



**California Regional Water Quality Control Board  
North Coast Region**

**Geoffrey M. Hales, Chairman**

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Environmental Protection

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**Edmund G. Brown, Jr.,**  
Governor

March 28, 2011

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In the Matter of

**Water Quality Certification**

for the

**California Department of Transportation  
Highway 1 – Storm Damage Repair Warren Creek Culvert- PM 40.13 Project  
WDID No. 1B10113WNSO**

APPLICANT: California Department of Transportation  
RECEIVING WATER: Warren Creek and Wetlands  
HYDROLOGIC AREA: Mendocino Coast Hydrologic Unit No. 113.00  
COUNTY: Sonoma  
FILE NAME: Highway 1 – Storm Damage Repair (Warren Creek Culvert-  
PM 40.13 Project

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BY THE EXECUTIVE OFFICER:

1. On October 21, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the California Department of Transportation (Caltrans), requesting Federal Clean Water Act (CWA), section 401, Water Quality Certification for activities related to the proposed Highway 1 – Storm Damage Repair Project (Warren Creek Culvert), PM 40.13 (project). The proposed project will cause disturbances to waters of the United States (U.S.) and waters of the State associated with Warren Creek and adjacent wetlands within the Mendocino Coast Hydrologic Unit (HU) No.113.00 and Gualala Hydrologic Sub-Area 113.85. The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on March 1, 2011, and posted information describing the project on the Regional Water Board's website. No comments were received
2. The proposed project is located on State Route 1 at post mile (PM) 40.13, in Sonoma County. The purpose of the proposed project is to replace the existing 36

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inch diameter CMP (Corrugated Metal Pipe) with a 54 inch diameter CMP with polymeric sheet coating. The flow-line or bottom of the culvert is approximately 15 feet from the road surface. Rock Slope Protection will be constructed at the outlet of the culvert to stabilize and minimize erosion. Several rainstorms and an invert failure of the existing culvert led to excessive saturation of the embankment slope which caused a 30-foot long by 20-foot wide slip-out to occur.

3. The first stage of construction will keep the northbound lane open to one-way traffic with signalized traffic control while the lower half of the culvert under the southbound lane is being replaced. The second stage construction will move the one-way traffic to the southbound lane with signalized traffic control while the other half of the culvert under the northbound lane is replaced. This method will require additional paving along the outside edge of the northbound lane to provide adequate travel lane width for truck traffic. Caltrans anticipates construction equipment will be parked on the roadway behind temporary K-rails during both phases of construction.
4. The proposed project will result in temporary and permanent impacts to waters of the U.S and waters of the State. Temporary impacts to jurisdictional waters will be 0.11 acres (148 linear feet), including 0.05 acres of wetlands adjacent to the creek. Caltrans has determined that the total permanent impacts to jurisdictional waters of the U.S. (Creek and adjacent wetlands) will be 0.01 acres, which includes 0.005 acres of wetlands and a total of 0.004 acres (38 linear feet). Permanent impacts to 0.005 acres of wetland due the culvert installation will reduce the function of the permanently impacted portion of wetland area; however, this reduction will not change the function of the remaining seasonal wetland area because the hydrology for the wetland area will not be changed as a result of the project.
5. As mitigation to compensate for impacts associated with this project, Caltrans proposes both an off-site restoration project and on-site revegetation following construction. The off-site mitigation plan includes restoring a California State Park coastal wetland located in Fort Ross State Park (off of Highway 1, approximately located at post mile 33) in Sonoma County. The restoration project will include purchasing and installing exclusionary fencing around a natural spring and sag pond area; purchasing two water troughs; installing metal piping to feed the troughs; and subsidizing salary for State Park staff to manage and implement the project. Restoration would also include hydrophytic plantings of willow around the sag pond to promote re-growth of wetland vegetation. Caltrans staff would be responsible for monitoring and reporting the status of the project to agencies. The restoration footprint around the sag pond totals 0.36 acres.
6. The entire project would take place during the dry season (May 15 to October 15). Project construction is tentatively anticipated to begin in July 2011 and is scheduled

to be completed by October 2011. If surface water is encountered, a clear-water diversion will be set up to divert clean water around the construction. Caltrans contractor will be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) that will include Best Management Practices (BMPs) for construction and post construction phases of the project. All disturbed areas will be kept to the minimum necessary to complete the highway repairs. Caltrans will utilize BMPs to provide erosion and sediment control and pollution prevention throughout the project area during construction. All graded areas within the project affected by the construction activities will be appropriately stabilized and BMPs will be implemented to ensure erosion is minimized and controlled.

7. Caltrans has applied for authorization from the United States Army Corps of Engineers to perform the project under their Nationwide Permits No. 3a Non-Reporting (maintenance projects) pursuant to Clean Water Act, section 404. Caltrans has also applied for a California Department of Fish and Game 1600 Streambed Alteration Agreement. Caltrans has determined that this project is Categorical Exempt from California Environmental Quality Act (CEQA - class 2 categorical exemption). In addition, Regional Water Board staff also determined that this project is categorically exempt from CEQA and anticipates filing a notice of exemption
8. To ensure compliance with sediment, temperature and other related Water Quality Objectives within the Basin Plan, adequate wetland and riparian protection and stringent requirements to avoid, minimize, and mitigate the sediment and temperature impacts associated with the proposed project will be incorporated as enforceable conditions this Water Quality Certification. In addition, Caltrans will be required to conduct surface water monitoring, sampling, and analysis in accordance with the conditions of the Water Quality Certification. Additionally, storm water runoff monitoring, sampling, and analysis will be conducted as required by the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities and Activities Order No. 99 – 06 - DWQ. The surface water data collected will be utilized to assess the adequacy of BMPs during construction as well as site specific mitigation measures proposed to minimize impacts to the environment, including sediment and temperature impacts.
9. The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that

existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this project.

Receiving Waters: Warren Creek and Wetlands  
Mendocino Coast Hydrologic Unit No. 113.00,  
Gualala Hydrologic Sub-Area No. 113.85.

Filled or Excavated Areas: Permanent – wetlands: 0.005 acres (218 ft<sup>2</sup>)  
Permanent - streams 0.004 acres (174 ft<sup>2</sup>)  
  
Temporary – wetlands: 0.05 acres (2,178 ft<sup>2</sup>)  
Temporary – streams: 0.06 acres (2,612 feet<sup>2</sup>)

Total Linear Impacts: Permanent - streams: 38 linear ft  
Temporary – streams: 148 linear ft

Dredge Volume : None

Latitude/Longitude: 38.5778 N / 123.3318 W

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE REGIONAL WATER BOARD CERTIFIES THAT THE CALTRANS HIGHWAY 1 STORM DAMAGE REPAIR (WARREN CREEK CULVERT) PROJECT (FACILITY NO. 1B10113WNSO), as described in the application will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Caltrans complies with the following terms and conditions:

**All conditions of this order apply to Caltrans (and all its employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the project (including the off-site mitigation lands) as related to this Water Quality Certification.**

1. This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.

2. 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 title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity this certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by the applicant.
4. Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited, and all proposed revegetation and mitigation being completed, in strict compliance with the applicant's project description, as approved herein, and b) compliance with all applicable water quality requirements and water quality control plans including the requirements of the Basin Plan, and amendments thereto.
5. All conditions required by this Order shall be included in the Plans and Specifications prepared by Caltrans for the Contractor. In addition, Caltrans shall require compliance with all conditions included in this Order in the bid contract for this project.
6. Caltrans shall construct the project in accordance with the project described in the application and the findings above, and shall comply with all applicable water quality standards as detailed in the Basin Plan.
7. Any change in the design or implementation of the project that would have a significant or material effect on the findings, conclusions, or conditions of this Order must be submitted to the Executive Officer of the Regional Water Board for prior review, consideration, and written concurrence.
8. Caltrans shall provide a copy of this Order and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ to the contractor, all subcontractors, and all utility companies conducting the work, and require that copies remain in their possession at the work site. Caltrans shall be responsible for work conducted by its contractor, subcontractors, or utility companies.
9. The Regional Water Board shall be notified in writing each year at least five working days (working days are Monday – Friday) prior to the commencement of

channel, vegetation or ground disturbing activities, dewatering activities, major concrete pours, or water diversion activities with details regarding the construction schedule, in order to allow Regional Water Board staff to be present on-site during installation and removal activities, and to answer any public inquiries that may arise regarding the project. Caltrans shall provide Regional Water Board staff access to the project site to document compliance with this order.

10. The Resident Engineer (or appropriately authorized agent) shall hold on-site water quality permit compliance meetings (similar to tailgate safety meetings) to discuss permit compliance, including instructions on how to avoid violations and procedures for reporting violations. 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. Caltrans shall maintain dated sign-in sheets for attendees at these meetings, and shall make them available to the Regional Water Board on request.
11. All activities and best management practices (BMPs) shall be implemented according to the submitted application and the conditions in 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. In addition, BMPs for erosion and sediment control shall be utilized year round, regardless of season or time of year. Caltrans 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, Caltrans shall submit a proposal to Regional Water Board staff for review and concurrence.
12. Caltrans shall prioritize the use of wildlife-friendly biodegradable (not photo-degradable) erosion control products wherever feasible. Caltrans 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 Caltrans 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. Caltrans shall not use or allow the use of erosion control products that

contain synthetic materials within waters of the United States or waters of the State at any time. Caltrans shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.

13. Work in flowing or standing surface waters, unless otherwise proposed in the project description and approved by the Regional Water Board, is prohibited. If construction dewatering of groundwater is found to be necessary, Caltrans shall use a method of water disposal other than disposal to surface waters (such as land disposal) or Caltrans shall apply for coverage under the Low Threat Discharge Permit or an individual National Pollutant Discharge Elimination System (NPDES) Permit and receive notification of coverage to discharge to surface waters, prior to the discharge.
14. Caltrans is prohibited from discharging waste to waters of the State, unless explicitly authorized by this Order. For example, 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 Order, shall be allowed to enter into waters of the State. In addition, none of the materials listed above shall be placed within 150 linear feet of waters of the State or where the materials may be washed by rainfall into waters of the State.
15. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any water quality problem arises, the associated project activities shall cease immediately until adequate BMPs are implemented. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
16. Caltrans and their contractor are not authorized to discharge wastewater (e.g., water that has contacted uncured concrete or cement, or asphalt) to surface waters, ground waters, or land. Wastewater may only be disposed of to a sanitary waste water collection system/facility (with authorization from the facility's owner or operator) or a properly-licensed disposal or reuse facility. If Caltrans or their contractor proposes an alternate disposal method, Caltrans or their contractor shall apply for a permit from the Regional Water Board. Plans to reuse or recycle wastewater require written approval from Regional Water Board staff.
17. Caltrans shall submit, subject to approval by the Regional Water Board staff, a dewatering and/or diversion plan that appropriately describe 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. 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 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. The in-channel work will only be conducted between May 15<sup>th</sup> and October 15<sup>th</sup>. This Water Quality Certification does not authorize Caltrans to draft surface waters.

18. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be outside of waters of the U.S. and the State. 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 or the U.S. At no time shall Caltrans use any vehicle or equipment which leaks any substance that may impact water quality.
19. Caltrans shall provide analysis and verification that placing 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 Standard Specification 7-1.13, Disposal of Material Outside the Highway Right of Way. Caltrans shall submit to the Regional Water Board the satisfactory evidence provided to the Caltrans Engineer by the Contractor referenced in Standard Specification 7-1.13. In accordance with State and Federal laws and regulations, Caltrans is liable and responsible for the proper disposal of waste generated by their project.
20. 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 and must be submitted to the Regional Water Board for review and concurrence.
21. Only clean washed spawning gravel (0.5" – 4") with a cleanliness value of at least 85, using the Cleanness Value Test Method for California Test No. 227 will be placed in the streams. Gravel bag fabric shall be nonwoven polypropylene

geotextile (or comparable polymer) and shall conform to the following requirements:

- Mass per unit area, grams per square meter, min ASTM Designation: D 5261 – 270
- Grab tensile strength (25-mm grip), kilonewtons, min. ASTM Designation: D4632\* 0.89
- Ultraviolet stability, percent tensile strength retained after 500 hours, ASTM Designation: D4355, xenon arc lamp method 70 or appropriate test method for specific polymer
- Gravel bags shall be between 600 mm and 800 mm in length, and between 400 mm and 500 mm in width.
- 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. Gravel shall be between 0.5” – 4” in diameter, and shall be clean and free from clay balls, organic matter, and other deleterious materials. 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.
- Caltrans shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.

22. Surface water monitoring shall be conducted whenever a project activity is conducted within waters of the State (e.g. demolition, pier construction, stream diversions). Surface water monitoring shall be conducted when any project activity has, or has the potential to, mobilize sediment and/or alter background conditions within waters of the State. In order to demonstrate compliance with receiving water limitations and applicable water quality standards, field measurements shall be collected whenever a project activity may alter background conditions.

23. Caltrans shall establish effluent, upstream (background) and downstream monitoring locations to demonstrate compliance with all applicable water quality objectives as detailed in the Basin Plan. The downstream location shall be no more than 50 feet from the effluent location. Field measurements shall be taken from each location four times daily for flow, pH, temperature, dissolved oxygen, total dissolved solids, turbidity and specific conductance. In addition, visual observations shall be made four times daily and include the appearance of the discharge including color, turbidity, floating or suspended matter or debris, appearance of the receiving water at the point of discharge (occurrence of erosion and scouring, turbidity, solids deposition, unusual aquatic growth, etc), and observations about the receiving water, such as the presence of aquatic life.

Measurements shall be collected from each sampling location four times daily while work is being conducted within waters of the State.

24. Whenever, as a result of project activities, downstream measurements exceed the following water quality objectives, appropriate measurements shall be collected from all monitoring locations every hour during the period of increase, and shall continue until measurements demonstrate compliance with receiving water limitations and the water quality parameters are no longer increasing as a result of project activities.

pH	<6.5 or >8.5 (any changes >0.5 units)
temperature	>0.5°F above background
dissolved oxygen	<7 milligrams per liter (mg/L)
turbidity	20% above natural background

If any measurements are beyond the water quality objectives 50 feet downstream of the source(s), all necessary steps shall be taken to install, repair, and/or modify BMPs to control the source(s). In addition, the overall distance from the source(s) to the downstream extent of the exceedance shall be measured.

Monitoring results shall be reported to appropriate Regional Water Board staff person by telephone within one hour of taking any measurements that exceed the limits detailed above (turbidity only if it is higher than 20 NTU as well). Upstream and downstream pictures within the working and/or disturbed area shall be taken and submitted to the appropriate Regional Water Board staff via e-mail or fax within 24 hours of the incident. All other monitoring data shall be reported on a monthly basis and is due to the Regional Water Board by the 15<sup>th</sup> of the following month.

25. Rainy Day Reports: Caltrans shall take photos of all areas disturbed by project activities, including all excess materials disposal areas, after rainfall events that generate visible runoff from these areas in order to demonstrate that erosion control and revegetation measures are present and have been installed appropriately and successfully. A brief report containing these photos shall be submitted within 30 days of the rainfall event that generated runoff from the disturbed areas. Once the site has demonstrated appropriate and effective erosion and sediment control, Caltrans may request a reprieve from this condition from the Regional Water Board.
26. Caltrans proposes to reduce the project impacts by implementing on-site restoration and revegetation activities. The on-site restoration shall be

conducted in accordance with the application for water quality certification and shall be completed the subsequent season after the bridge replacement project is complete. Monitoring reports for the on-site restoration project are due annually to the Regional Water Board on December 31, for five years subsequent to the completion of the project. The off-site mitigation plan includes restoring a California State Park coastal wetland located in Fort Ross State Park (off of Highway 1, approximately located at post mile 33) in Sonoma County. The off-site restoration shall be conducted in accordance with the application for water quality certification and shall be completed the by October 15, 2013. Monitoring reports for the off-site restoration project are due annually to the Regional Water Board on December 31, for five years subsequent to the completion of the project.

27. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this Order to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this Order, the Regional Water Board may add to or modify the conditions of this Order as appropriate to ensure compliance.
28. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, and 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.
29. This Order is not transferable. In the event of any change in control of ownership of land presently owned or controlled by Caltrans, Caltrans shall notify the successor-in-interest of the existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board. The successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of this Order to discharge dredged or fill material under this Order. The request must contain the following:

- a. requesting entity's full legal name
  - b. the state of incorporation, if a corporation
  - c. address and phone number of contact person
  - d. description of any changes to the project or confirmation that the successor-in-interest intends to implement the project as described in this Order.
30. The authorization of this certification for any dredge and fill activities expires on March 28, 2016. Conditions and monitoring requirements outlined in this Order are not subject to the expiration date outlined above, and remain in full effect and are enforceable.
31. Please contact our staff Environmental Specialist / Caltrans Liaison Jeremiah Puget at (707) 576-2835 or [jpuket@waterboards.ca.gov](mailto:jpuket@waterboards.ca.gov) if you have any questions.

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Catherine Kuhlman  
Executive Officer

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Weblink: 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 can be found at:  
[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0017.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf)

Original sent to: Mr. Cyrus Vafai, California Department of Transportation,  
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