



# California Regional Water Quality Control Board

## San Francisco Bay Region



Linda S. Adams  
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Environmental  
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Arnold Schwarzenegger  
Governor

Date: **APR 16 2008**  
Site No. 02-01-C0966  
File No. 2198.11 (BT)

California Department of Transportation  
Attn: Ms. Judy Chen  
111 Grand Avenue  
Oakland, CA 94612

**Subject: Water Quality Certification for Southbound Interstate 680 Sunol Grade Modified HOV Lane Widening Project, City of Fremont, Alameda County, Unincorporated Alameda County, and City of Milpitas, Santa Clara County**

**Department Project No.: EA 04-253751**

Dear Ms. Chen:

We have reviewed and hereby issue water quality certification to the California Department of Transportation (Department) for the project referenced above (hereinafter Project). The Department has applied to the U.S. Army Corps of Engineers (Corps) for Nationwide Permit No. 27, *Wetland and Riparian Restoration and Creation Activities*, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). As such, the Department has applied to the Water Board for a Clean Water Act Section 401 water quality certification that the Project will not violate State water quality standards.

**Project:** The Department proposes to construct a southbound HOV lane and make related improvements along a 21.7-mile stretch of Interstate 680 (I-680), beginning at the I-680/State Route 237 interchange in the city of Milpitas, Santa Clara County, and extending north through the Alameda County cities of Fremont and Pleasanton. The northern terminus of the Project is at the Stoneridge Drive interchange in the City of Pleasanton. Improvements related to HOV lane construction include widening of the outside roadway shoulders, widening of eight bridges, construction of three auxiliary lanes, installation of retaining walls and drainage systems, and application of an asphalt overlay on the southbound ramps and mainline.

Three auxiliary lane segments connecting on-ramps and off-ramps will be constructed between the following six freeway interchanges: Jacklin Road and Scott Creek Road; Mission Boulevard

(Route 262) and Durham Road (Auto Mall Parkway); and, Washington Boulevard and Mission Boulevard (Route 238).

Bridges spanning I-680 are proposed to be widened to accommodate additional traffic lanes, at the following locations: Calaveras Boulevard in the city of Milpitas, East Warren Avenue in the city of Fremont, North Mission Boulevard (SR 238) in the city of Fremont, Vargas Road in unincorporated Alameda County, as well as north and southbound bridges crossing a Department of Water Resources pipeline just south of East Warren Avenue in the city of Fremont.

Project construction is proposed to begin during the 2008-2009 construction season and be completed by approximately August, 2010.

**Impacts:** Placement of a retaining wall between Post Miles 4.3 and 4.4, north of Auto Mall Parkway in the city of Fremont, will result in permanent impacts to 606 linear feet (0.17 acres) of a vegetated roadside drainage ditch. The Department will permanently impact 0.006 acres of a seasonal isolated pond to install a permanent bridge footing for I-680 bridge widening over the DWR pipeline. The same pond, as well as three additional seasonal isolated ponds in the same vicinity, will be temporarily impacted by construction access activities, totaling 0.042 acres. Additionally, to create wetland and riparian habitat contiguous with Sabercat Creek in Fremont, the Department will temporarily impact 241 linear feet (0.105 acres) of ephemeral creek.

Project implementation would result in 26.74 acres of new and reworked impervious areas. Stormwater runoff from new and reworked impervious areas may contain hydrocarbons, metals, volatile organic compounds, trash, and sediment at levels that may significantly impact State waters if left untreated. Additionally, added impervious areas may result in alterations to existing hydrologic regimes, resulting in erosion and/or changes of sediment transport in receiving waters (hydromodification).

**Mitigation:** The Department will mitigate for temporary and permanent impacts through a combination of on- and off-site activities.

*Vegetated drainage ditch creation:* The Department will construct a retaining wall that will allow rebuilding of the 606 linear foot drainage ditch, in-kind, adjacent its current location.

*Sabercat Creek and unnamed tributary restoration and creation:* The Department will restore 660 linear feet (0.72 acres) of riparian habitat, and create 0.42 acres of wetland habitat and 5.14 acres of oak woodland, along perennial Sabercat Creek and its adjacent perennial tributary. The Sabercat Creek mitigation area is located along northbound I-680 just south of Washington Boulevard in the city of Fremont.

As part of wetland creation and riparian restoration activities, culverted portions of Sabercat Creek and an unnamed tributary to Sabercat Creek will be daylighted, approximately 165 and 70 linear feet, respectively, just upstream of their current underground confluence beneath I-680, immediately east of I-680. Creek flows will be combined in the daylighted area to allow wetland creation. To ensure adequate flows from Sabercat Creek and the unnamed tributary are maintained to support the proposed wetland and riparian habitat within the areas of the daylighted creeks, an overflow berm will be created at the down-gradient edge of the wetland. The berm will allow high flows to drain to a box culvert that will route the flow back into Sabercat Creek and flow downstream beneath I-680.

The banks of Sabercat Creek are severely eroded, and sacked concrete previously installed to abate bank erosion has broken away from the creek banks. The Department will remove all concrete material from the creek and use bioengineering bank stabilization techniques (e.g., willow mats) to stabilize the channel banks.

*Permanent Stormwater Treatment Controls:* Project implementation would result in 26.74 acres of new and reworked impervious areas. The Department has proposed on-site stormwater treatment of 9.70 acres using biofiltration strips, resulting in a 17.04 acre treatment deficit.

The Department has proposed an alternate stormwater treatment project (proposal) in coordination with the City of Dublin that would treat stormwater runoff from urbanized impervious areas. Contingent upon implementation of the following proposal summary, the Water Board will consider full implementation of the alternative treatment proposal as meeting the Project's outstanding 17.04 acre treatment deficit.

The Department has proposed to ensure stormwater treatment for approximately 60 acres of impervious residential and commercial area using hydrodynamic separators in the city of Dublin. One separator shall be installed on Maple Drive between York Drive and Ebensburg Lane and treat stormwater from a 41-acre catchment. The second separator shall be installed on Amador Valley Boulevard immediately southwest of the York Drive terminus and treat a 19-acre catchment. The hydrodynamic separator devices shall be equipped with oil sorbent materials to provide hydrocarbon pollutant removal. The devices must be maintained for the life of each device to provide effective removal of trash, suspended solids and petroleum-based pollutants. Additionally, the Department has proposed retrofit of an existing culvert to provide approximately 0.51 acres of impervious area treatment using a biofiltration swale (See #2 in this section, below, for a description).

Hydrodynamic separators are not considered by the Water Board to provide treatment of stormwater pollutants to the Maximum Extent Practicable<sup>1</sup> (MEP), and therefore are not considered one-to-one alternatives for foregone MEP stormwater treatment. Additionally, the Water Board typically will not allow alternative treatment using non-MEP technologies, unless they are one step in a treatment train that, overall, provides MEP treatment. Nevertheless, the Water Board is accepting the Department's current proposal because all of the following apply:

1. On-site MEP stormwater treatment opportunities have been maximized;
2. The Department has maximized off-site MEP stormwater treatment opportunities as demonstrated by: 1) Inclusion of at least one off-site treatment control that surpasses the MEP standard; and 2) Field verification by Water Board staff that off-site stormwater treatment opportunities are exhausted.

In between Village Parkway and Interstate 680, between Dublin Boulevard and the adjacent northbound I-680 on-ramp, the Department has identified a portion of its right-of-way that may be retrofitted to convert a grass strip into a biofiltration swale. The swale shall treat freeway and roadway stormwater runoff from approximately 0.51 acres of impervious surface. The area currently receives runoff only from the freeway on-ramp; however, the Department shall divert runoff from approximately 0.28 acres of Village Parkway.

3. The Water Board has been working with the Department to publicize that Department-funded stormwater treatment opportunities are available to municipalities. At the time of this certification's issuance, the city of Dublin was the only jurisdiction offering a feasible alternative compliance project. Water Board staff met with Dublin city staff to confirm MEP opportunities were not being overlooked in the proposed treatment area; and,
4. The city of Dublin shall be subject to trash control requirements as detailed in the yet-to-be ratified Municipal Urban Regional Permit (MRP). The tentative MRP language requires municipalities to identify five percent of the total urban/suburban areas within their city limits and provide full capture treatment for those areas. This level of treatment is proposed to be provided no later than four years from adoption of the MRP. Although Dublin has indicated it intends to claim trash treatment credit for approximately 34 of the 60 acres treated by the proposed hydrodynamic separators, given the language in the draft MRP at the time of this certification issuance, Caltrans sponsorship of the treatment devices will ensure their implementation within one to

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<sup>1</sup> Examples of treatment controls that may treat stormwater to the MEP standard include vegetated treatment controls, such as vegetated swales and bioretention cells, as well as certain mechanical controls, such as media filtering systems.

one-and-a-half years of the date of this certification, thereby providing treatment at an earlier date than may otherwise be provided.

**Hydromodification:** The Department shall perform a Project hydromodification analysis using the Bay Area Hydrology Model (BAHM). Upon submission of a hydromodification analysis report to the Water Board (HM Report), as described in the Hydromodification Analysis Roadway Workplan (Workplan) (Attachment A), the Water Board will evaluate proposed mitigation for any areas subject to potentially significant hydromodification impacts.

**Wetland Tracker System:** It has been determined through regional, state, and national studies that tracking of mitigation/restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. In addition, to effectively carry out the State's No Net Loss Policy for wetlands, the State needs to closely track both wetland losses and mitigation/restoration project success. Therefore, we require that the Department use a standard form to provide Project information related to impacts and mitigation/restoration measures. An electronic copy of the form and instructions can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.htm>. Project information concerning impacts and mitigation/restoration will be made available at the web link: <http://www.wetlandtracker.org>.

**CEQA Compliance:** The Water Board presumes the validity of the Initial Study/Negative Declaration completed for the Project on June 1, 2005 (SCH# 199122004).

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

1. The Department shall adhere to the Standard and Regional conditions imposed by Nationwide Permit No. 27 and to the conditions imposed by the California Department of Fish and Game (CDFG) in the Streambed and Lake Alteration Agreement issued for the Project;
2. The Department shall submit a Habitat Mitigation and Monitoring Plan (HMMP) for the Sabercat Creek mitigation site acceptable to the Executive Officer, no later than September 22, 2008. The HMMP shall include: a vegetation monitoring period of no less than five

years following completion of mitigation construction; a schedule for submitting periodic mitigation monitoring reports; a conservation easement for any mitigation work done outside of the Department's right-of-way; and, a description of the bank stabilization technique(s) that shall be used to help restore riparian functions to Sabercat Creek. The HMMP shall propose a stabilization design utilizing live vegetation;

3. The Department shall fully implement all proposed habitat mitigation no later than October 15, 2011;
4. The Department shall fully implement the proposed alternative stormwater treatment project (proposal) as described above in the Certification section, *Permanent Stormwater Treatment Controls*. The Department shall ensure that hydrodynamic separator devices are properly maintained to enable their full pollutant removal functionality, for the design life of that device. Treatment BMPs in the Department's right-of-way shall be maintained in perpetuity;
5. The Department shall fully implement and meet all deadlines included in the attached Workplan (Attachment A). The HM Report shall be subject to the acceptance of the Executive Officer;
6. Following the end of each construction season (April 1 – October 31), and no later than December 31, the Department shall provide an updated summary detailing the extent of added and reworked impervious areas, as well as the extent of hydromodification control implementation;
7. All hydromodification control measures shall be implemented no later than July 31, 2010;
8. Not later than 60 days prior to the beginning of construction of any Project component, the Department shall submit, acceptable to the Executive Officer, a final SWPPP, prepared pursuant to its Statewide Permit, to address the Project's expected construction stage impacts;
9. Swirl separator devices shall be equipped with oil sorbent materials to provide hydrocarbon pollutant removal. The devices must be maintained to provide effective removal of trash, suspended solids and petroleum-based pollutants;
10. The Department is required to use the standard Wetland Tracker form to provide Project information describing impacts and mitigation/restoration measures within 14 days from the date of this certification (or Order). The completed Wetland Tracker form shall be submitted electronically to [wetlandtracker@waterboards.ca.gov](mailto:wetlandtracker@waterboards.ca.gov), or, shall be submitted as a hard copy to both: 1) San Francisco Bay Regional Water Quality Control Board (see

letterhead for address), to the attention of Wetland Tracker, and, 2) San Francisco Estuary Institute, 7770 Pardee Lane, Oakland, CA 94621-1424, to the attention of Mike May;

11. This certification does not allow for the take, or incidental take of any State or Federal listed threatened or endangered listed species. The Department is required, as prescribed in the State or Federal endangered species acts, to consult with the appropriate agency prior to commencement of the project. Any unauthorized take of such listed species may result in prosecution;
12. The Department shall maintain a copy of this water quality certification at the Project site so as to be available at all times to site operating personnel. It is the responsibility of the Department to assure that all personnel (employees, contractors, and subcontractors) are adequately informed and trained regarding the conditions of this certification;
13. This Certification applies to the Project as proposed in the application materials submitted to the Board on January 14, 2008, and any subsequent information received by Water Board staff from the Department. Please be advised that failure to implement the Project as proposed, unless otherwise authorized by the Executive Officer, is a violation of this water quality certification;
14. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code (CWC) and Section 3867 of Title 23 of the California Code of Regulations(23 CCR);
15. This certification action does not apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to California Code of Regulations (CCR) Title 23, Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and,
16. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833). Water Board staff received full payment of \$6766.40 on March 5, 2008.

We anticipate your cooperation in implementing these conditions. However, please be advised that any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) section 13350. Failure to respond, inadequate response, late response, or failure to meet any condition of this certification may subject you to civil liability imposed by the Water Board to a maximum of

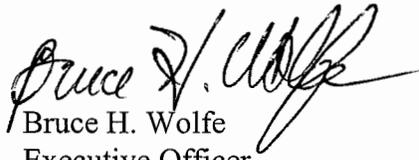
\$5,000 per day per violation or \$10 for each gallon of waste discharged in violation of this certification.

Conditions 2, 5, 6, 8, and 10 are requests for information or reports. Any request for a report made as a condition to this action is a formal request pursuant to CWC section 13267, and failure or refusal to provide, or falsification of such requested report is subject to civil liability as described in CWC section 13268.

We anticipate no further action on this request. Should new information come to our attention that indicates a water quality problem with this project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR Section 3857.

If you have any question, please contact Brendan Thompson of my staff at (510) 622-2506, or via e-mail to [BThompson@waterboards.ca.gov](mailto:BThompson@waterboards.ca.gov).

Sincerely,

  
Bruce H. Wolfe  
Executive Officer

Enclosure: Appendix A-- Hydromodification Analysis Roadway Workplan

cc (w/enc): Mr. Bill Orme SWRCB-DWQ  
Mr. Hal Durio, Regulatory Branch, USACE  
Mr. Keith H. Lichten, Water Board  
Mr. Hardeep Takhar, California Department of Transportation  
Ms. Melissa Escaron, CDFG, Yountville  
Mr. David Smith, EPA, Wetlands Regulatory Office, San Francisco  
SFBRWQCB 401 database

# **Appendix A**

## **Hydromodification Analysis Roadway Workplan**

**HYDROMODIFICATION ANALYSIS ROADWAY WORK PLAN**

<b>DATE OF SUBMITTAL OR ACTION</b>	<b>ACTIONS/SUBMITTALS</b>	<b>SUNOL ROADWAY CONSTRUCTION SCHEDULE (CORRIDOR)</b>
April 14, 2008 - June 13, 2008	<p>Department will use Bay Area Hydrology Model (BAHM) to analyze areas that offer opportunity for hydromodification mitigation via storage in basins and open channels. Caltrans will also use BAHM to evaluate infiltration on roadway side slopes where soil and hydraulic conditions are favorable. In situations where BAHM cannot be applied, such as areas where compost-amended soil may be proposed as mitigation, because adequate storage is unavailable and soil types are unsuitable, empirical methods developed by Washington State Department of Transportation will be used.</p>	
June 16, 2008	<p>Hydromodification analysis and results forwarded, by Department, to the San Francisco Bay Regional Water Quality Control Board (SF Bay RWQCB). This submittal will include proposals for implementing appropriate control measures where practicable to mitigate for hydromodification impacts. The proposal will include the types of control measures, their location, construction details and a schedule for implementation.</p>	
June 17, 2008 - July 16, 2008	SF BayRWQCB review of Department's proposal.	
October, 2008		<b>Begin Roadway Construction (Corridor)</b>
October 2008 - July 2010		<p>Incorporate hydromodification control measures as proposed via Contract Change Order (CCO), if necessary, or consider included as part of the wetland creation and riparian restoration proposed along Sabrecaat Creek. The Department will attempt to minimize the time gap between installation of impervious areas and proposed control measures through Contract Change Orders (CCOs), and modify contract special provisions related to "Order of Work" to avoid any delays.</p>
July, 2010		<b>End Roadway Construction (Corridor)</b>