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**California Regional Water Quality Control Board
North Coast Region
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Arnold
Schwarzenegger
Governor

August 6, 2010

In the Matter of

Water Quality Certification

for the

**California Department of Transportation
Highway 101 – Willits Bypass Project:
WDID No. 1B10019WNME**

APPLICANT: California Department of Transportation
RECEIVING WATER: Wetlands and Haehl Creek, Baechtel Creek, Broaddus
Creek, Mill Creek, Outlet Creek, Upp Creek, and Ryan Creek
HYDROLOGIC AREA: Eel River Hydrologic Unit (HU) No.111.00
Outlet Creek Hydrologic Sub-Area (HSA) No. 111.61
COUNTY: Mendocino
FILE NAME: CDOT - Hwy 101, Willits Bypass Project

BY THE EXECUTIVE OFFICER:

1. On March 1, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application and \$40,000.00 fee from the California Department of Transportation (Caltrans), requesting federal Clean Water Act (CWA), section 401, Water Quality Certification for activities related to the proposed first phase of the Highway 101, Willits Bypass project (project). The proposed project will cause disturbances to waters of the United States (U.S.) and waters of the State, including wetlands and intermittent, ephemeral and perennial tributaries to Outlet Creek, which is located within the Eel River Hydrologic Unit No.111.00, the Outlet Creek Hydrologic Sub-Area (HSA) No. 111.61, and the Little Lake Valley Ground Water Basin. The Regional Water Board is proposing to

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regulate this project pursuant to Section 401 of the CWA (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority.

2. The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on April 29, 2010, and posted information describing the project on the Regional Water Board's website. Regional Water Board staff received letters from 75 individuals or groups in response to the subject notice of Water Quality Certification and Waste Discharge Requirements. Of those 75, 27 were in favor of the proposed project, while 48 raised various objections. Because many of the same comments were described in different letters, Regional Water Board staff grouped comments together where appropriate, and provided one response. The Regional Water Board has issued a response to comments concurrently with this Order, and is included as Attachment 1.
3. The proposed project is located on Highway 101, in Mendocino County, and will begin approximately 0.8 mile south of the Haehl Overhead and end approximately 1.9 miles south of the Reynolds Highway. The overall length of the bypass is approximately 5.9 miles from post mile realignment (PMR) 43.1 and ending near PMR 49.0. The purpose of the project is to upgrade the level of service to the traveling public along Highway 101 by reducing travel times and reducing the traffic congestion along Highway 101 and within the City of Willits. Beginning at the southern end of the project, the new alignment of Highway 101 would swing to the northeast and then travel back to the northwest, adjacent to the Willits Wastewater Treatment Plant (WWTP). Because of funding constraints, the decision was made to construct the bypass in two phases such that a functional interim two-lane facility would be constructed initially; when adequate funding becomes available in the future, the remaining lanes will be constructed to complete the four-lane bypass. This Water Quality Certification is for Phase I only.

Project Description

4. The proposed project will be constructed largely on fill material imported to the site. The bypass requires imported borrow material from outside the project area in addition to material excavated on-site. The area from which Caltrans proposes that the contractor will take fill material for the project is at Oil Well Hill, which is located on the east side of Highway 101, approximately 0.85 mile north of the intersection of Reynolds Highway and Highway 101. The State Geology and Mining Board granted an exception to the Surface Mining and Reclamation Act (SMARA) permitting requirement on March 13, 2008 for obtaining the fill material from Oil Well Hill. The construction contractor will have the option to determine whether the source of fill material for the project will be from the Caltrans-designated borrow site at Oil Well Hill, a commercial borrow site, or another site. If

the contractor chooses to use available commercial borrow sites in the vicinity of the project to obtain the required fill, it will likely not need to obtain any additional environmental permitting when soil is exported, because commercial borrow sites typically hold preapproved operating permits. Should the contractor select an alternative, noncommercial borrow site for this project, the contractor will be responsible for obtaining proper approvals.

5. The following structures will be constructed during the project:
 - Two interchanges will be constructed for the project. The Haehl Creek interchange will be located at the south end of the project near Haehl Creek and connect the existing highway into Willits with the new highway facility. The Quail Meadows interchange will be located near the north end of Little Lake Valley and connect the new highway facility to the existing highway north of Willits.
 - The bypass will cross multiple creeks, riparian corridors, streets, and railroad rights-of-way using 22 bridges, three retaining walls, and a one mile long viaduct that will span the regulated floodway.
 - Six bridges will be constructed in the Haehl Creek interchange area, one for each of the following:
 1. Northbound freeway lanes separation over State Route (SR) 20
 2. Southbound freeway lanes separation over SR 20
 3. Southbound off-ramp over Haehl Creek
 4. Northbound on-ramp over Haehl Creek
 5. Northbound freeway lanes over Haehl Creek
 6. Southbound freeway lanes over Haehl Creek
 - A culvert will be replaced during improvement of the proposed new Schmidbauer Ranch access road.
 - Two retaining walls will be constructed in the Haehl Creek interchange area adjacent to Haehl Creek:
 1. East side of northbound lanes
 2. West side of northbound on-ramp
 - One retaining wall will be constructed on the west side of the southbound roadway lanes, just south of Center Valley Road.
 - Two bridges will be constructed to cross East Hill Road:
 1. One bridge for the southbound roadway lanes (Phase 1)
 2. One bridge for the northbound roadway lanes (Phase 2)

- Two bridges will be constructed to cross the middle reach of Haehl Creek south of Shell Lane:
 1. One bridge for the southbound roadway lanes (Phase 1)
 2. One bridge for the northbound roadway lanes (Phase 2)
- Two viaduct structures will be constructed to span the floodway:
 1. Southbound (Phase 1)
 2. Northbound (Phase 2)
- Two bridges will be constructed to cross over the North Western Pacific Rail Road tracks in the Quail Meadows interchange area, one for each of the following:
 1. U.S. Highway 101 Willits Bypass
 2. Southbound roadway lanes (Phase 1)
 3. Northbound roadway lanes (Phase 2)
- Two bridges will be constructed to cross the new connector road to existing U.S. Highway 101 in Quail Meadows Interchange area:
 1. One for the southbound roadway lanes (Phase 1)
 2. One for the northbound roadway lanes (Phase 2)
- Six bridges will be constructed to cross Upp Creek directly north of the Quail Meadows interchange, one for each of the following:
 1. Southbound roadway lanes (Phase 1)
 2. Northbound roadway lanes (Phase 2)
 3. Northbound on-ramp (Phase 1)
 4. Northbound on-ramp (Phase 2)
 5. Southbound off-ramp
 6. Roundabout local intersection
- The proposed alignment encroaches upon the 100 year floodplain. The design includes two elevated structures, which make up the floodway viaducts. The purpose of this design feature is to span the floodway. The Willits Bypass Floodplain Evaluation Report, dated September 2006, concludes that the project will not increase the base flood elevation of the floodway, and does not constitute a significant floodplain encroachment as defined in 23 CFR 650.105(q). The viaduct will be located in the central part of the project area and will span Center Valley Road, the lower reach of Haehl Creek just upstream of the confluence with Baechtel Creek, Hearst Willits Road, Baechtel and Broadus Creeks at their confluence (beginning of the Outlet Creek designation), the WWTP, and Mill Creek. The approximately 6,000-foot long structures will consist of separate northbound and southbound elevated viaduct

superstructures. The total area of both viaducts would be 11.6 acres. Each of the viaducts will be approximately 42.6 feet wide. The edge to edge distance between the structures will be approximately 31.2 feet, and each will have a 16.5 foot minimum clearance underneath. The viaducts will require supporting columns, ranging in size from 4.5 to 7 feet in diameter.

Proposed Impacts to Wetlands and Surface Waters within the Regional Water Board's Jurisdiction

6. The project will result in impacts to wetlands and surface waters within the Outlet Creek HSA, including Haehl Creek, Baechtel Creek, Broaddus Creek, Mill Creek, Outlet Creek, Upp Creek, Ryan Creek and two ponds (Rutledge and Niesen). Caltrans has determined that the project would directly impact a total of 89.27 acres of waters of the U.S.¹, including 83.77 acres of impacts to wetlands and 5.5 acres (12,416 linear feet) to streams and ponds also identified as waters of the U.S. The project would temporarily impact 29.88 acres of wetlands and 3.16 acres (9,255 linear feet) of streams and ponds identified as waters of the U.S.². In addition, the project would result in permanent impacts to 53.89 acres of wetlands and up to 2.34 acres (3,161 linear feet) of streams and ponds that are waters of the U.S.³
7. Caltrans has also determined that the project would result in 10.12 acres of temporary impacts (6,693 linear feet) and 10.88 acres of permanent impacts (8,535 linear feet) to waters of the state, including riparian areas.⁴ "Waters of the

¹ Waters of the U.S. is defined in section 232.2 of title 40 of the Code of Federal Regulations and includes "all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. All interstate waters, including interstate wetlands. All other waters including intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would or could affect interstate or foreign commerce... and wetlands adjacent to waters (other than waters that are themselves wetlands) ..."

² A temporary impact is the short term impact that occurs during the placement of fill within wetlands for access roads, or the removal of trees and vegetation along streams to construct false work and structures.

³ A permanent impact is the placement of fill within areas for the purpose of a permanent structure such as the roadway embankments for the new highway, bridge footings, or culverts within streams.

⁴ Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Protection of riparian areas adjacent to streams, lakes, and estuarine-marine shorelines is essential to the protection of the beneficial uses of the waterbodies. As collectively agreed to by the resource agencies with jurisdiction over this project, riparian areas are: 1) Category I Riparian Corridors, which include areas of salmonid streams and adjacent riparian areas extending 100 feet from each bank laterally from the Ordinary High Water Mark; 2) Category II Riparian Corridors, which include tributaries of Category I Riparian Corridors that are within 1,000 feet of the confluence with a Category I Stream,

State” is defined very broadly within the Water Code as “any surface water or groundwater, including saline waters, within the boundaries of the state.” (Cal. Water Code, § 13050(e)). It has been interpreted to include all Waters of the U.S., in addition to areas outside of Waters of the U.S., such as isolated wetlands, headwaters, and riparian areas above the ordinary high water mark.

8. Protecting riparian areas is essential to ensuring the protection of beneficial uses identified in the Regional Water Board’s Water Quality Control Plan (Basin Plan). Riparian areas support and protect surface water quality by accumulating and filtering sediment before it reaches surface waters and providing shade for the enhancement and protection of cold freshwater habitat. In addition, riparian areas have their own beneficial uses that are recognized in the Basin Plan, such as providing terrestrial habitats, vegetation, and wildlife (WILD), providing flood peak attenuation/ flood water storage (FLD), providing water quality enhancement, including filtration, purification and erosion control (WQE), and the preservation and enhancement of wetland habitat (WET).

Proposed Mitigation

9. As part of its application for the Water Quality Certification, Caltrans submitted the *Final Mitigation and Monitoring Proposal* (Final MMP), dated June 8, 2010. To mitigate impacts to wetlands, Caltrans has proposed creating 24.33 acres of wetlands. During the project planning process Caltrans assessed over 6,000 acres of land within Little Lake Valley to identify potential mitigation for the impacts of the bypass project and contacted the property owners, requesting that they consider selling land to Caltrans for mitigation. Caltrans received responses from willing sellers of 3,157 acres, of which there was little opportunity for wetland creation. At the request of the Regional Water Board, Caltrans expanded their search to approximately 11,000 acres outside Little Lake Valley. Caltrans received responses from land owners willing to sell 2,700 acres, with little opportunity for wetland creation.
10. Prior to the beginning of ground-disturbing project construction activities, known populations of wetlands plant species to be affected by construction will either be salvaged for transportation to adjacent on-site locations, or salvaged for relocation to off-site mitigation parcels, where the harvested material will be used to topdress created wetlands. Off-site mitigation actions for wetlands creation will require site preparation, including grading uplands and modifying local hydrology; seeding

and extending 50 feet from the OHWM on each bank; and 3) Category III Riparian Corridors, which include tributaries of Category I Riparian Corridors that are more than 1,000 feet upstream of the confluence with the Category I Stream, extending 25 feet from the OHWM on each bank.

graded areas; planting wetlands species; and monitoring for successful wetland establishment.

11. After the creation of approximately 24 acres of wetlands, the project would still result in a permanent net loss of approximately 29 acres of wetlands. State of California Executive Order W-59-93 directs all state agencies to “*ensure no overall net loss and long term net gain in the quantity, quality and permanence of wetlands acreage and values in California...*” Executive Order W-59-93 also directs all state agencies “to encourage partnerships to make restoration, landowner incentive programs, and cooperative planning efforts the primary focus of wetland conservation.” To compensate for the loss of the approximately 29 acres of wetlands, the United States Environmental Protection Agency (U.S. EPA), United States Fish and Wildlife Service (U.S. FWS), United States Army Corps of Engineers (U.S. ACE), National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), Mendocino County Resource Conservation District (MCRCD), Willits Environmental Center (WEC) and Regional Water Board collectively agreed to and developed an ecologically based watershed approach designed to ensure no net loss of ecological functions and values. The watershed approach would provide significant improvements to the ecological functions and values of wetlands off-site of the project, but still within the Little Lake Valley⁵. (The project is planned in the west-central portion of the Little Lake Valley.) The resource agencies agreed that the mitigation should be focused within Little Lake Valley because it hosts a variety of unique ecological features, including the presence of several rare, threatened, and endangered species (e.g. anadromous fish and Baker’s Meadowfoam).
12. In addition, the watershed approach option was developed in collaboration with U.S. EPA and U.S. ACE to be consistent with federal Compensatory Mitigation Rule released on April 10, 2008. (40 CFR § 230, Subpart J; 33 CFR 332.) Caltrans proposed that 1,011.13 acres of existing wetlands would be enhanced and in combination with the 24.33 acres created and 53.44 acres preserved, for a total of 1,088.90 acres of wetlands secured in perpetuity. Wetland enhancement actions include: filling in man-made drainage ditches to increase the residence time of surface waters within the wetland area; implementing a grazing management plan to reduce the impacts from cattle; and removing invasive species to promote the health and natural recruitment of native wetland species. The enhancement of wetlands will be verified through a robust monitoring and reporting program (per Condition 10) that requires Caltrans to use the California

⁵ During the Willits Bypass Mitigation Development Team meetings, it was collectively agreed between the U.S. EPA, U.S. ACE, U.S. FWS, CDFG, NMFS, WEC, Caltrans, and the Regional Water Board that the most appropriate use of the mitigation funds would be a watershed approach within Little Lake Valley. The resource agencies believe, that in this case, a watershed based approach will be superior to an approach relying on wetland creation/establishment ratios..

Rapid Assessment Method (CRAM) for wetlands, as well as additional hydrology, vegetation, and surface water sampling and analysis methods to verify the enhancement of wetland functions and values. The mitigation site preservation and site protection instruments would be a combination of fee title purchase, conservation easement, or other deed restriction.

13. The Eel River watershed is listed on the Clean Water Act section 303(d) list as impaired for sediment and temperature. In 2004, the U.S. EPA established sediment and temperature total maximum daily loads (TMDLs) for the Upper Main Eel River and tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury). Therefore, to fully develop a watershed approach the mitigation must include a nexus to address the temperature and sediments impairments. The nexus relates how the proposed mitigation will implement additional measures to reduce stream temperatures and excessive sediment inputs into the watershed. For sediment, Caltrans has prepared an assessment of all the erosion sites located within the off-site mitigation lands, which includes the inventory, prescription, and prioritization of restoration actions that will reduce erosion and sediment delivery within the watershed. In addition, the bypass structure has been designed to reduce erosion and sediment delivery to the maximum extent practicable (MEP). For temperature impairment, the most practical way to reduce stream temperatures is to provide riparian vegetation in all areas feasible within the project limits, including bypass alignment and off-site mitigation lands (maximum site potential shade). In addition, baseline surveys will be conducted to find all areas that benefit from riparian plantings to achieve maximum site potential shade, and percent effective shade (shade on water). Additionally, the current land management practices of stream alteration and cattle grazing have potentially negative side effects on water. Therefore, the proposed grazing management plan, which is geared towards the enhancement and protection of natural resources, will be implemented to improve the overall health of the watershed.
14. Caltrans proposes to mitigate impacts to riparian areas by planting with native riparian species along approximately 48 acres (approximately 35,000 linear feet) adjacent to waters of the U.S. and State, and monitoring to ensure successful establishment. In addition, 49 acres of riparian areas would be enhanced by the following actions: expanding riparian habitat through planting native species; increasing habitat complexity; improving hydrology; controlling invasive species; and implementing a grazing management plan. A total of 104 acres of riparian areas would be secured in perpetuity. The mitigation site protection would be a combination of fee title purchase, conservation easement, or other deed restriction.
15. To mitigate for temporary and permanent impacts to waters of the U.S. and State, Caltrans proposes to enhance approximately 17 acres of streams by improving hydrology and increasing habitat complexity. The Rutledge pond will be realigned

adjacent to the bypass, and therefore its disturbance will only be a temporary impact. Additionally, Caltrans proposes to grade and modify the Neisen pond as part its plan to create wetlands. Approximately 24 acres of streams identified as waters of the U.S. and State will be protected in perpetuity. Overall, the mitigation plan would result in the purchase and/or preservation of approximately 2,100 acres of land within Little Lake Valley.

16. Caltrans proposes to remove fish passage barriers along Upp Creek, Haehl Creek and Ryan Creek. The removal and/or upgrade of these facilities would likely reduce sediment input into the creeks as well as improve the beneficial use of the creeks for migration by anadromous fish. One existing culvert in the upper Haehl Creek channel, located under the proposed highway bridge, will be permanently removed and the stream channel will be restored as a natural drainage feature. A second existing culvert in upper Haehl Creek will be replaced and the area restored during improvement of the proposed new Schmidbauer Ranch access road. An existing box culvert in the vicinity of the proposed Quail Meadows interchange and passing under US 101 will be permanently removed and the creek contoured, re-graded, stabilized, and replanted; local traffic will cross Upp Creek on the new bridge that will be on the north leg of the roundabout. Stabilization of both creek channels that pass through the interchange areas (Haehl and Upp Creeks) will consist of grade control structures located downstream of the culvert, at appropriate heights and intervals, for the distance necessary to stabilize the natural stream gradient. Fish passage design elements will comply with guidelines established by NMFS and CDFG.
17. The project will result in an increase of approximately 38 new acres of impervious surface in the Little Lake Valley. The total area of impervious surface that will exist within the project limits will be 49 acres (including new and existing impervious surface) when the first phase of the project is completed. Caltrans will provide permanent post-construction storm water treatment for approximately 43 acres of impervious surface. Storm water runoff and modifications to the local hydrograph will be controlled primarily through the use of low impact development (LID) best management practices (BMPs) such as bio-strips, bio-swales, and shallow vegetated detention basins that rely on infiltration and dispersion. In addition, where feasible, Caltrans will install and maintain traction sand traps within drain inlets along the roadway to reduce sediment delivery to Outlet Creek HSA.
18. If Caltrans uses Oil Well Hill as a borrow site for fill material, the modifications to the roadside area will allow room for additional post-construction treatment BMPs. Therefore, additional storm water treatment would be provided by treating existing Highway 101 storm water runoff.

Project Schedule

19. The proposed activities associated with the bypass project are scheduled to begin in the fall of 2010 with the projected completion of the first phase of the project near the end of 2015. The proposed project will be conducted year round; however, work within jurisdictional streams will only occur within summer months during low flow conditions from the period of June 15th to October 15th. The entire project is expected to take four to five years to complete.

Federal and State Regulatory Compliance

20. Caltrans has applied for authorization from the U.S. ACE to conduct the project under an individual Department of the Army permit pursuant to the CWA, section 404. Caltrans has applied to the CDFG for a 1602 Lake and Streambed Alteration Agreement. Additionally, Caltrans has sought formal consultation and obtained Biological Opinions from the U.S. FWS and the NMFS. On October 25, 2006, Caltrans certified a Final Environmental Impacts Statement / Environmental Impact Report (FEIS/EIR - State Clearing House No. 1990030006) for the project in order to comply with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). On December 15, 2006, Caltrans filed a Notice of Determination (NOD) for the proposed project. On December 18, 2006, Caltrans filed a Record of Decision (ROD) for the proposed project. A Supplemental Environmental Impact Report (EIR) was prepared pursuant to CEQA. The draft report was signed on November 15, 2009. Comments were received during the circulation period, which ended January 19, 2010. The Final Supplemental EIR was completed in May 2010, with potential impacts to NCSG determined to be less than significant after mitigation.

Total Maximum Daily Loads and Compliance with Water Quality Standards

21. The Eel River watershed is listed on the Clean Water Act section 303(d) list as impaired for sediment and temperature. In 2004, the U.S. EPA established sediment TMDLs for the Upper Main Eel River and tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury). Roads are a significant source of sediment in the watershed (directly, from surface erosion, and, indirectly, by triggering landslides). In addition, activities that impact the riparian zone and reduce riparian vegetation are identified as sources contributing to increased stream temperatures. A focus on measures to reduce sediment discharges to surface waters from roads in the watershed, and measures to avoid, minimize, and mitigate impacts on riparian zones is essential for achieving TMDL compliance.

22. Pursuant to Regional Water Board Resolution R1-2004-0087, *Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters within the North Coast Region* (Sediment TMDL Implementation Policy), the Executive Officer is directed to “rely on the use of all available authorities, including existing regulatory standards, and permitting and enforcement tools to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste.”
23. To ensure compliance with sediment, temperature and other related Water Quality Objectives within the Basin Plan, and consistent with the U.S. EPA-established TMDLs, 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.
24. 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.

California Environmental Quality Act

25. On October 25, 2006, Caltrans certified the FEIS/EIR (State Clearing House No. 1990030006) for the project in order to comply with the NEPA and CEQA. On December 15, 2006, Caltrans filed a NOD for the proposed project. On December 18, 2006, Caltrans filed a ROD for the proposed project. The Final Supplemental

EIR for NCSG was completed in May 2010. As a Responsible Agency, the Regional Water Board complies with CEQA by considering the FEIS/FEIR prepared by the Lead Agency (Caltrans) and by reaching its own conclusions on whether and how to approve the project involved. (Cal. Code Regs, tit. 14, § 15096.) The Regional Water Board has considered the FEIS/FEIR and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The Regional Water Board's conclusions on the FEIS/FEIR and findings for impacts to resources within the jurisdiction of the Regional Water Board are included in Attachment 2 to this Water Quality Certification and incorporated herein.

Receiving Waters:	Wetlands, Haehl Creek, Baechtel Creek, Broaddus Creek, Mill Creek, Outlet Creek, Upp Creek, and Ryan Creek Eel River Hydrologic Unit No.111.00 Outlet Creek Hydrologic Sub-Area No. 111.61
Filled or Excavated Areas:	Permanent - wetlands: 53.89 acres Permanent - streams and ponds: 2.34 acres Permanent - riparian areas: 10.88 acres Temporary - wetlands: 29.88 acres Temporary - streams and ponds: 3.16 acres Temporary - riparian areas: 10.12 acres
Total Linear Impacts:	Permanent - wetlands: 20,222 linear ft (2.83 miles) Permanent - streams and ponds: 3,161 linear ft (0.6 miles) Permanent - riparian areas: 8,535 linear ft (1.62 miles) Temporary - wetlands: 21,463 linear ft (4.07 miles) Temporary - streams and ponds: 9,255 linear ft (1.75 miles) Temporary - riparian areas: 6,693 linear ft (1.27 miles)
Dredge Volume :	None
Fill Volume :	Permanent - wetlands: 358,083 cubic yards Permanent - streams and ponds: 15,099 cubic yards Permanent - riparian areas: 72,846 cubic yards Temporary - wetlands: 167,682 cubic yards Temporary - streams and ponds: 20,581 cubic yards Temporary - riparian areas: 67,764 cubic yards

Latitude/Longitude: 39.3752 N/123.3249 W (Southern Interchange)
39.4392 N/123.2563 W (Northern Interchange)

Expiration: This Water Quality Certification authorizes dredge and fill activities for ten years following the date of issuance or until the U.S. ACE CWA Section 404 permit expires. If this Water Quality Certification Expires and the project does not comply with the proposed application, findings, and conditions of this Order, the Regional Water Board may enroll the project in the appropriate regulatory tool as determined by the Executive Officer. 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.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE REGIONAL WATER BOARD CERTIFIES THAT THE Caltrans – Highway 101 – Willits Bypass Project, WDID No. 1B10019WNME, 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 Caltrans complies with the requirements and conditions specified in this certification and the activity being limited and all proposed mitigation being completed in compliance with the applicant's project description, as set forth in the application and applicable documents received by the Regional Water Board from Caltrans. Discharges from these projects are also regulated under the State Water Resources Control Board Order No. 2003-0017-DWQ, "Statewide General Waste Discharge Requirements for Dredge or Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this Order.

STANDARD CONDITIONS

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 application.
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.

COMPENSATORY MITIGATION CONDITIONS

5. Caltrans shall submit plans and reports to the satisfaction of the Executive Officer of the Regional Water Board by all dates and time frames detailed in this Order, unless an exception is granted by the Executive Officer, or all bypass construction activities shall cease and desist, until the Regional Water Board authorizes operations.
6. Caltrans is ultimately responsible for the success of all mitigation performance standards, success criteria, and long term management actions.
7. Caltrans shall mitigate the project impacts by implementing the Caltrans-prepared *Final Mitigation and Monitoring Proposal (Final MMP)*, adopted June 8, 2010. At a minimum, the mitigation shall result the enhancement of approximately 1,011 acres of existing wetlands, the creation of 24 acres, the preservation of 53 acres for a total of approximately 1,088 of wetlands to be secured in perpetuity. In addition, Caltrans must mitigate impacts to riparian areas (waters of the State) by creating 47.57 acres, enhancing 48.51 acres, and securing in perpetuity 104 acres. Additionally the mitigation must enhance 27.58 acres and preserve 24.5 acres of waters of the U.S. and State.
8. At least 90 days prior to conducting any channel- ground- or vegetation-disturbing activities associated with bypass construction and no later than December 31, 2010; Caltrans shall acquire by fee title, easement, or deed restriction and permanently preserve all the mitigation lands identified in the Final MMP, dated June 8, 2010. Caltrans must maintain the properties to prohibit any owner/occupier of property to be used for mitigation from using that land, or allowing activities on the land that would interfere with the use of the property as mitigation including dredging, filling, modifying drainage patterns, or removing any vegetation within waters of the State, including riparian areas.

9. Caltrans shall submit a restoration work plan for the erosion sites identified in Appendix J of the final MMP, to the Executive Officer of the Regional Water Board for review, consideration, and concurrence by April 30, 2012. The restoration plan shall include the following locations and shall have work completed by October 15, 2012:
- Outlet Creek (108-010-06);
 - Outlet Tributary (108-030-04);
 - Berry Creek tributaries (108-070-04); and
 - Davis Creek tributaries (108-070-13).

The erosion site restoration work plan shall be submitted to the, U.S. ACE, CDFG, and the Executive Officer of the Regional Water Board for prior review, consideration, and concurrence. The restoration plans shall include:

- Existing functions and conditions (wetted channel width, pool/riffle ratio, mean/maximum depths, complexity, shade/cover);
 - List and plot of native species to be planted, density of plantings;
 - Detailed design plans and cross-sections;
 - Restoration methods and materials; and
 - Water diversion plans (if necessary).
10. Caltrans must implement the monitoring and reporting program (MRP) set forth in Attachment 3. The MRP is designed to collect data and provide reports that assess the biological, chemical, physical conditions of resources within the jurisdiction of the Regional Water Board for both the bypass footprint alignment and the associated mitigation lands. The required technical reports outlined in the MRP are necessary for the Regional Water Board to appropriately determine whether or not the project will adequately comply with the Basin Plan and all applicable Water Quality Standards and provide the mitigation necessary to compensate for the impacts to jurisdictional resources. The results of the monitoring requirements outlined in the MRP shall be used to develop performance standards and success criteria for the on-site repair areas (bypass alignment) and the off-site mitigation lands. Additionally, the data will be used to demonstrate the enhancement and protection of beneficial uses and long term TMDL implementation for the receiving waters with the Outlet Creek HSA. The baseline reports are due to the Regional Water Board by January 31, 2012. In addition, the revised MMP including revised management plans shall be submitted to the Executive Officer of the Regional Water Board by April 30, 2012, for review, consideration, and concurrence. Caltrans may request revisions to the MRP by submitting a plan to the Executive Officer of the Regional Water Board for review, consideration, and concurrence.

11. Subsequent to obtaining baseline information on the mitigation parcels, and no later than April 30, 2012, Caltrans shall submit a revised grazing management plan to the Executive Officer of the Regional Water Board for review, consideration, and concurrence. If it is determined by Regional Water Board staff that the grazing practices are not implemented in accordance with the approved management plan and pose a potential threat to water quality the Regional Water Board will adopt Individual Waste Discharge Requirements (WDRs) for the short term and long term grazing practices under Porter-Cologne Water Quality Control Act authority.
12. Herbicides and pesticides shall not be used on the bypass or mitigation parcels. If Caltrans or the long term manager has a compelling case as to why herbicides and pesticides should be used, they may submit a plan to the Regional Water Board for Executive Officer review, consideration, and concurrence.
13. Caltrans shall provide detailed designs and implementation schedule for the Ryan Creek Fish Passage projects. Final plans will be prepared and submitted to the Executive Officer of the Regional Water Board for review and concurrence no later than June 30, 2012. Caltrans shall complete construction of the South Fork Ryan Creek culvert project no later than October 15, 2013.
14. At least 90-days prior to initiating channel- ground- or vegetation-disturbing activities on Oil Well Hill, Caltrans shall submit the following information to the Executive Officer of the Regional Water Board for review, consideration, and concurrence:
 - a) A geotechnical report on the site specific hydrology and geology of the Oil Well Hill borrow area. The report shall identify potential hazards and corrective actions in regards to slope stability, ground water interception, and the potential for mass wasting;
 - b) A site specific land restoration/reclamation plan;
 - c) A surface water monitoring plan to address storm water runoff discharges to and from waters of the State, and any potentially new waters of the State (springs or seeps) that may develop as a result of excavation or any activities on Oil Well Hill.
 - d) A revised risk level assessment for the entire project (Oil Well Hill, bypass alignment, and mitigation sites).

If it is determined by Regional Water Board staff that the reclamation/restoration activities are not implemented in accordance with the approved plan and pose a potential threat to water quality, the Regional Water Board will adopt individual WDRs under Porter-Cologne Water Quality Control Act authority.

15. At least 90 days prior to conducting any channel- ground- or vegetation-disturbing activities Caltrans shall:
 - a) Appoint an appropriate land manager that is approved by the Executive Officer of the Regional Water Board.
 - b) Obtain the land manager's concurrence with the final MMP and associated management plans.
 - c) Recalculate the Property Analysis Record (PAR) and long term endowment to include all the conditions of this Order, projected changes to the short term and long term management plans for long term manager approval.
16. The land manager shall comply with all conditions within this Order and shall submit confirmation to the Regional Water Board that they approve the final MMP and any future modifications thereto, including but not limited to: associated plans; PAR; long term endowment; and acceptance of all conditions of this Order. Any revisions or modifications to the final MMP (e.g. work plan, grazing plan, long term management plan, adaptive management actions or plans, stream alteration plans or actions, and flood control plans or actions) shall cause an open review period of the PAR and endowment and shall be approved by the land manager. The open review period allows the land manager and Caltrans to revisit the PAR and endowment to ensure the revised mitigation actions are appropriately funded. In addition, any change in the PAR, endowment or final MMP shall be submitted to the U.S. ACE, CDFG, and the Executive Officer of the Regional Water Board for review, consideration, and concurrence.
17. Mitigation and monitoring requirements outlined in this Order are not subject to an expiration date, and remain in full effect and are enforceable.

GENERAL CONDITIONS

All conditions of this order apply to Caltrans (and all its employees) and all contractors (and their employees), sub-contractors (and their employees), the land manager, 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.

18. This Water Quality Certification covers the construction of Phase I only.
19. 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 and the worker training program requirement per Condition 27 below.

20. 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 requirements and Water Quality Standards as detailed in the Basin Plan.
21. 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 concurrence.
22. At least 90 days before initiating channel- ground- or vegetation-disturbing activities associated with construction, Caltrans shall submit to the Regional Water Board a technical analysis of the proposed haul road(s) and demonstrate that the contractor's proposal will not impact the 100-year floodplain. All temporary bridges, culverts, haul roads, or other structures that will remain in place after October 15 shall be designed to pass the 100-year flood event. Structures and materials not designed to withstand high flows or 100-year flood shall be removed from the floodplain prior to October 1st and the associated areas shall be appropriately stabilized to prevent erosion and sediment discharges to "Waters of the State".
23. Caltrans shall provide a copy of this Order, associated attachments, 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 employees, contractors, subcontractors, utility companies, and land manager.
24. 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 ground disturbing activities, major concrete pours, dewatering activities, 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.
25. Caltrans shall provide monthly updates and coordinate with the City of Willits on their construction schedule of work to avoid conflicts with the WWTP during construction and to avoid potential cumulative impacts.
26. 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.

27. Caltrans shall conduct an environmental awareness and compliance training program for all contractors, sub-contractors and Caltrans staff working on the project and shall be approved by the Executive Officer of the Regional Water Board. The training program shall present the environmental regulations and various permit conditions that Caltrans, the contractors, and land manager shall comply with and the applicable measures established for the project to minimize impacts to water quality and avoid sensitive resources, habitats, and species. The training program shall be conducted at least once annually during the construction of the bypass, and is required for all employees, contractors, sub-contractors, and other entities prior to performing any work or monitoring activities on the project. The training program must emphasize that Caltrans and the contractors are legally liable for compliance with all environmental regulations and permit conditions. In addition, the training program must emphasize a clear understanding of all applicable permits and conditions thereof. Caltrans shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. These forms shall be filed at the worksite offices and be available to Regional Water Board staff upon request.
28. Pursuant to its authority under Section D(2) of the Caltrans Storm Water MS4 permit, the Regional Water Board hereby requires Caltrans to conduct a risk determination in accordance with the State Water Resources Control Board (SWRCB) Construction General Permit (CGP) Order No. 2009-0009-DWQ for the entire area of the bypass and the mitigation sites. In addition, Caltrans shall submit the Storm Water Pollution Prevent Plan (SWPPP) in an electronic format using the Storm Water Multi-Application Reporting and Tracking System (SMARTS). <http://smarts.waterboards.ca.gov/>. Risk determination shall include the time frame (i.e. number of years) that will be required to completely construct the bypass. Caltrans shall submit the SWPPP, including the risk level determination(s) 30 days prior to initiating channel- ground- or vegetation-disturbing activities.
29. If the contractor elects to use Oil Well Hill as a borrow site, Caltrans shall recalculate the risk determination to fully include the borrow site and the entire area of the bypass, and the mitigation sites in the risk analysis. In addition, the risk

determination shall include the time frame, in years that will be required to completely construct the bypass and fully (to the satisfaction of the Regional Water Board) complete reclamation on Oil Well Hill. Additionally, if the Oil Well Hill site is used then Caltrans shall develop and install the appropriate post-construction storm water treatment measures along existing Highway 101 to the maximum extent practicable (MEP).

30. All activities and best management practices (BMPs) shall be implemented according to the submitted application and the conditions in this Order. 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.
31. 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.
32. 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.

33. 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.
34. Herbicides and pesticides shall not be used on the bypass. 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 the Executive Officer of the Regional Water Board for review, consideration, and concurrence.
35. 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 within fish-bearing streams will only be conducted between June 15th and October 15th. This Water Quality Certification does not authorize Caltrans to draft surface waters.
36. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be at least 150 linear feet beyond of waters of U.S. and the State with the exception of cranes and stationary equipment which shall only be refueled using a company certified by the CDFG. Proper certification and documentation of fueling (field logs) shall be provided to the Regional Water Board upon request. The Regional Water Board shall provide concurrence with each fueling location prior to fueling equipment within waters of 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 or its contractors allow use of any vehicle or equipment, which leaks any substance that may impact water quality.
37. 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.

38. Caltrans shall implement appropriate BMPs to prevent the discharge of equipment fluids to the stream channel. The minimum requirements will include: storing hazardous materials at least 150 linear feet outside of the stream banks; checking equipment for leaks and preventing the use of equipment with leaks; pressure washing or steam cleaning equipment to remove fluid residue on any of its surfaces prior to its entering any stream channel in a manner that does not result in a discharge to Waters of the State.
39. Spill kits are required at each fueling location and at each location that work will be conducted with streams. If the event of an unauthorized release of fuel (spill or leak) to waters of the State, Caltrans shall immediately stop work and conduct the following measures:
 - a) Notify the appropriate agencies including the Regional Water Board, CDFG, and the Office of Emergency Services (OES) at 1(800) 852-7550;
 - b) Utilized the appropriate spill kits for containment and clean up of the release;
 - c) Collect samples within the release, 50 feet downstream, and downstream to the full extent of the release; and
 - d) Analyze samples for total petroleum hydrocarbons as diesel (TPH-D), total petroleum hydrocarbons as gasoline (TPH-G), and benzene, toluene, ethylbenzene, total xylenes (BTEX).
40. The project shall have no more than 17 acres of disturbed soil area (DSA) at any time. Caltrans shall request approval from the Regional Water Board if an exception from this requirement is needed. Request for exceptions must include the locations, size of area, anticipated duration of exposure (e.g. DSA without BMPs), and a location specific rain event action plan (REAP). All disturbed soil areas and exceptions to the 17 acre limit shall be adequately documented in the site specific SWPPP.
41. Caltrans shall establish and clearly define stream setbacks that limit construction activities and prohibit ground disturbing activities within 50 linear feet of streams during the rainy season (October 15th to May 15th). If an exception from this requirement is needed for a specific location, Caltrans shall request approval from the Regional Water Board at least 5 working days in advance. At no time shall in-stream activities be conducted outside the work window of June 15th to October 15th. Exceptions may be granted by the Executive Officer of the Regional Water Board on a case by case review, only if the streams are dry or have minimal flow, and CDFG and NMFS have concurred.

42. If work is allowed within the stream channel or on the banks outside of the above referenced work window, Caltrans shall monitor the seventy-two (72) hour forecast from the National Weather Service. When forecast indicates a probability of precipitation of 50 percent or greater within the 72-hour period, or at the onset of any precipitation, ground disturbing activities shall cease and erosion and sediment control measures shall be implemented to stabilize exposed soils and prevent the mobilization of sediment into the stream channel or adjacent wetland or riparian areas. Caltrans bears full liability should the BMPs employed fail to prevent any discharge to waters of the State that exceeds applicable water quality standards or is beyond the certified area of impact. All earthwork and ground disturbing activities halted due to precipitation may resume when precipitation ceases and a 50 percent or less chance of precipitation is forecast throughout the duration of the subsequent 72-hour weather forecast.
43. 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.
44. Any potentially hazardous waste(s) (solids, liquids, or slurries) derived or encountered in this project shall undergo the appropriate characterization to demonstrate compliance with all applicable waste disposal laws and regulations. If unanticipated or anticipated waste are encountered or created during the project, Caltrans shall notify the Regional Water Board immediately and at least within 24 hours. Caltrans or their contractor shall prepare applicable work plans for handling, treating, transporting, and disposing of waste. The work plans shall be prepared and signed by an engineer or geologist with the appropriate and valid California licenses.
45. 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.

46. Wastewater from invasive species control and equipment washing must be disposed of at an appropriately permitted facility or comply with the proper NPDES requirements for discharges. Wastewater from vehicle cleaning will not be allowed for on-site use for any purposes (e.g. dust control) unless Caltrans can demonstrate to the satisfaction of the Regional Water Board that the wastewater has been adequately treated for potential pollutants and invasive species.
47. 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.
48. 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.

If an exception from this requirement is needed for a specific location, Caltrans may request that the Executive Officer of the Regional Water Board consider and approve the exception.

49. Caltrans shall retain a dedicated Water Quality Monitor to be on-site daily and document compliance with all applicable water quality requirements. At least 30 days before initiating channel- ground- or vegetation-disturbing activities, Caltrans shall submit to the Regional Water Board in writing the name, qualifications, and contact information for the designated water quality monitor(s). The water quality monitor(s) shall be knowledgeable of and have experience with the Basin Plan, and surface water monitoring procedures, protocols, quality assurance, and quality control protocols. The water quality monitor(s) shall be responsible for monitoring Project activities and/or channel- ground- or vegetation disturbing activities that result in or have the potential to result in a discharge to waters of the State.
50. The water quality monitor shall be on-site daily while project activities including all pile installation, dewatering, channel- vegetation- or ground-disturbing activities that may affect water quality to: (1) document compliance with water quality standards and conditions of this Order; (2) record the results of all required surface water monitoring; (3) evaluate the effectiveness of BMPs, mitigation measures, and avoidance measures; (4) alert key construction staff of precipitation forecasts; and (5) make stop work recommendations for activities that results in or may result in violations of this Order. The water quality monitor(s) shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections; recommendations; monitoring and sampling results; and discharges.
51. 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.
52. Caltrans in conjunction with the water quality monitor shall establish effluent, upstream (background) and downstream monitoring locations to demonstrate compliance with all applicable water quality requirements, and 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. Prior to conducting any and all monitoring and sampling activities required by this Water Quality Certification, Caltrans shall develop the proper Quality Assurance Project Plan (QAPP) to ensure the data gathered is valid and will be reliable for statistical evaluation.

53. 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)
total dissolved solids	>125 mg/L
turbidity	20% above natural background
specific conductance	>200 micromhos @ 77°F

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 15th of the following month.

54. Monthly Monitoring Reports: shall be submitted to the Executive Officer of the Regional Water Board. The monthly monitoring reports shall include at a minimum a summary of discharges, a summary of corrective actions taken (if necessary), photographs, all field sampling measurements and/or results, project status (i.e.

upcoming construction schedule and disturbed soil area updates), water quality monitor reports and field logs, water quality monitor reports and field logs, and all field monitoring equipment calibration logs. Caltrans shall develop, and Regional Water Board shall approve, a data management and reporting system to efficiently and effectively report sampling and monitoring data. Monthly monitoring reports are due to the Regional Water Board by the 15th of each month once work on the project has been initiated.

55. 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.
56. Slope Stability Reports: Caltrans shall provide yearly slope evaluation and erosion control monitoring reports for up to 10 years subsequent to the completion of the bypass project. Caltrans shall provide at least 80 percent coverage of established erosion control of all exposed areas along the bypass. To ensure the reduction of sediment transport into the Outlet Creek HSA, Caltrans shall conduct inspections prior to and subsequent to each rainy season up to 10 years after completion of the bypass. Reports shall include, at a minimum, the following information: name and title of personnel conducting monitoring and/or maintenance; observation dates; site photographs; maps including percent coverage of established erosion control and revegetation efforts; and an erosion evaluation. If the new bypass project has slope failures, excessive erosion, or causes other water quality degradation corrective actions will be required to mitigate the impacts. Established erosion control is vegetation growth, not applied erosion control product.
57. Annual Status Reports: Caltrans shall provide the Regional Water Board with an Annual Status Report no later than January 31 of every year beginning with issuance of this Order and continuing until the Regional Water Board accepts the Final Mitigation Report. Each annual report shall include, at a minimum: 1) a summary of all monitoring reports identified in this Order; 2) a general description of the status of the project site and project activities, including actual or projected completion dates, if known; 3) a summary of the annual mitigation monitoring reports and the current implementation status of each mitigation measure; 4) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and mitigating project impacts; 5) results and an evaluation of the data collected from the SWMRP; 6) Monthly Monitoring and Rainy Day Reports; and 7) A compliance table (spreadsheet) that presents each

condition of this certification, time frame (yearly calendar), project milestones and achievements, all reported discharges, and all violations of this Order.

58. Final Mitigation Report: No later than 90 days after completion of the project, including completion of all mitigation measures, Caltrans shall provide the Regional Water Board with a Final Mitigation Report. The Final Mitigation Report shall include, at a minimum: 1) a summary of all monthly monitoring reports and annual status reports; 2) copies of all mitigation monitoring reports documenting when success criteria for each of the mitigation measures were achieved; 3) all available information about mitigation measures, data collection for the SWMRP, and projects taken to implement the sediment and temperature TMDL; 4) each yearly compliance calendar; 5) an assessment of the effectiveness of the required measures in minimizing and mitigating project impacts; 6) any recommendations on how mitigation measures might be changed to more effectively minimize impacts to water quality and mitigate the impacts of future projects; 7) a final long term management plan; 8) revised PAR and endowment calculation approved by the long term manager; and 9) any other pertinent information.
59. 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.
60. 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.
61. 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.

62. This Water Quality Certification authorizes dredge and fill activities for ten years following the date of issuance or until the U.S. ACE CWA Section 404 permit expires. If this Water Quality Certification Expires and the project does not comply with the proposed application, findings, and conditions of this Order, the Regional Water Board may enroll the project in the appropriate regulatory tool as determined by the Executive Officer. 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.

63. Please contact our staff Environmental Specialist / Caltrans Liaison Jeremiah Puget of at (707) 576-2835 or jpuget@waterboards.ca.gov if you have any questions.

Catherine Kuhlman
Executive Officer

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Attachments:

1. Response to Public Comments
2. CEQA Findings
3. Monitoring and Reporting Program
4. 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

Original sent to: Mr. Jeremy Ketchum, Caltrans, 2800 Gateway Oaks Drive,
Sacramento, CA 95833

Copies sent to:

- Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 1455 Market Street, San Francisco, CA 94103-1398
- Ms. Laurie Monarres, U. S. Army Corps of Engineers, 1455 Market Street, San Francisco, CA 941003
- Mr. David Wickens, U. S. Army Corps of Engineers, 1455 Market Street, San Francisco, CA 941003
- Mr. Jason Brush, U.S. Environmental Protection Agency, Region 9, 75 Hawthorne Street, San Francisco, CA 94105
- Ms. Melissa Scianni, U.S. Environmental Protection Agency, Region 9, 75 Hawthorne Street, San Francisco, CA 94105
- Mr. Tom Daugherty, NMFS, 777 Sonoma Avenue, Room 325, Santa Rosa, CA 95404
- Mr. Ray Bosch, U.S. Fish & Wildlife Service, 1655 Heindon Road, Arcata, CA 95521
- Mr. Craig Martz, California Department of Fish and Game, 601 Locust Street, Redding, CA 96001
- Mr. Dave Kelly, Caltrans, P.O. Box 911, Marysville, CA 95901
- Mr. Jason Meigs, Caltrans, 2800 Gateway Oaks Drive, Sacramento, CA 95833