Department Project No.: EA 04-0A5300

Dear Mr. Endrawos:

This certification includes legal requirements to submit information prior to commencement of certain project activities. It is the responsibility of the California Department of Transportation, Solano Transportation Authority, and their contractors and sub-contractors, to ensure that all conditions of this certification are met.

The following conditions may affect the Department's construction schedule: 1, 2, 3, 4, 14, 15, and 28.

The following conditions include enforceable timelines to submit information or reports, or conduct activities that could result in enforcement actions if not provided: 1, 2, 3, 4, 8, 11, 12, 15 and 16.

Certification conditions start on certification page 5.

Then overall project consists of several phases which are planned to be built over several decades. Phase 1 consists of 7 construction packages which are scheduled over the next 7 years. This certification permits the impacts associated with only the first 7 construction packages and directs all mitigation for the entire first phase. Phases 2-7 construction package impacts are intended to be permitted with Waste Discharge Requirements to be issued in the near future.

---

JOHN MULLER, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

1615 Clay St., Suite 1400, Oakland, CA 94612 | [www.waterboards.ca.gov/sanfranciscobay](http://www.waterboards.ca.gov/sanfranciscobay)

We have reviewed and hereby issue water quality certification to the California Department of Transportation (Department) for the Interstate 80/Interstate 680/State Route 12 Interchange Project (Project). The Department is seeking an Individual Permit for the Project from the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344). As such, the Department has applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) for a Clean Water Act Section 401 water quality certification that the Project will not violate State water quality standards.

**Project:** The Department is proposing to improve traffic facilities through the Interstate 80/Interstate 680/State Route 12 corridor in the City of Fairfield. The purpose of the Project is to relieve congestion, reduce traffic on local roads, encourage HOV lane use and ridesharing, improve safety, accommodate current and future truck volumes, and facilitate truck scale operation throughout and around the Project area. The Project has been divided into seven individual construction packages:

- **Construction Package 1**

Major project elements in construction package 1 include constructing a new westbound I-80 to westbound State Route 12 connector, widening westbound I-80 between the existing I-80/I-680 separation and westbound State Route 12, and reconstructing the west half of the I-80 Green Valley Road interchange. Work would take approximately two years and start in 2013.

- **Construction Package 2**

Construction package 2 involves constructing a new I-680/Red Top Road interchange, realigning Lopes and Fermi Roads, and realigning Ramsey Road around the proposed I-680 Red Top Road interchange. Construction would start in 2014 and last approximately 1.5 years.

- **Construction Package 3**

Major project elements include: Constructing the westbound I-80 to southbound I-680 connector; widening westbound I-80 between the I-80/Suisun Valley Road and the I-80/Green Valley Road interchanges; reconstructing the westbound I-80 bridge over Green Valley Creek; constructing a new westbound on-ramp to I-80 at Suisun Valley Road; constructing a new westbound off-ramp from I-80 to Green Valley Road; constructing a new bridge and westbound I-80 off-ramp to Green Valley Road over Green Valley Creek; removing the existing I-80/I-680 connector bridges over I-80 and Green Valley Road; removing Neitzel Road; and excavation and grading of the Business Center Drive Extension. Construction would start in 2014 and last approximately two years.

- **Construction Package 4**

Major project elements include: Constructing the northbound I-680 to eastbound I-80 connector; reconstructing the eastbound State Route 12 west connector to eastbound I-80; reconstructing the eastbound I-80 off-ramp to Green Valley Road; reconstructing the Green Valley Road on-ramp to eastbound I-80; realigning Lopes

Road and Green Valley Road to connect with the original I-680 alignment; widening eastbound State Route 12 and existing culvert one lane to the south; and constructing a retaining wall between Ledgewood Creek and Pennsylvania Avenue. Construction would start in 2014 and last approximately two years.

- **Construction Package 5**

Construction package 5 includes constructing a new Red Top Road/Business Center Drive Extension, constructing a northbound I-680 to westbound State Route 12 west connector, reconstructing the I-80/Red Top Road interchange, and constructing a new State Route 12/Red Top Road Interchange. Construction would start in 2018 and last approximately two years.

- **Construction Package 6**

Construction package 6 involves constructing new I-80/I-680 connectors. Construction would start in 2018 and last approximately two years.

- **Construction Package 7**

Construction package 7 involves constructing a new northbound I-680/I-80 loop on-ramp, constructing an eastbound I-80 connector to southbound I-680, and reconstructing the Union Pacific Railroad I-80 overpass. Construction would start in 2018 and last approximately one and-a-half years.

This certification allows construction of construction package 1. The Water Board is certifying construction package 1 in advance of issuance of Waste Discharge Requirements (WDRs) for the entire Project at the request of Caltrans because the timeline for WDRs issuance would jeopardize Caltrans's funding deadline for construction package 1. The Water Board plans to adopt Waste Discharge Requirements (WDRs) for construction of the subsequent six construction packages.

**Impacts:** Project implementation would permanently impact approximately 4.82 acres of wetlands, approximately 2,444 linear feet of waters, and approximately 3.33 acres of riparian habitat. Permanent impacts to jurisdictional waters and wetlands for each construction package are summarized below in Attachment A, *Summary of Permanent Impacts*.

Project implementation would result in temporary impacts to approximately 0.55 acres of jurisdictional seasonal freshwater wetlands, approximately 1,049 linear feet of jurisdictional waters, and approximately 0.11 acres of riparian woodland as a result of construction access. Temporary impacts to jurisdictional waters and wetlands for each construction package are summarized in Attachment B, *Summary of Temporary Impacts*.

**Roadway Pollutant Impacts:** implementation of construction package 1 would result in approximately 8.1 acres of new and 3.8 acres of reworked impervious area. Stormwater runoff from impervious areas may contain hydrocarbons, metals, volatile organic

compounds, trash, and sediment at levels that may significantly impact jurisdictional waters if left untreated.

**Hydromodification Impacts:** Added impervious areas may result in alterations to existing hydrologic regimes, resulting in erosion and/or changes of sediment transport in receiving waters (hydromodification). Hydromodification mitigation is not required for this Project because the Project area is not within the Fairfield-Suisun Hydromodification control areas, as identified in Attachment D of the Water Board's Municipal Regional Permit (Order No. R2-2009-0074).

**Avoidance and Minimization:** The Department has met regularly since 2007, with staff from the Water Board, U.S. Environmental Protection Agency, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service (USFWS) to discuss various project alternatives. The interagency group agreed that the current design alternative represents the least environmentally damaging practicable alternative that still achieves the basic project purpose.

After selecting the current project design, the Department found additional opportunities to reduce wetland fill through incorporation of retaining walls and alteration of the proposed Business Center Drive extension profile. This certification requires the Department to investigate additional opportunities to avoid and minimize impacts to waters of the State and the U.S. prior to construction of packages 2 through 7 (see condition 2.a).

**Mitigation:** To mitigate for permanent impacts to wetlands, waters, and riparian habitat, the Department shall: create no less than 8.25 acres of seasonal freshwater wetlands at Suisun Creek Preserve; create no less than 2,461 linear feet of creek channel at Suisun Creek Preserve; create no less than 3.33 acres of riparian habitat at Suisun Creek Preserve and no less than 3.33 acres at a location yet to be determined; and, construct no less than 7,752 linear feet of unlined, earthen ditches within the Project limits.

To mitigate for temporary impacts to wetlands and waters, the Department shall restore temporarily impacted areas to previous or enhanced condition. A specific plan to restore temporarily impacted areas shall be provided in the Final Mitigation and Monitoring Plan (MMP) (see certification condition no. 7.a).

**Roadway Pollutant Mitigation:** As mitigation for increased pollutant loads associated with impervious areas for construction package 1, the Department shall construct a biofiltration basin in the northwest quadrant of the Interstate 80/Green Valley Road interchange to treat 17.13 acres of impervious area.

**CEQA Compliance:** The Department prepared and approved an Environmental Impact Report for this Project pursuant to the provisions of the California Environmental Quality Act. The Department filed a Notice of Determination on October 29, 2012 (SCH No. 2003052021).

**California Wetlands Portal:** It has been determined through regional, state, and national studies that tracking of mitigation/restoration projects must be improved to better assess the performance of these projects. In addition, to effectively carry out the State's No Net Loss Policy for wetlands, the State needs to closely track wetland losses, gains, and mitigation/restoration project success. Therefore, we require the Department use the California Wetlands Standard Form to provide Project information related to impacts and mitigation/restoration measures (see Condition Nos. 11 and 12 of this certification). An electronic copy of the form and instructions may be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>

Project information concerning impacts and mitigation/restoration will be made available at the web link: <http://www.californiawetlands.net>

**Certification:** I hereby issue an order certifying that any discharge from the referenced Project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 – DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

1. The mitigation requirements of this certification reflect the Department's intent to commence all offsite mitigation concurrent with Construction Package 1 impacts to wetlands and waters. If the Department cannot commence mitigation at Suisun Creek Preserve within six months from initiation of Construction Package 1 impacts to wetlands and waters, then the Department shall submit, subject to approval by the Executive Officer, a mitigation proposal to account for temporal loss to wetlands and waters impacted during the delay period.

All mitigation required for Construction Package 1 shall be constructed prior to completion of Construction Package 1 construction activities. If the Department cannot complete Suisun Creek Preserve mitigation prior to completion of

Construction Package 1, then the outstanding Suisun Creek Mitigation requirements for Construction Package 1 shall thereafter increase by 20% per annum;

2. The Department shall not commence any element of Project construction for construction packages two through seven until Waste Discharge Requirements for those construction packages have been adopted by the Water Board. Water Board staff will request additional information before drafting Waste Discharge Requirements. Requested information shall include, but not be limited to:
  - a. Analyses of additional opportunities to avoid and minimize impacts to wetlands and waters and their beneficial uses. These analyses shall be conducted as the design details for construction packages 2-7 progress;
  - b. Confirmation of required onsite mitigation implementation;
  - c. Confirmation of Suisun Creek Preserve mitigation implementation. Please note if the Suisun Creek Preserve is not meeting performance standards (if applicable) or if any unforeseeable conditions render any portion of the proposed mitigation infeasible, then Waste Discharge Requirements (WDRs) shall not be issued until the site is brought into compliance or alternative mitigation is identified;
  - d. A proposal to create or restore no less than 3.33 acres of riparian habitat within the Suisun Bay watershed (above and beyond the 3.33 acres required at Suisun Creek Preserve). The riparian habitat shall be planted no later than December 15, 2014. The proposal shall include a monitoring and reporting proposal equivalent to the riparian planting proposal in the final, accepted MMP; and
  - e. A proposal to treat stormwater from an area of impervious surface equivalent to all added and reworked impervious areas associated with Construction Packages 2-7. The Department may propose stormwater treatment proposal timelines for each individual construction package. Under this scenario, WDRs would prohibit construction package construction until the Water Board's Executive Officer accepts the respective stormwater treatment proposal;
- \* 3. Not less than sixty days prior to commencement of Package 1 construction, the Department shall submit a Final Mitigation and Monitoring Plan for restoration and enhancement activities at the Suisun Creek Preserve (Suisun Plan). The Suisun Plan must be submitted in this time frame to accommodate public and staff review. Package 1 staging and construction shall not commence until the Suisun Plan has been found acceptable to Water Board staff. The Suisun Plan shall include, but not be limited to:

- a. A proposal to create no less than 8.25 acres of seasonal freshwater wetlands at Suisun Creek Preserve; create no less than 2,461 linear feet of creek channel at Suisun Creek Preserve; and create no less than 3.33 acres of riparian habitat at Suisun Creek Preserve;
- b. A detailed riparian and wetland planting plan and palette. Seed mixes shall consist only of species native to the Suisun Bay hydrologic area. The Department shall prioritize use of seeds developed from local seed sources to promote genetic integrity;
- c. An invasive species control plan;
- d. A plan for controlled herbicide use that includes use criteria (e.g., target invasives, weather condition criteria, herbicide types). All herbicide use shall be inventoried and reported in each mitigation site annual report. The type of herbicide, target species, frequency and duration of use shall be reported);
- e. Performance standards for all plantings;
- f. A monitoring period no less than ten years for wetland and riparian areas;
- g. An adaptive management plan;
- h. A grazing plan that prohibits cattle from entering riparian areas. The Department may propose "flash grazing" in riparian areas after defining triggers for such grazing as well as management protocol to ensure damage to channel morphology and riparian plants are prevented. If cattle would be allowed to enter wetland areas, the grazing plan shall explain the benefit to wetland grazing, the circumstances and timing under which wetland grazing would be allowed, and how the wetlands would be protected from grazing activities. The grazing plan shall acknowledge that grazing plan modification, subject to the review of the resource agencies, may be necessary should listed species become established within the grazing area;
- i. A plan to wait two full growing seasons after termination of supplemental irrigation before considering success of the associated plantings; and
- j. A plan to submit annual reports to the Water Board by December 31<sup>st</sup> of each year. All monitoring reports shall include photo-documentation utilizing consistent photo vantage points. If the monitoring report includes management recommendations, then the report must express whether the Department shall implement those recommendations.

Any changes to the final, accepted MMP shall be subject to the review and acceptance of Water Board staff prior to implementation.

4. Prior to Year 10 mitigation monitoring at Suisun Creek Preserve and transfer of the Suisun Creek Preserve to the long-term manager, the Department shall demonstrate

the ability to secure all supplemental water necessary to support mitigation site functions. This may occur in the form of a secure water right or the right to purchase and convey supplemental water to the mitigation site;

5. Not less than sixty days prior to commencement of Package 1 construction, the Department shall submit a letter of financial assurance to ensure that the MMP approved by the Executive Officer shall be implemented as accepted and that the mitigation habitat shall be maintained in perpetuity. The letter shall assure the purchase and implementation of alternative compensatory mitigation in the event of mitigation failure;
6. The Department shall ensure that a conservation easement for the Suisun Creek Preserve is completed and recorded with the County Recorder's Office. The conservation easement shall specify preservation of the mitigation area as wetland and riparian wildlife habitat, in perpetuity. Copies of the recorded documents shall be provided to the Water Board within six months of initiation of impact to wetlands and waters in construction package 1;
7. Not less than sixty days prior to commencement of Package 1 construction, the Department shall submit a Final Mitigation and Monitoring Plan for restoration of temporarily impacted areas and creation of unlined, earthen ditches onsite (Onsite Plan). The Onsite Plan must be submitted in the above time frame to allow for public and staff review. Package 1 staging and construction shall not commence until the Onsite Plan has been found acceptable to Water Board staff. The Onsite Plan may be incorporated into the Suisun Plan. The Onsite Plan shall include:
  - a. An onsite temporary impact restoration plan detailing specific procedures to restore temporarily impacted wetlands and waters to their pre-construction conditions within the first growing season following cessation of construction activity in those areas. Restoration measures shall be specific to the type of impact (e.g., compaction from heavy machinery and removal of vegetation);
  - b. Planting plans and palettes. Seed mixes shall consist only of species native to the Suisun Bay Hydrologic Area;
  - c. A proposal to construct 7,752 linear feet of unlined, earthen ditches within the project limits to mitigate for impacts to waters. The proposal shall include an implementation timeline for ditch construction per the timelines included in the certification mitigation summary (Attachment C) as well as the proposed, exact location of the ditches. The ditches shall not be considered successful until they are verified as federal jurisdictional wetlands or waters. To demonstrate the constructed ditches are jurisdictional, the Department shall submit a wetland delineation to the U.S. Army Corps of Engineers for



verification. The Onsite Plan shall also include a monitoring and reporting plan for the constructed ditches;

8. As mitigation for increased pollutant loads associated with impervious areas in construction package 1, the Department shall provide treatment of stormwater runoff from no less than 11.9 acres of impervious area using a bioretention basin. The basin shall be installed consistent with the Project plans included in Attachment D of this certification. The basin shall be constructed as part of construction package 1. Any revisions to the bioretention basin design details shall be subject to the acceptance of Water Board staff before they are implemented.

Water Board staff recognize that the proposed design would sufficiently treat stormwater from 17.1 acres impervious area. The Department may apply surplus treatment area to future construction packages;

9. All temporarily disturbed areas shall be re-vegetated using only plant species native to the Suisun Bay Hydrologic Area. The Department shall not cause, through operation of heavy machinery, or any other construction activity, compaction of wetlands or waters in areas of temporary impact (see Attachment B for areas of temporary impact). Any compaction of wetlands or waters to areas of temporary impact shall require mitigation;
10. The Resident Engineer (or appropriately authorized agent) shall hold water quality permit compliance meetings (similar to tailgate safety meetings) to discuss permit compliance, including instructions on violation avoidance and violation reporting procedures. The meetings shall be held at least every other week, before forecasted storm events, and when a new contractor or subcontractor arrives to begin work at the site. The contractors, subcontractors and their employees, as well as any inspectors or monitors assigned to the project, shall be present at the meetings. The Department shall maintain dated sign-in sheets for attendees at these meetings, and shall make them available to the Water Board on request;
11. The Department is required to use the California Wetlands Standard Form to provide project information describing impacts and mitigation/restoration measures for construction package 1 within 30 days from the date of this certification. An electronic copy of the form can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. The completed California Wetlands form shall be submitted electronically to [habitatdata@waterboards.ca.gov](mailto:habitatdata@waterboards.ca.gov) or shall be submitted as a hard copy to both: 1) The Water Board, 1515 Clay St., Suite 1400, Oakland, CA 94612, to the attention of California Wetlands Portal; and 2) San Francisco Estuary Institute, 4911 Central Ave., Richmond, CA 94804, to the attention of California Wetlands Portal;

12. Suisun Creek Preserve mitigation monitoring reports shall be submitted to the Water Board by January 1 of each year. Modification of this deadline is subject to the acceptance of Water Board staff. The reports may be submitted by upload to the California Wetlands Portal website at <http://www.californiawetlands.net/tracker/ba/list>. Select the Suisun Creek Preserve restoration project from the Bay Area Project List and then use the "Files & Links" web-link on the mitigation site project page to upload the report. The Department shall immediately notify appropriate Water Board staff once the monitoring report has been uploaded. If the Department cannot, or chooses not to submit the report using the California Wetlands Portal, the report may be submitted directly to Water Board staff electronically, via e-mail;
13. If the Department provides advance mitigation for impacts not incurred, the Department may use that mitigation as credit for other Department project(s), subject to the acceptance of the Water Board Executive Officer. Credit for other Department project(s) may not be granted until all Project impacts have occurred and mitigated unless the Executive Officer determines that the mitigation provided is sufficient to cover all probable Project impacts;
14. Concrete shall be excluded from surface water for a period of 30 days after it is poured/sprayed. During that time the concrete shall be kept moist and runoff from the concrete shall not be allowed to enter State waters. Commercial sealants may be applied to the concrete surface in instances where 30 days of water exclusion is infeasible. If sealant is used, water shall be excluded from the site until the sealant is cured. If groundwater comes into contact with fresh concrete, it shall be prevented from flowing towards surface water;
15. The Project shall be constructed in conformance with the Project Description described in this certification and certification application materials. Any change in the Project that could impact State waters may require compensatory mitigation and shall first be reported to and found acceptable by the Water Board Executive Officer;
16. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any other water quality problem arises, the associated Project activities shall immediately cease until adequate BMPs are implemented. The Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises;
17. The Department shall adhere to the conditions imposed by the Individual Permit issued to the Department by the U.S. Army Corps of Engineers, to the Streambed Alteration Agreement issued to the Department by the California Department of Fish and Wildlife, and to the Biological Opinion issued to the Department by the USFWS;

18. All activities and best management practices (BMPs) shall be implemented according to the submitted application materials and the findings and conditions of this certification. BMPs for erosion, sediment, turbidity and pollutant control shall be implemented and in place at commencement of, during, and after any ground clearing activities, construction activities, or any other Project activities that could result in erosion, sediment, or other pollutant discharges to waters of the State. The BMPs shall be implemented in accordance with the Caltrans Construction Site Best Management Practice Manual (CCSBMPM) and all contractors and subcontractors shall comply with the CCSBMPM. BMPs for erosion and sediment control shall be utilized throughout all phases of construction, regardless of date, wherever sediment-laden runoff threatens to enter waters of the State. The Department shall stage erosion and sediment control materials at the work site. All BMPs shall be installed properly and in accordance with the manufacturer's specifications. If the Project Resident Engineer elects to install alternative BMPs for use on the project, the Department shall submit a proposal to Water Board staff for review and concurrence;
19. The Department shall not use or allow the use of erosion control products that contain synthetic materials within waters of the State at any time. The Department shall request approval from Water Board staff if an exception from this requirement is needed at a specific location. In areas outside waters of the State jurisdiction, the Department shall prioritize the use of wildlife-friendly biodegradable (not photo-degradable) erosion control products. The Department shall not use or allow the use of erosion control products that contain synthetic netting for permanent erosion control (i.e. erosion control materials to be left in place for two years or after the completion date of the Project);

If the Department finds that erosion control netting or products have entrapped or harmed wildlife, personnel shall remove the netting or product and replace it with wildlife-friendly biodegradable products ;

20. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be prohibited within waters of the State. Fueling of individual equipment types within waters of the State may be authorized if the Department first prepares a fueling plan that:
- a. Identifies the specific piece of machinery that may require fueling within waters of the State;
  - b. Provides justification for the need to refuel within State waters. The justification shall describe why fueling outside of jurisdictional waters is infeasible; and
  - c. Includes a narrative of specific BMPs that shall be employed to prevent and capture fuel releases.

Fueling of equipment within waters of the State shall be prohibited until the above mentioned plan has been approved by Water Board staff. The fueling plan may be submitted individually, included in the project Storm Water Pollution Prevention Plan (SWPPP), or submitted as a SWPPP amendment;

21. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall not result in a discharge or a threatened discharge to any waters of the State. At no time shall the Department use any vehicle or equipment which leaks any substance that may impact water quality;
22. Except as expressly allowed in this certification, the Department is prohibited from discharging waste to waters of the State. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or concrete washings, welding slag, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this certification, shall be allowed to enter into waters of the State. Except for temporary stockpiling of waste generated during demolition operations ("temporary" in this instance means generated and removed during the same working day), waste materials shall not be placed where the materials may be washed by rainfall into waters of the State;
23. The Department shall provide analysis and verification that placement of non-hazardous waste or inert materials (which may include discarded product or recycled materials) will not result in degradation of water quality, human health, or the environment. All Project-generated waste shall be handled, transported, and disposed in strict compliance with all applicable State and Federal laws and regulations. When operations are complete, any excess material or debris shall be removed from the work area and disposed of properly and in accordance with the Special Provisions for the Project and/or the 2006 Standard Specification 7-1.13, Disposal of Material Outside the Highway Right of Way. In accordance with State and Federal laws and regulations, the Department is liable and responsible for the proper disposal of waste generated by their Project;
24. All imported fill material shall be clean and free of pollutants. All fill material shall be imported from a source that has the appropriate environmental clearances and permits. The reuse of low-level contaminated solids as fill on-site shall be performed in accordance with all State and Federal policies and established guidelines; a plan for such re-use must first be submitted to Water Board staff for review and concurrence;
25. Work in flowing or standing surface waters is prohibited unless otherwise proposed in the Project description and approved by the Water Board;
26. Gravel bags used within waters of the State shall:

- a. Consist of mechanically-rounded and washed, and/or river run gravel obtained from a river or creek bed;
- b. Be clean, hard, sound, durable, uniform in quality, and free of disintegrated material, organic matter, or other deleterious substances;
- c. Be composed entirely of particles that have no more than one fractured face;
- d. Have a cleanliness value of at least 85, using the Cleanliness Value Test Method for California Test No. 227; and
- e. Have a diameter no less than 0.75 inches in diameter, and no greater than four inches in diameter.

Gravel bag fabric shall be nonwoven polypropylene geotextile (or comparable polymer) and shall conform to the following requirements:

- a. Mass per unit area, grams per square meter, min ASTM Designation: D 5261 – 270;
  - b. Grab tensile strength (25-mm grip), kilonewtons, min. ASTM Designation: D4632\* 0.89;
  - c. Ultraviolet stability, percent tensile strength retained after 500 hours, ASTM Designation: D4355, xenon arc lamp method 70 or appropriate test method for specific polymer;
  - d. Gravel bags shall be between 600 mm and 800 mm in length, and between 400 mm and 500 mm in width;
  - e. Yarn used in construction of the gravel bags shall be as recommended by the manufacturer or bag supplier and shall be of a contrasting color. The opening of gravel-filled bags shall be secured to prevent gravel from escaping. Gravel-filled bags shall be between 13 kg and 22 kg in mass; and
  - f. Caltrans shall request approval from Water Board staff if an exception from this requirement is needed for a specific location;
27. Herbicides and pesticides shall not be used within the Project. If Caltrans has a compelling case as to why herbicides and pesticides should be used, they may submit a request along with a BMP plan to Water Board staff for review, consideration, and concurrence;
28. Caltrans shall submit, subject to the acceptance of Water Board staff, a dewatering and/or diversion plan that appropriately describes the dewatered or diverted areas and how those areas will be handled during construction. The diversion/dewatering plans shall be submitted no later than 30 days prior to conducting the proposed activity. Diversion/dewatering activities shall be prohibited until Water Board staff has accepted the dewatering/diversion plan for that specific water. Information submitted shall include the area or work to be diverted or dewatered and method of the proposed activity. All diversion or dewatering activities shall be designed to minimize

the impact to waters of the State, avoid fish entrainment, and maintain natural flows upstream and downstream. All dewatering or diversion structures shall be installed in a manner that does not cause sedimentation, siltation or erosion upstream or downstream. All dewatering or diversion structures shall be removed immediately upon completion of Project activities;

29. This certification does not allow for the take, or incidental take, of any special status species. The Department shall use the appropriate protocols, as approved by the California Department of Fish and Wildlife and the USFWS, to ensure that Project activities do not impact the Beneficial Use of the Preservation of Rare and Endangered Species, as described in the San Francisco Bay Regional Water Quality Control Plan;
30. The Department shall maintain a copy of this certification at the Project site to be available at all times to Project personnel. It is the Department's responsibility to ensure that all personnel (employees, contractors, and subcontractors) are adequately informed and trained in the conditions of this certification;
31. The Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act;
32. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code and Title 23 of the California Code of Regulations, Section 3867;
33. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to California Code of Regulations Title 23, Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and
34. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833). The Water Board has received the full fee for this certification.

We anticipate your cooperation in implementing these conditions. However, please be advised that any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code, Section

13350. Failure to respond, inadequate response, late response, or failure to meet any condition of this certification may subject you to civil liability imposed by the Water Board to a maximum of \$5,000 per day per violation or \$10 for each gallon of waste discharged in violation of this certification.

This certification includes requirements for information and reports. Any requirement for a report made as a condition to this action is a formal requirement pursuant to CWC section 13267, and failure or refusal to provide, or falsification of such required report is subject to civil liability as described in California Water Code, Section 13268.

If you have any question, please contact Dale Bowyer at (510) 622-2323, or via e-mail to [DBowyer@waterboards.ca.gov](mailto:DBowyer@waterboards.ca.gov).

Sincerely,

Shin-Roei Lee

*Shin-Roei Lee* acting for

2013.04.29

17:50:47 -07'00'

Bruce H. Wolfe  
Executive Officer

Attachments: A- Summary of Permanent Impacts  
B- Summary of Temporary Impacts  
C- Summary of Mitigation Requirements for Permanent Impacts  
D- Biofiltration Basin Design Details  
E- Consideration of Public Comments

cc (via e-mail): Mr. Bill Orme SWRCB-DWQ  
Ms. Laurie Monarres, USACE  
Ms. Jane Hicks, Regulatory Branch, USACE  
Ms. Melissa Escaron, Caltrans  
Ms. Paula Gill, USACE  
Mr. Scott Steinwert, Circle Point  
Ms. Janet Adams, Solano Trans.  
Mr. Dale Bowyer, Water Board  
Mr. Cyrus Vafai, Caltrans  
Mr. Hardeep Takhar, Caltrans  
Ms. Melissa Scianni, USEPA  
Mr. Jason Brush, USEPA  
Mr. Wilfung Martono, Caltrans  
Mr. Dale Dennis, Solano Trans.

# **Attachment A**

## **Summary of Permanent Impacts**



**Table 1: Summary of Permanent Impacts—Construction Package 1**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45a	Seasonal roadside drainage, impacted at two locations: 1) Where Lopes Road terminates to the north at Green Valley Road; and 2) North of I-80, east of Green Valley Road, south of Green Valley Creek	0.10 acres (862 linear feet)
OW-61	Seasonal roadside drainage adjacent Southbound Green Valley Road, north of westbound I-80	0.04 acres
OW-61a	Seasonal roadside drainage adjacent westbound I-80. The impact area extends between just west of Green Valley Road and the I-80 off-ramp to westbound State Route 12	0.20 acres
OW-61a	Riparian vegetation (oak woodland) adjacent OW-61a	0.26 acres
OW-180	Drainage connecting wetlands W-180a and W-180b, north of westbound State Route 12, just east of Red Top Road	0.01 acres
W-13	Vernal pool seasonal wetland adjacent westbound State Route 12 approximately 250 feet west of Red Top Road	0.02 acres
W-14	Vernal pool seasonal wetland adjacent westbound State Route 12 approximately 1,800 feet west of Red Top Road	0.01 acres
W-15	Vernal pool seasonal wetland adjacent westbound State Route 12 approximately 250 feet northeast of existing Red Top Road terminus at State Route 12	0.03 acres
W-180a	Vernal pool seasonal wetland adjacent westbound State Route 12 approximately 300 feet northeast of existing Red Top Road terminus at State Route 12, just south of W-15	0.09 acres
W-180b	Seasonal wetland adjacent westbound State Route 12 approximately 400 feet south of Mangels Pond, immediately south of W-181	0.05 acres
W-181	Perennial marsh south of Mangels Pond and north of W-180b	0.01 acres
W-45-1	Seasonal wetland immediately north of westbound I-80 and immediately west of and below existing I-680 overpass	0.01 acres
W-45-2	Seasonal wetland east of Green Valley Road, west of Green Valley Creek, and north of I-80	0.03 acres
W-45a-2	Vernal pool seasonal wetland east of Green Valley Road, west of Green Valley Creek, north of I-80, south of W-45-2	0.16 acres
W-60	Seasonal wetland adjacent the north side of the existing I-80 off ramp to westbound State Route 12	0.20 acres
W-61b	Seasonal wetland adjacent north side of southbound Green Valley Road on-ramp to westbound I-80	0.47 acres
W-62	Seasonal wetland adjacent the north side of the existing I-80 off ramp to westbound State Route 12, just north of W-60	0.03 acres
W-63	Vernal pool Seasonal wetlands adjacent north side of westbound I-80 between Green Valley Road and off-ramp to State Route 12 west	0.02 acres

**Table 1: Summary of Permanent Impacts—Construction Package 1 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
W-64	Seasonal wetlands adjacent north side of westbound I-80 between Green Valley Road and off-ramp to State Route 12 west	0.02 acres
W-143		0.05 acres
<i>totals:</i>		1.55 acres and 5 linear feet of fill to jurisdictional wetlands and waters; 0.26 acres of permanent impact to riparian woodland

**Table 2: Summary of Permanent Impacts—Construction Package 2**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-19	Seasonal drainages west of southbound 680 at location of proposed Red Top Road/I-680 interchange	0.04 acres
OW-150		0.02 acres
OW-151		0.02 acres
W-20	Linear seasonal wetland between OW-19 and southbound I-680	0.05 acres
W-21	Seasonal wetland adjacent southbound I-680 at proposed location of Red Top Road on-ramp to southbound I-680	0.01 acres
W-C	Seasonal wetlands east of northbound I-680 at location of proposed Red Top Road/I-680 interchange	0.13 acres
W-D		0.36 acres
W-E		0.15 acres
<i>totals:</i>		0.78 acres of fill to jurisdictional wetlands and waters

**Table 3: Summary of Permanent Impacts—Construction Package 3**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
W-45	Perennial marsh segment of Green Valley Creek just north of westbound I-80	0.21 acres
W-26	Riparian woodland north of West Cordelia Road at location of future westbound I-80 to southbound I-680 connector	0.01 acres
OW-8	Jameson Canyon Creek beneath proposed I-80 to southbound I- 680 connector	490 linear feet (0.34 acres)
OW-8	Riparian Woodland along Jameson Canyon Creek	0.72 acres

**Table 3: Summary of Permanent Impacts—Construction Package 3 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45a	Seasonal drainage adjacent the north side of westbound I-80 just east of Green Valley Road	0.02 acres
OW-161	Seasonal drainage in footprint of the proposed Business Center Drive extension, approximately 900 feet due east from northern end of Mangels Pond	0.01 acres
OW-164	Seasonal drainage upstream of Mangels Pond in footprint of the proposed Business Center Drive extension	0.08 acres
OW-175	Seasonal drainage approximately 600 feet west of existing Business Center Drive terminus in footprint of the proposed Business Center Drive extension	43 linear feet (0.01 acres)
W-45-1	Seasonal wetland adjacent the north side of westbound I-80 east of Green Valley Road in footprint of proposed westbound I-80 to southbound I-680 connector	0.15 acres
W-109	Seasonal wetland between existing westbound I-80 mainline and I-80 westbound off-ramp to Green Valley Road	0.18 acres
W-182	Seasonal wetland between existing westbound I-80 mainline and I-80 westbound off-ramp to Green Valley Road. Just east of W-109	0.48 acres
W-F	Seasonal wetland in footprint of the proposed Business Center Drive extension approximately 1800 feet due east from southern end of Mangels Pond	0.01 acres
<i>totals:</i>		1.14 acres and 533 linear feet of fill to jurisdictional wetlands and waters; 0.73 acres of permanent impact to riparian woodland

**Table 4: Summary of Permanent Impacts—Construction Package 4**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-8	Riparian Woodland along Jameson Canyon Creek	0.07 acres
OW-8b-1	Seasonal drainage immediately east of Red Top Road, south of State Route 12	326 linear feet
OW-8b-1	Riparian woodland along seasonal drainage immediately east of Red Top Road, south of State Route 12	0.89 acres

**Table 4: Summary of Permanent Impacts—Construction Package 4 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45a	Seasonal drainage alongside eastbound I-80 between West Cordelia Road and Green Valley Road	0.10 acres
OW-90	Ledgewood Creek south of State Route 12 east	18 linear feet
OW-90a	Perennial drainage south of State Route 12 east approximately 800 feet west of Beck Avenue	0.01 acres
OW-119	Seasonal drainage outletting under State Route 12 immediately east of Pennsylvania Avenue	0.01 acres
W-28	Seasonal wetland south of eastbound I-80 approximately 1,000 feet northeast of West Cordelia Road intersection with I-80	0.03 acres
W-29	Seasonal wetland south of eastbound I-80 approximately 1,100 feet northeast of West Cordelia Road intersection with I-80	0.01 acres
W-30	Seasonal wetland south of eastbound I-80 approximately 1,700 feet northeast of West Cordelia Road intersection with I-80	0.10 acres
W-45a-1	Seasonal wetland south of eastbound I-80 approximately 500 feet northwest of the terminus of Auto Plaza Court	0.20 acres
W-90	Ledgewood Creek at State Route 12	0.02 acres
W-90a	Perennial marsh south of State Route 12 east from approximately 800 feet west of Beck Avenue to Beck Avenue	0.02 acres
W-145	Seasonal wetland south of eastbound I-80 approximately 1,200 feet northeast of West Cordelia Road intersection with I-80	0.01 acres
W-146	Seasonal wetland south of eastbound I-80 approximately 800 feet northeast of West Cordelia Road intersection with I-80	0.02 acres
W-194	Alkali seasonal marsh along southern side of SR 12 east, just west of Pennsylvania Avenue	0.01 acres
		0.54 acres and 344 linear feet of fill to jurisdictional wetlands and waters; 0.96 acres of permanent impact to riparian woodland

**Table 5: Summary of Permanent Impacts—Construction Package 5**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-1	Seasonal drainages in vicinity of the proposed Business Center Drive extension western terminus at westbound I-80	157 linear feet
OW-1a		213 linear feet
OW-2		22 linear feet
OW-2a		0.01 acres

**Table 5: Summary of Permanent Impacts—Construction Package 5 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-3	Seasonal drainage in location of proposed Business Center Drive extension on-ramp to westbound I-80	0.01 acres
OW-8	Riparian Woodland along Jameson Canyon Creek	0.11 acres
OW-8a	Riparian woodland along Jameson Canyon Creek at location of proposed Business Center Drive extension, south of SR 12	0.20 acres
OW-8b-1	Riparian woodland along seasonal drainage immediately east of Red Top Road, south of State Route 12	0.46 acres
OW-8c	Riparian woodland along seasonal Jameson Canyon Creek tributary, south of I-80, just northeast of confluence with Jameson Canyon Creek	0.09 acres
OW-158	Seasonal drainage north and south of SR 12 west approximately 1,700 feet west of Red Top Road	85 linear feet
OW-158a		342 linear feet
OW-158a	Riparian woodland at OW-158a	0.41 acres
OW-160a	Seasonal drainage south of SR 12 west approximately 1,500 feet west of Red Top Road	171 linear feet
OW-162	Seasonal drainage north and south of SR 12 west approximately 1,050 feet west of Red Top Road	395 linear feet
OW-163	Seasonal drainage north and south of SR 12 west approximately 250 feet west of Red Top Road	0.01 acres
OW-175	Seasonal drainage approximately 600 feet west of existing Business Center Drive terminus in footprint of the proposed Business Center Drive extension	37 linear feet (0.01 acres)
OW-175a	Seasonal drainage north of SR 12 west, just north of the Red Top Road, adjacent eastern end of W-15	0.01 acres
W-13	Vernal pool seasonal wetland north of SR 12 approximately 150 feet west of the Red Top Road terminus	0.26 acres
W-14	Vernal pool seasonal wetland north of SR 12 approximately 1600 feet west of the Red Top Road terminus and directly north of OW-160a	0.08 acres
W-15	Vernal pool seasonal wetland north of SR 12 west, just northeast of Red Top Road	0.08 acres
W-26	Riparian woodland north of West Cordelia Road at location of future westbound I-80 to southbound I-680 connector	0.01 acres
W-42	Seasonal wetland adjacent southern side of Southern-Pacific railroad and eastbound I-80	0.03 acres
W-158a	Seasonal wetland at southern extent of OW-158a	0.01 acres
W-173	Vernal pool seasonal wetland north of SR 12 west, just north of the Red Top Road	0.01 acres

**Table 5: Summary of Permanent Impacts—Construction Package 5 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
W-177	Seasonal wetlands north of SR 12 west, just north of the Red Top Road	0.01 acres
W-178		0.01 acres
W-179		0.01 acres
W-180a	Vernal pool seasonal wetland north of SR 12 west, just northeast of the Red Top Road	0.08 acres
W-180b	Seasonal wetland north of SR 12 west, just north of the Red Top Road. East of W-180a with a hydrological connection via OW-180	0.06 acres
<i>totals:</i>		0.68 acres and 1,422 linear feet of fill to jurisdictional wetlands and waters; 1.28 acres of permanent impact to riparian woodland

**Table 6: Summary of Permanent Impacts—Construction Package 6**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45	Green Valley Creek in I-80 Median	11 linear feet (0.01 acres)
		11 linear feet of fill to jurisdictional waters

**Table 7: Summary of Permanent Impacts—Construction Package 7**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-8	Jameson Canyon Creek at I-80	118 Linear Feet (0.06 acres)
OW-61a	Seasonal drainage adjacent northern side of existing westbound I-80 off-ramp to SR 12 westbound	0.02 acres
OW-61a	Riparian vegetation (oak woodland) adjacent OW-61a	0.02 acres
W-26	Riparian woodland north of West Cordelia Road at location of future westbound I-80 to southbound I-680 connector	0.05 acres
W-41	Riparian Woodland along eastbound Cordelia Road, just south of I-80	0.03 acres

**Table 7: Summary of Permanent Impacts—Construction Package 7 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
W-60	Seasonal wetland adjacent northern side of existing westbound I-80 off-ramp to SR 12 westbound	0.11 acres
<i>totals:</i>		0.13 acres and 129 linear feet of fill to jurisdictional wetlands and waters; 0.10 acres of permanent impact to riparian woodland

**Attachment B**  
**Summary of Temporary Impacts**



**Table 8: Summary of Temporary Impacts—Construction Package 1**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45a	Seasonal roadside drainage, impacted at two locations: 1) Where Lopes Road terminates to the north at Green Valley Road; and 2) North of I-80, east of Green Valley Road, south of Green Valley Creek	0.02 acres
OW-61a	Seasonal roadside drainage adjacent westbound I-80. The impact area extends between just west of Green Valley Road and the I-80 off-ramp to westbound State Route 12	0.05 acres
W-A1	Seasonal wetland between Grobric Court, Central Way, and Ritchie Road	0.18 acres
W-45-2	Seasonal wetland east of Green Valley Road, west of Green Valley Creek, and north of I-80	0.03 acres
W-65	Seasonal wetland adjacent north side of westbound I-80 between Green Valley Road and off-ramp to State Route 12 west. Approximately 200 feet north of W-64	0.01 acres
W-181	Perennial marsh south of Mangels Pond and north of W-180b	0.01 acres
<i>totals:</i>		0.30 acres of temporary impact to jurisdictional wetlands and waters

**Table 9: Summary of Temporary Impacts—Construction Package 2**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-150	Seasonal drainage west of southbound 680 at location of proposed Red Top Road/I-680 interchange	0.05 acres
<i>totals:</i>		0.05 acres of temporary impact to jurisdictional waters

**Table 10: Summary of Temporary Impacts—Construction Package 3**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
W-26	Riparian woodland north of West Cordelia Road at location of future westbound I-80 to southbound I-680 connector	0.02 acres
OW-8	Jameson Canyon Creek beneath proposed I-80 to southbound I-680 connector	80 linear feet (0.06 acres)

**Table 10: Summary of Temporary Impacts—Construction Package 3 (continued)**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45	Green Valley Creek at I-80	111 linear feet (0.18 acres)
OW-45a	Seasonal drainage adjacent the north side of westbound I-80 just east of Green Valley Road	0.01 acres
OW-150	Seasonal drainage west of southbound 680 at location of proposed Red Top Road/I-680 interchange	0.04 acres
<i>totals:</i>		0.05 acres and 191 linear feet of temporary impacts to jurisdictional waters; 0.02 acres of temporary impacts to riparian woodland

**Table 11: Summary of Temporary Impacts—Construction Package 4**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-8	Jameson Canyon Creek at I-80	30 linear feet (0.02 acres)
OW-45a	Seasonal drainage alongside eastbound I-80 between West Cordelia Road and Green Valley Road	0.01 acres
W-26	Riparian woodland north of West Cordelia Road at location of future westbound I-80 to southbound I-680 connector	0.18 acres
W-28	Seasonal wetland south of eastbound I-80 approximately 1,000 feet northeast of West Cordelia Road intersection with I-80	0.01 acres
W-30	Seasonal wetland south of eastbound I-80 approximately 1,700 feet north east of West Cordelia Road intersection with I-80	0.05 acres
W-144	Seasonal wetland south of eastbound I-80 approximately 1,100 feet northeast of West Cordelia Road intersection with I-80	0.01 acres
W-145	Seasonal wetland south of eastbound I-80 approximately 1,200 feet northeast of West Cordelia Road intersection with I-80	0.01 acres
		0.08 acres and 30 linear feet of temporary impact to jurisdictional wetlands and waters

**Table 12: Summary of Temporary Impacts—Construction Package 5**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-1	Seasonal drainages in vicinity of the proposed Business Center Drive extension western terminus at westbound I-80	215 linear feet
OW-2a		0.01 acres
OW-8	Jameson Canyon Creek beneath proposed I-80 to southbound I-680 connector	162 linear feet (0.14 acres)
OW-8a	Jameson Canyon Creek at location of proposed Business Center Drive extension, south of SR 12	67 linear feet (0.03 acres)
OW-8b-1	Seasonal drainage immediately east of Red Top Road, south of State Route 12. Temporary impacts at three separate locations	265 linear feet (0.06 acres)
OW-8c	Seasonal Jameson Canyon Creek tributary, south of I-80, just northeast of confluence with Jameson Canyon Creek	14 linear feet (0.01 acres)
OW-160a	Seasonal drainage south of SR 12 west approximately 1,500 feet west of Red Top Road	11 linear feet (0.01 acres)
OW-162	Seasonal drainage north and south of SR 12 west approximately 1,050 feet west of Red Top Road	46 linear feet (0.01 acres)
OW-175a	Seasonal drainage north of SR 12 west, just north of the Red Top Road, adjacent eastern end of W-15	0.01 acres
OW-176	Seasonal drainage approximately 500 feet west of existing Business Center Drive terminus in footprint of the proposed Business Center Drive extension	19 linear feet (0.01 acres)
W-15	Vernal pool seasonal wetland north of SR 12 west, just northeast of Red Top Road	0.08 acres
W-26	Riparian woodland north of West Cordelia Road at location of future westbound I-80 to southbound I-680 connector	0.03 acres
W-41	Riparian Woodland along eastbound Cordelia Road, just south of I-80	0.03 acres
W-158	Seasonal wetland at southeastern extent of OW-158a, immediately adjacent northern edge of Southern Pacific Railroad	0.01 acres
W-158a	Seasonal wetland at southern extent of OW-158a	0.01 acres
W-160	Seasonal wetland with hydrologic connection and downstream of OW-160a	0.01 acres
W-180b	Seasonal wetland north of SR 12 west, just north of the Red Top Road. East of W-180a with a hydrological connection via OW-180	0.08 acres
W-181	Perennial marsh south of Mangels Pond and north of W-180b	0.08 acres

**Table 12: Summary of Temporary Impacts—Construction Package 5**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
		0.06 acres and 799 linear feet of temporary impact to jurisdictional wetlands and waters; 0.06 acres of temporary impacts to riparian woodland
	<i>totals:</i>	

**Table 13: Summary of Temporary Impacts—Construction Package 6**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-45a	Seasonal roadside drainage, impacted at two locations: 1) Where Lopes Road terminates to the north at Green Valley Road; and 2) North of I-80, east of Green Valley Road, south of Green Valley Creek	0.01 acres
		0.01 acres of temporary impact to jurisdictional waters

**Table 14: Summary of Temporary Impacts—Construction Package 7**

Feature ID (as provided in application materials)	Jurisdictional Feature Impacted and Location	Acreage and/or Linear Footage of Permanent Impact
OW-8	Jameson Canyon Creek at I-80	15 linear feet (0.01 acres)
OW-8c	Seasonal Jameson Canyon Creek tributary, south of I-80, just northeast of confluence with Jameson Canyon Creek	14 linear feet (0.01 acres)
	<i>totals:</i>	29 linear feet of temporary impact to jurisdictional waters;

# **Attachment C**

## **Summary of Mitigation Requirements for Permanent Impacts**

**Table 1: Summary of Mitigation for Permanent Impacts—Construction Package 1**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-45a	0.10 acres (862 linear feet)	Construction of 1,060 linear feet of unlined, earthen ditch within the project limits during Package 1 construction
OW-61	0.04 acres	Creation of 0.08 acres of seasonal wetlands at the Suisun Creek Preserve
OW-61a	0.20 acres (2,871 linear feet)	Construction of 3,531 linear feet of unlined, earthen ditch within the project limits during Package 1 construction
OW-61a (riparian)	0.26 acres	Creation of 0.52 acres of riparian habitat at the Suisun Creek Preserve
OW-180	0.01 acres (169 linear feet)	Construction of 208 linear feet of unlined, earthen ditch within the project limits during Package 1 construction
W-13	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-14	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-15	0.03 acres	Creation of 0.06 acres of seasonal wetlands at the Suisun Creek Preserve
W-180a	0.09 acres	Creation of 0.18 acres of seasonal wetlands at the Suisun Creek Preserve
W-180b	0.05 acres	Creation of 0.10 acres of seasonal wetlands at the Suisun Creek Preserve
W-181	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-45-1	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-45-2	0.03 acres	Creation of 0.06 acres of seasonal wetlands at the Suisun Creek Preserve
W-45a-2	0.16 acres	Creation of 0.32 acres of seasonal wetlands at the Suisun Creek Preserve
W-60	0.20 acres	Creation of 0.40 acres of seasonal wetlands at the Suisun Creek Preserve
W-61b	0.47 acres	Creation of 0.94 acres of seasonal wetlands at the Suisun Creek Preserve

**Table 1: Summary of Mitigation for Permanent Impacts—Construction Package 1**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
W-62	0.03 acres	Creation of 0.06 acres of seasonal wetlands at the Suisun Creek Preserve
W-63	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-64	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-143		
<i>totals:</i>		Construction of 4,799 linear feet of unlined, earthen ditch within the project limits during Package 1 construction; Creation of 2.38 acres of seasonal wetlands at Suisun Creek Preserve; Creation of 0.52 acres of riparian habitat at the Suisun Creek Preserve

**Table 2: Summary of Mitigation for Permanent Impacts—Construction Package 2**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-19	0.04 acres	Creation of 0.08 acres of seasonal wetlands at the Suisun Creek Preserve
OW-150	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
OW-151	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-20	0.05 acres	Creation of 0.10 acres of seasonal wetlands at the Suisun Creek Preserve
W-21	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-C	0.13 acres	Creation of 0.26 acres of seasonal wetlands at the Suisun Creek Preserve
W-D	0.36 acres	Creation of 0.72 acres of seasonal wetlands at the Suisun Creek Preserve
W-E	0.15 acres	Creation of 0.30 acres of seasonal wetlands at the Suisun Creek Preserve
<i>totals:</i>		Creation of 1.56 acres of seasonal wetlands at the Suisun Creek Preserve

**Table 3: Summary of Mitigation for Permanent Impacts—Construction Package 3**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
W-45	0.21 acres	Creation of 0.42 acres of seasonal wetlands at the Suisun Creek Preserve
W-26 (riparian)	0.01 acres	Creation of 0.02 acres of riparian habitat at the Suisun Creek Preserve
OW-8	490 linear feet (0.34 acres)	Creation of 490 linear feet of creek channel at Suisun Creek Preserve
OW-8 (riparian)	0.72 acres	Creation of 1.44 acres of riparian habitat at the Suisun Creek Preserve
OW-45a	0.02 acres (94 linear feet)	Construction of 116 linear feet of unlined, earthen ditch within the project limits no later than during Package 3 construction
OW-161	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
OW-164	0.08 acres	Creation of 0.16 acres of seasonal wetlands at the Suisun Creek Preserve
OW-175	43 linear feet (0.01 acres)	Creation of 43 linear feet of creek channel at Suisun Creek Preserve
W-45-1	0.15 acres	Creation of 0.30 acres of seasonal wetlands at the Suisun Creek Preserve
W-109	0.18 acres	Creation of 0.36 acres of seasonal wetlands at the Suisun Creek Preserve
W-182	0.48 acres	Creation of 0.96 acres of seasonal wetlands at the Suisun Creek Preserve
W-F	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
<i>totals:</i>		Creation of 2.24 acres of seasonal wetlands at the Suisun Creek Preserve; Creation of 533 linear feet of creek channel at Suisun Creek Preserve; Creation of 1.46 acres of riparian habitat at the Suisun Creek Preserve; Construction of 116 linear feet of unlined, earthen ditch within the project limits no later than during Package 3 construction



**Table 4: Summary of Mitigation for Permanent Impacts—Construction Package 4**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-8 (riparian)	0.07 acres	Creation of 0.14 acres of riparian habitat at the Suisun Creek Preserve
OW-8b-1	326 linear feet	Creation of 326 linear feet of creek channel at Suisun Creek Preserve
OW-8b-1 (riparian)	0.89 acres	Creation of 1.21 acres of riparian habitat at the Suisun Creek Preserve
		Creation and/or restoration of 0.57 acres of riparian habitat at a location TBD
OW-45a	0.10 acres (2,071 linear feet)	Construction of 2,547 linear feet of unlined, earthen ditch within the project limits no later than during Package 4 construction
OW-90	18 linear feet	Creation of 18 linear feet of creek channel at Suisun Creek Preserve
OW-90a	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
OW-119	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-28	0.03 acres	Creation of 0.06 acres of seasonal wetlands at the Suisun Creek Preserve
W-29	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-30	0.10 acres	Creation of 0.20 acres of seasonal wetlands at the Suisun Creek Preserve
W-45a-1	0.20 acres	Creation of 0.40 acres of seasonal wetlands at the Suisun Creek Preserve
W-90	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-90a	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-145	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve
W-146	0.02 acres	Creation of 0.04 acres of seasonal wetlands at the Suisun Creek Preserve
W-194	0.01 acres	Creation of 0.02 acres of seasonal wetlands at the Suisun Creek Preserve

**Table 4: Summary of Mitigation for Permanent Impacts—Construction Package 4 (continued)**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
<i>totals:</i>		Creation of 344 linear feet of creek channel at Suisun Creek Preserve; Construction of 2,547 linear feet of unlined, earthen ditch within the project limits no later than during Package 4 construction; Creation of 1.35 acres of riparian habitat at the Suisun Creek Preserve; Creation and/or restoration of 0.57 acres of riparian habitat at a location TBD; Creation of 0.88 acres of seasonal wetlands at the Suisun Creek Preserve

**Table 5: Summary of Mitigation for Permanent Impacts—Construction Package 5**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-1	157 linear feet	Creation of 157 linear feet of creek channel at Suisun Creek Preserve
OW-1a	213 linear feet	Creation of 213 linear feet of creek channel at Suisun Creek Preserve
OW-2	22 linear feet	Creation of 44 linear feet of creek channel at Suisun Creek Preserve
OW-2a	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
OW-3	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
OW-8 (riparian)	0.11 acres	Creation and/or restoration of 0.22 acres of riparian habitat at a location TBD
OW-8a (riparian)	0.20 acres	Creation and/or restoration of 0.40 acres of riparian habitat at a location TBD
OW-8b-1 (riparian)	0.46 acres	Creation and/or restoration of 0.92 acres of riparian habitat at a location TBD
OW-8c (riparian)	0.09 acres	Creation and/or restoration of 0.18 acres of riparian habitat at a location TBD
OW-158	85 linear feet	Creation of 85 linear feet of creek channel at Suisun Creek Preserve
OW-158a	342 linear feet	Creation of 342 linear feet of creek channel at Suisun Creek Preserve
OW-158a (riparian)	0.41 acres	Creation and/or restoration of 0.82 acres of riparian habitat at a location TBD
OW-160a	171 linear feet	Creation of 171 linear feet of creek channel at Suisun Creek Preserve
OW-162	395 linear feet	Creation of 395 linear feet of creek channel at Suisun Creek Preserve
OW-163	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve

**Table 5: Summary of Mitigation for Permanent Impacts—Construction Package 5 (continued)**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-175	37 linear feet	Creation of 37 linear feet of creek channel at Suisun Creek Preserve
OW-175a	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
W-13	0.26 acres	Creation of 0.39 acres of seasonal wetlands at the Suisun Creek Preserve
W-14	0.08 acres	Creation of 0.12 acres of seasonal wetlands at the Suisun Creek Preserve
W-15	0.08 acres	Creation of 0.12 acres of seasonal wetlands at the Suisun Creek Preserve
W-26 (riparian)	0.01 acres	Creation and/or restoration of 0.02 acres of riparian habitat at a location TBD
W-42	0.03 acres	Creation of 0.045 acres of seasonal wetlands at the Suisun Creek Preserve
W-158a	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
W-173	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
W-177	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
W-178	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
W-179	0.01 acres	Creation of 0.015 acres of seasonal wetlands at the Suisun Creek Preserve
W-180a	0.08 acres	Creation of 0.12 acres of seasonal wetlands at the Suisun Creek Preserve
W-180b	0.06 acres	Creation of 0.09 acres of seasonal wetlands at the Suisun Creek Preserve
<i>totals:</i>		Creation of 1,444 linear feet of creek channel at Suisun Creek Preserve; Creation of 1.02 acres of seasonal wetlands at the Suisun Creek Preserve; Creation and/or restoration of 2.56 acres of riparian habitat at a location TBD

**Table 6: Summary of Mitigation for Permanent Impacts—Construction Package 6**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-45	11 linear feet (0.01 acres)	Creation of 22 linear feet of creek channel at Suisun Creek Preserve
<i>totals:</i>		Creation of 22 linear feet of creek channel at Suisun Creek Preserve

**Table 7: Summary of Mitigation for Permanent Impacts—Construction Package 7**

Feature ID (as provided in application materials)	Acreage and/or Linear Footage of Permanent Impact	Mitigation
OW-8	118 Linear Feet (0.06 acres)	Creation of 118 linear feet of creek channel at Suisun Creek Preserve
OW-61a	0.02 acres (236 linear feet)	Construction of 290 linear feet of unlined, earthen ditch within the project limits no later than during Package 7 construction
OW-61a (riparian)	0.02 acres	Creation and/or restoration of 0.04 acres of riparian habitat at a location TBD
W-26 (riparian)	0.05 acres	Creation and/or restoration of 0.10 acres of riparian habitat at a location TBD
W-41 (riparian)	0.03 acres	Creation and/or restoration of 0.06 acres of riparian habitat at a location TBD
W-60	0.11 acres	Creation of 0.17 acres of seasonal wetlands at the Suisun Creek Preserve
<i>totals:</i>		Creation of 118 linear feet of creek channel at Suisun Creek Preserve; Construction of 290 linear feet of unlined, earthen ditch within the project limits no later than during Package 7 construction; Creation of 0.17 acres of seasonal wetlands at the Suisun Creek Preserve; Creation and/or restoration of 0.20 acres of riparian habitat at a location TBD

**Attachment D**  
**Biofiltration Basin Design Details**

CIVIL	DATE	BY	SCALE
04	12.27.12.5	148	

REVISED CIVIL ENGINEER, STATE OF CALIFORNIA

PROJECT: **GREEN VALLEY RD**

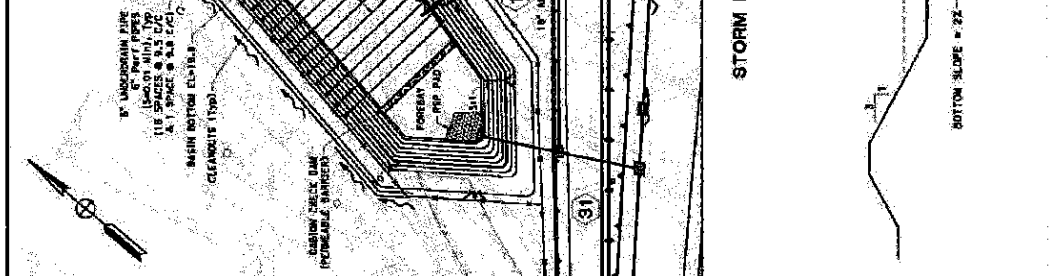
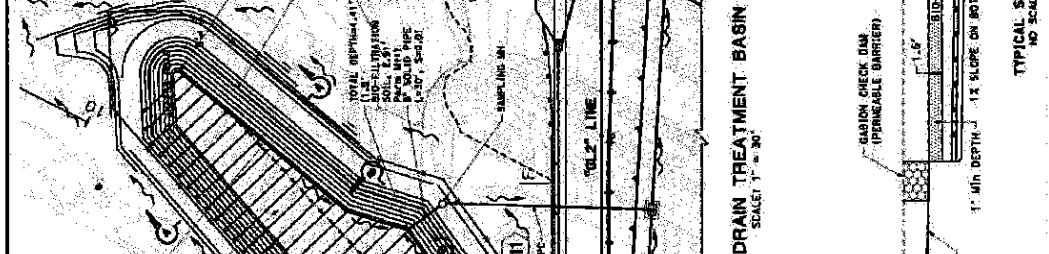
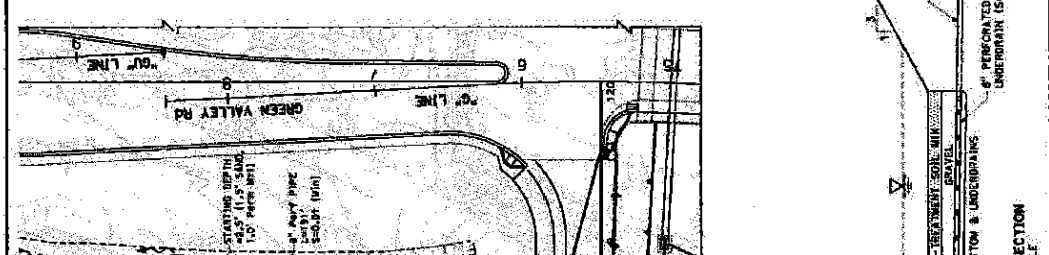
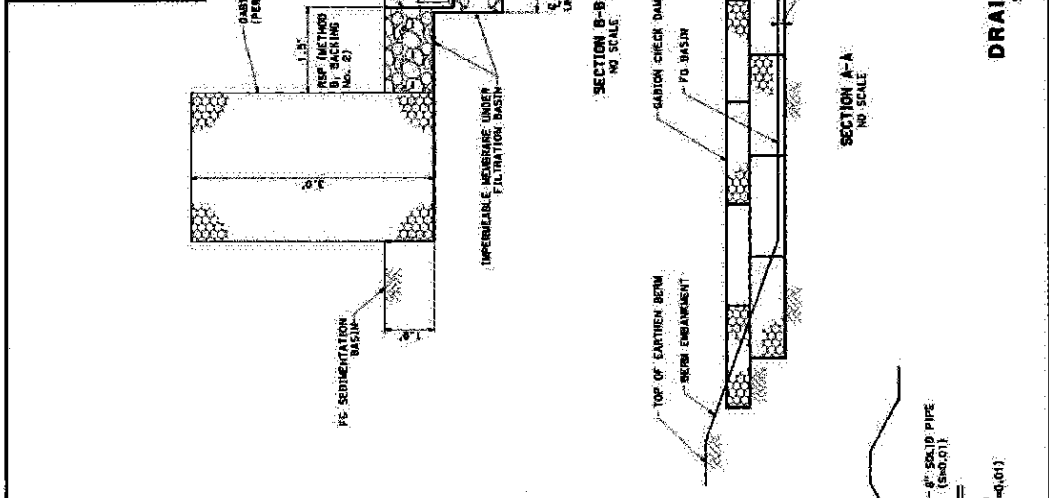
DATE: **12.27.12.5**

SCALE: **1/4" = 1'-0"**

PROJECT NUMBER: **DD-6**

UNIT: **0741**

PROJECT NUMBER & PHASE: **0400021311**



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CIVIL ENGINEER

PROJECT: **GREEN VALLEY RD**

DATE: **12.27.12.5**

SCALE: **1/4" = 1'-0"**

PROJECT NUMBER: **DD-6**

UNIT: **0741**

PROJECT NUMBER & PHASE: **0400021311**

REVISIONS:

NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	12/27/12
2	REVISED	12/27/12

**Attachment E**  
**Public Comment Considerations**

<b>Consideration of Comments Received from Citizens Committee to Complete the Refuge</b>	
<b>Comment</b>	<b>Consideration of Comment</b>
<p>We are concerned that the estimated direct impacts to waters of the state (and U.S.) increase with each new document we review (PN - Draft MMP1 - Draft MMP2). We believe this is indicative of the fact the application was submitted prematurely, before Caltrans has access to all available and necessary information (property access, etc.). We believe it is necessary, therefore, for Caltrans to provide some assurance that additional impacts will not be unveiled during construction or as Construction Packages 2-7 are implemented.</p>	<p>We cannot restrict Caltrans from changing their project design after the certification has been issued. Should Caltrans change the project design and incur additional impacts to State waters, then a certification modification and/or additional mitigation may be required. Refer to certification condition # 15, which addresses this concern.</p>
<p>Our question remains regarding whether changes on adjacent properties could impact the long-term sustainability of the proposed mitigation site, particularly those lands to the north and east of the proposed mitigation area.</p>	<p>It is unlikely that changes in adjacent land use would significantly affect the long-term sustainability of the mitigation site. The mitigation site would receive water from the northern connector drainage ditch which collects excess water from irrigation and storm events. Properties in the area are currently zoned for agricultural uses and are not anticipated to change per the County General Plan. The property to the east is owned by the same property owner as the mitigation site. This area is being proposed for a mitigation bank. The property to the north is owned by a cattle rancher. A drainage easement would be placed over the portion of his property supplying water from the northern ditch.</p>
<p>We would like confirmation of the source of hydrology for the large area of wetlands located along the western portion of the mitigation site. The information provided seems to indicate direct precipitation is the source of the seasonal wetlands, but we request confirmation of the</p>	<p>Caltrans ensures that this wetland area is not affected by off-site hydrology and receives water from direct precipitation. A small earthen berm separates this area from the property located to the north. An area of approximately 125 acres would continue to provide runoff to this wetland following mitigation construction.</p>



<p>source of hydrology for existing wetlands (within the proposed mitigation site).</p>	
<p>If direct precipitation is the source of hydrology, the project proponent must ensure that construction, erosion/sediment control measures, stockpiling of material, etc. will not result in alteration of the hydrological regime, or result in degradation or diminished areal extent of the existing wetlands. The RWQCB should require the areal extent of existing wetlands and waters (those that are being "preserved") be mapped and included in annual monitoring reports.</p>	<p>We don't have a compelling reason to suspect that the proposed activities would indirectly impact existing wetlands. If we were to require monitoring of existing wetlands and noticed a decline in jurisdictional area, we would likely not be able to identify a causal relationship in the absence of an overwhelming probable cause.</p> <p>Direct unreported impacts to jurisdictional wetlands and waters are prohibited by this certification.</p>
<p>The proposed success criteria are inadequate:</p> <p>Under performance criteria for created wetlands - the criteria should be more stringent than 60% cover - 60% cover by which species?</p> <p>Success criteria for riparian habitat should be more than just survivorship - survivorship alone doesn't provide any indication of the degree to which the created habitat is flourishing - shouldn't there be an inclusion of a requirement for increased % cover?</p> <p>Monitoring should extend well beyond two years of cessation of irrigation.</p>	<p>Performance criteria shall be revised and proposed in a revised MMP. The MMP shall be subject to public review and comment. See certification conditions 3 and 7.</p> <p>The certification requires that the final MMP include "A plan to wait two full growing seasons after termination of supplemental irrigation before considering success of the associated plantings"</p>
<p>Grazing - While we agree grassland habitat can benefit from grazing, we are concerned about the introduction of nuisance/invasive species. We are</p>	<p>Comment noted. See certification condition no. 3.h; The certification requires that the final MMP include "A grazing plan that prohibits cattle from entering riparian areas. The Department may propose "flash grazing" in riparian areas after defining</p>

<p>also concerned about the impacts of cattle in particular on the preserved, enhanced, restored, or created waters of the state. The project proponent must ensure grazing will not adversely impact waters of the state, and if adverse impacts result (e.g. diminished areal extent, continued introduction of nuisance/invasive species, etc.) grazing must be prohibited in waters of the state.</p>	<p>triggers for such grazing as well as management protocol to ensure damage to channel morphology and riparian plants are prevented. If cattle would be allowed to enter wetland areas, the grazing plan shall explain the benefit to wetland grazing, the circumstances and timing under which wetland grazing would be allowed, and how the wetlands would be protected.”</p>
<p>The grazing plan should be subject to restrictions should listed species become established - the grazing plan would need to be consistent with the protection of listed species.</p>	<p>Comment noted. See language added to certification condition no. 3.h.</p>
<p>Salt marsh harvest mouse - although a habitat assessment has been conducted for this species, prior to construction activities within the proposed mitigation site, USFWS and CDFW should be contacted to determine whether surveys for the species are required.</p>	<p>Comment noted. It is our understanding that authorization from USFWS and CDFG will be necessary before mitigation may commence. Authorization would entail evaluation of potential impacts to special status species.</p>
<p>Newly created/established wetlands will be seeded with a native wetlands species seed mix" - is the seed mix from local seed sources to ensure genetic integrity?</p>	<p>Comment noted. See certification condition no. 3.b</p>

<p>Funding - "If Grizzly Bay LLC cannot qualify for one of these types of financial assurances, an alternative mechanism such as formal documented commitment from Caltrans or other public authority shall be issued." What other "public authority" Why wouldn't it be Caltrans?</p>	<p>Grizzly Bay LLC insists it is fully capable of funding the required assurances. These assurances would be provided in advance of construction so funding would be in place prior to any impacts on the mitigation site. STA/Caltrans will also be required to provide a funding assurance letter (see condition no. 4).</p>
<p>Irrigation plan - "It is currently assumed that irrigation of planted trees and shrubs will be performed with a drip irrigation system." What is the source of irrigated water?</p>	<p>Temporary irrigation water would be provided to all riparian planting through a drip irrigation system. A new PVC line would extend from the existing Club House on Chadbourne Road to the Mitigation Site. This will be a pressurized, metered source with shutoff and timers.</p>
<p>Removal of exotic invasives should not be limited to the list provided.</p>	<p>Agreed. We have asked Caltrans to revise the MMP to revise the mitigation plan to identify specific non-native species that are naturalized to the area and that also do not represent a threat to development of healthy wetland and riparian systems. We also have asked them to change invasive plant performance standards to address potential threats from plants outside the list of those identified in the draft MMP. Please look for a revised condition once the revised MMP is issued.</p>
<p>Herbicides should not be used on the site without the approval of the USFWS, CDFW, RWQCB.</p>	<p>Noted. Please refer to certification condition 3.d.</p>
<p>What means of "rodent control" is used to protect the integrity of the levees? Are rodenticides used and could this adversely impact sensitive species such as the Swainson's hawk?</p>	<p>We do not know at this time. Although this is out of our jurisdiction, we have asked Caltrans about this and are awaiting a reply.</p>

<p>"In the event that additional freshwater is needed to maintain wetland habitat on the Mitigation Area, Grizzly Bay, LLC is able to obtain water from the Solano Irrigation District. The Solano Irrigation District currently provides irrigation water to the surrounding properties directly north of the Mitigation Area through a series of irrigation ditches. Minor modifications could be implemented in the ditch system in order to provide Solano Irrigation District water into the drainage channel providing water to the Mitigation Area. If there is a necessity to augment freshwater to the Mitigation Area, Grizzly Bay, LLC may need to construct additional connecting channel features to obtain Solano Irrigation District water. It would be the responsibility of Grizzly Bay, LLC or property owner to obtain all required permits/authorizations prior to undertaking these actions." This statement raises concerns regarding the long-term sustainability of the proposed compensatory mitigation.</p>	<p>Comment noted. The designers of the mitigation insist that created seasonal wetlands would be sustained by direct precipitation as well as overflow from the channel during the winter. No additional water is expected during the summer to support wetlands, allowing the wetland features to dry.</p> <p>Augmentation of flows during dry months are proposed at &lt; 2 cubic feet per second to support plant communities along the newly created channel. Upstream water sources are available in dry months from irrigation tail water and other unspecified upstream sources.</p> <p>Use of Solano Irrigation District water is not a requirement of this certification—it is only mentioned as a possible adaptive management measure should the identified sources of water appear inadequate to meet mitigation goals.</p>
<p>The major concern is the necessity for a variety of potentially tenuous agreements to ensure likelihood of success. Levees must be maintained, pumping and associated costs must be continued, a drainage easement is necessary and potential modifications to that agreement are necessary to provide a source of hydrology, and grazing must be managed. We are therefore concerned about the long-term viability of the proposed mitigation site.</p>	<p>Comment noted. We believe the site is viable long-term because the levee integrity and pumping regime are significant regional priorities involving stakeholders other than the mitigation site sponsor.</p>

<p>Figures 12 and 13 provide a conceptual design for created wetlands, vernal pools, riparian woodland, and channel recreation. I don't believe the most recent MMP still states the intent to create vernal pool habitat</p>	<p>Caltrans is not proposing vernal pool habitat at Suisun Creek Preserve because the site is not appropriate for vernal pool creation.</p>
<p>Would bringing in water from off-site impact existing wetlands?</p>	<p>Water being received from the northern connector drainage ditch is excess water from irrigation and storm events and is not water that would otherwise sustain wetlands. Caltrans will be "tapping-in" to a water source that would otherwise be pumped directly to tidal waters at the far southern end of the Grizzly Bay mitigation parcel.</p>
<p>Alternatively, the Mitigation Plan mentions the possibility of accepting treated water from the nearby waste water treatment plant. If tertiary (?) waste water is proposed as a water source, the project proponent should be required to demonstrate that endocrine disrupting chemicals (EDCs) are not present in the treated water, as there are adverse ramifications for amphibians and fish exposed to EDCs. Is this no longer being proposed?</p>	<p>This is no longer being proposed.</p>
<p>Consistent with the Corps Mitigation and Monitoring Guidelines, December 2004, longitudinal profiles of the created channels, as well as reference locations upstream and downstream of the channel creation should be provided. Before and after bank-full flows above and downstream of the created channels should be monitored. Cross-sections of the created channel, and reference locations above stream and downstream of the created channel should be provided. If necessary, water rights</p>	<p>Due to the relatively low-gradient and low-velocity nature of the channel, as well as the fact that the channel will be very low in the watershed, we are not particularly concerned with changes in channel morphology.</p> <p>Water that is received from the drainage ditch to the north is irrigation and stormwater runoff. According to Caltrans, there are no water rights associated with this water as it is drainage water. Certification condition number 4 requires Caltrans to secure any water source used to support mitigation site functions.</p>

<p>availability should also be provided. It appears the MMP incorporates these requirements. It also appears information regarding water rights will be provided.</p>	
<p>Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp - Caltrans has proposed the preservation of 1.71 acres of vernal pool and swale habitat and the creation of 1.45 acres of restoration of vernal pool and swale habitat no later than 60 calendar days prior to the date of initial ground disturbance of the specific construction packages. Once again, for purposes of clarity, to preserve institutional knowledge, and to ensure compliance, the timing of these impacts should be indicated on Table 1 as recommended above. The Conservation Measure (#21) also states the location of the compensation will be submitted for approval by the Service. Does Caltrans propose to create/restore/preserve habitat for vernal pool species at the Suisun Creek Preserve? If so, the Mitigation Plan would have to provide substantive information regarding the existing and proposed hydrological regime as discussed above. The Mitigation Plan would also need to describe the target suite of vernal pool species, proposed pond depths (all to be 18") and duration of ponding, etc. Where is this now being proposed? Is it at the Elsie Gridley mitigation bank? If so, have issues regarding not meeting success criteria been resolved?</p>	<p>Caltrans is not proposing to create/restore/preserve habitat for vernal pool species at the Suisun Creek Preserve.</p> <p>We do not know where mitigation for vernal pool shrimp will occur. We defer to the United States Fish and Wildlife Service to ensure that these special status species are protected.</p>