

**California Regional Water Quality  
Control Board (RWQCB) Permit**

**For the**

San Francisco-Oakland Bay Bridge East Span  
Seismic Safety Project

**October 2001**



# California Regional Water Quality Control Board

## San Francisco Bay Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

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Gray Davis  
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Date: **OCT 19 2001**  
File No. 2198.11 (KHL)

Ms. Mara Melandry  
Environmental Manager, Caltrans  
Mail Station 12-C  
P.O. Box 23660  
Oakland, CA 94623-0660

**Subject: Corps Interagency Meeting Comments Summary, Bay Bridge Replacement Project, Alameda County.**

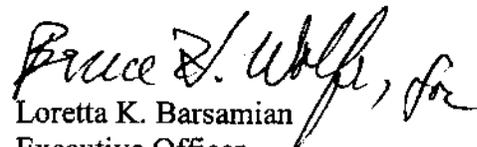
Dear Ms. Melandry:

Enclosed please find a copy of Order 01-120, which was adopted by the Board on October 17, 2001.

Please note the various required submittals and due dates for reports and plans that are a part of the Order. We look forward to working with Caltrans in the development of these reports. In addition, leading up to the Board's scheduled January 2002 consideration of Waste Discharge Requirements for the project, we will continue to work with you to develop plan schedules, details, and other information for elements of the project including self-monitoring plans during dredging, the post-construction storm water management plan, and the wetland mitigation plan.

If you have any questions, please contact Keith Lichten of my staff via email to [khl@rb2.swrcb.ca.gov](mailto:khl@rb2.swrcb.ca.gov), or at (510) 622-2380.

Sincerely,

  
Loretta K. Barsamian  
Executive Officer

cc: Bruce Wolfe, RWQCB  
Dale Bowyer, RWQCB  
Tim Vedlinsky, USEPA, WTR-8  
Bob Smith, U.S. Army Corps of Engineers, Regulatory Division

*California Environmental Protection Agency*

Ms. Mara Melandry

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Caltrans Bay Bridge Project

cc (cont.):

Richard Smith, USFWS  
Margaret Roper, CDFG  
Bob Batha, BCDC  
David Woodbury, NMFS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER No. 01-120

WATER QUALITY CERTIFICATION FOR:

CALIFORNIA DEPARTMENT OF TRANSPORTATION

SAN FRANCISCO-OAKLAND BAY BRIDGE EAST SPAN SEISMIC SAFETY PROJECT  
(EAST SPAN PROJECT), CITY AND COUNTY OF SAN FRANCISCO AND CITY OF  
OAKLAND, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter Board, finds that:

1. The California Department of Transportation (hereinafter, Caltrans) on September 12, 2001, applied to the Board for Water Quality Certification under Section 401 of the Clean Water Act for the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project (hereinafter, the Project). Caltrans proposes to replace the existing East Span of the San Francisco-Oakland Bay Bridge with a new bridge constructed north of that span. The Project will be located on San Francisco Bay between the cities of San Francisco, at Yerba Buena Island (YBI) and Oakland.
2. The existing East Span is not expected to withstand a maximum credible earthquake (MCE) on the San Andreas or Hayward fault. The Project will replace the East Span with a new bridge that will withstand a MCE and will meet current roadway design standards for operations and safety to the greatest extent possible.
3. Caltrans has indicated in its application for water quality certification that the Project is a seismic retrofit project subject to California Streets and Highways Code (CSHC) Section 180, et seq. CSHC Section 180.4 requires that all State and local agencies with permitting authority over a seismic retrofit project act on a permit application within 15 days of its submission. As stated in its October 3, 2001, letter to Board staff, Caltrans recognizes the Board's difficulty in meeting this permitting timeline and agrees to Board staff's strategy that the Board act on Caltrans' water quality certification application at the October 17, 2001, Board meeting and act on an application for waste discharge requirements (WDRs) at the January 16, 2002, Board meeting. As such, that letter states that Caltrans agrees to extend the 15-day action requirement to these dates.

Project Description and Impacts

4. Project construction will occur over a seven-year period, including five years to construct the new bridge and two years to remove the existing East Span. Construction of the new bridge will be divided among four separate contracts as follows: 1) Skyway contract, 2)

Self-Anchored Suspension Span and Transition Structures at Yerba Buena Island contract, 3) Oakland Approach Structures contract, and 4) Geofill contract at the Oakland Touchdown. There would be an additional demolition contract to remove the existing bridge. Caltrans intends to open bids on the Skyway contract on November 14, 2001, and award that contract shortly thereafter.

5. The Project would require the use of large-scale equipment and involve labor-intensive activities. Materials and equipment would arrive to the site by land and water. Dredging of approximately 615,000 cubic yards of Bay mud and soil will also be required.
6. This Order applies to the permanent and temporary direct and indirect impacts to waters of the State associated with the Project, which is comprised of the Project components listed above. Total direct permanent and temporary Project impacts to waters of the State are approximately 8.59 acres. These impacts occur in areas known as special aquatic sites. The majority of Project impacts will occur near the Oakland Touchdown area due to dredging for a temporary barge access channel, placement of fill to construct a new westbound roadway, relocation of Caltrans' existing maintenance road, and permanent shading from the new east and westbound roadways. Relatively minor impacts to eelgrass beds adjacent to YBI to construct a temporary barge dock will occur.
7. The Project's direct permanent impacts include elimination of approximately 3.24 acres of eelgrass habitat and approximately 4.19 acres of sand flat habitat. The Project's direct temporal impacts during construction include approximately 0.36 acres of eelgrass habitat and approximately 0.80 acres of sand flat habitat.
8. The Project may temporarily impact special aquatic sites, including eelgrass and sand flats, and open waters of the Bay over the estimated seven years of bridge construction and demolition. Impacts may occur through the discharge of construction and demolition materials and debris, indirect impacts from equipment access and changes to erosion and sedimentation during project dredging and fill placement.
9. The Project will directly impact the beneficial uses of waters of the State for estuarine habitat and preservation of rare and endangered species through construction stage impacts including pile driving. Pile driving was shown to cause fish kills during a pilot project for the new bridge. Caltrans will complete mitigation, including adaptive management to maximize mitigation effectiveness, to minimize these impacts, and is working with the National Marine Fisheries Service (NMFS) to develop a mitigation plan.
10. To mitigate for the Project's direct impacts, Caltrans plans to implement measures on-site to restore special aquatic sites affected during Project construction including:
  - a. Harvesting approximately 0.54 acres of eelgrass from the footprint of the temporary barge access channel prior to dredging, planting test plots in adjacent eelgrass beds, and monitoring to evaluate performance;

- b. Restoring to its pre-construction bathymetry up to approximately 1.73 acres of the barge access channel with dredge material and excavated sand to facilitate eelgrass colonization and then replanting with eelgrass. Caltrans will monitor replanted eelgrass to evaluate its performance;
  - c. Restoring approximately 0.80 acres of sand flats that are temporarily affected by the placement of a geotube or mud boils from engineered fill;
  - d. Implementing measures on-site to replace and/or restore shorebird roosting habitat and commorant habitat; and,
  - e. Implementing measures to minimize impacts to protected salmonids and to improve water quality at the Emeryville Crescent and portions of the Eastshore State Park.
11. Caltrans will provide additional mitigation for the Project's direct impacts at off-site locations. Caltrans will provide \$10.5 million in funds to be divided between the following:
  - a. Provide funding to the East Bay Regional Park District (EBRPD) to restore, enhance or create new aquatic habitat and transitional uplands at the Eastshore State Park and within Central San Francisco Bay. Potential mitigation sites include:
    - Radio Beach Area-potential shoreline restoration including intertidal habitat and upland transition zones;
    - Brickyard Cove Area-potential shoreline restoration including intertidal habitat, the removal of riprap and upland transition zones;
    - Albany Beach Area-potential beach restoration/nourishment including the removal of parking areas; and,
    - Hoffman Marsh Area – potential tidal marsh restoration including the removal of fill and improving tidal action and water circulation.
  - b. Provide funding to the United States Fish and Wildlife Service (USFWS) to acquire, cleanup contaminants, and initiate restoration of approximately 3,000 acres of diked historic baylands at Skaggs Island, Sonoma County, to tidal marsh and seasonal wetlands.
12. Operation and maintenance of the Project's new bridge, roads, and reconfigured plaza area will indirectly impact beneficial uses through the discharge of polluted storm water and other urban runoff pollutants (e.g., oil and grease, heavy metals, pathogens, nutrients, etc.).
13. To address the Project's post-construction storm water impacts, Caltrans proposes to permanently capture and treat storm water runoff from a portion of the new bridge, the reconstructed metering lights and toll plaza area, and east to the Powell Street interchange in Emeryville. An area totaling approximately 155 acres is proposed for capture and

treatment. This treatment would improve the quality of water draining into the Emeryville Crescent and Central San Francisco Bay, and thus would enhance wildlife habitat.

14. This Order requires Caltrans to submit, acceptable to the Executive Officer, the following documents, reports, or plans prior to beginning construction of the Project, or within specified dates following contract award for the Skyway, to adequately mitigate the Project's impacts. As of the date of adoption of this Order, the items listed below either have been submitted to the Board and are not complete or not otherwise acceptable to the Board, or have not been submitted. Because of project phasing, some plans may be submitted separately, over time, prior to the beginning of construction for the Project's different contracts.
  - a. On-site mitigation plan;
  - b. Off-site mitigation proposal;
  - c. Dredging Operations Plan;
  - d. Storm Water Management Plan for activities identified in Finding 13;
  - e. Storm Water Pollution Prevention Plan;
  - f. Construction phasing schedule; and,
  - g. Financial Assurance/Project Budget Authority.
15. This Order requires Caltrans to prepare and implement a post-construction Storm Water Management Plan for activities identified in Finding 13 (SWMP) and construction-stage Storm Water Pollution Prevention Plan or Plans (SWPPP), in compliance with its statewide NPDES permit for storm water runoff. Because of the Project's proximity to sensitive resources, including special status species habitat, and potential to discharge materials that could significantly impact those resources, this Order requires Caltrans to submit a SWPPP(s) for the Project, at least 30 days prior to the beginning of construction for the Project. As a part of the Board's consideration of appropriate mitigation measures for the Project's post-construction/ operation-stage direct and cumulative impacts, this Order requires Caltrans to submit, within one year of contract award for the Skyway, a site-specific SWMP, acceptable to the Executive Officer, including appropriate design measures and storm water treatment controls to minimize and mitigate these impacts.
16. This Order is conditioned upon Caltrans' compliance with waste discharge requirements (WDRs), to be adopted at a future Board meeting. WDRs are necessary to ensure implementation of the work described in the documents, reports, and plans listed in Finding 14 above to address water quality impacts; to further ensure protection of beneficial uses of waters of the State from the Project; and to allow the Board to timely address any changes to the Project and thus any material changes in the character, location and volume of any proposed waste discharges.

#### Regulatory Framework

17. The Board, on June 21, 1995, adopted, in accordance with CWC, Division 7, Chapter 3, Article 3, a revised Water Quality Control Plan, San Francisco Bay Basin (Basin Plan).

The State Water Resources Control Board and the Office of Administrative Law approved this updated and consolidated revised Basin Plan on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters. This Order is in compliance with the Basin Plan.

18. The Project is located with the Central portion of San Francisco Bay. Central San Francisco Bay has the following existing beneficial uses defined in the Basin Plan: estuarine habitat, industrial service supply, fish migration, navigation, industrial process supply, preservation of rare and endangered species, water contact recreation, non-contact water recreation, shellfish harvesting, and fish spawning.
19. Caltrans submitted a Clean Water Act 404(b)(1) Alternatives Analysis in its application package, which demonstrates that appropriate effort was made to avoid and then to minimize impacts to waters of the State, as required by the Basin Plan. Board staff held extensive additional discussions with Caltrans regarding its Alternatives Analysis. The Board concurs with the conclusions of the Alternatives Analysis.
20. The Basin Plan Wetland Fill Policy (policy) establishes that there is to be no net loss of wetland acreage and no net loss of wetland value, and a long-term net gain in both, when the project and any proposed mitigation are evaluated together, and that mitigation for wetland fill projects is to be located in the same area of the Region, whenever possible, as the project. The policy further establishes that wetland disturbance should be avoided whenever possible, and if not possible, should be minimized, and only after avoidance and minimization of impacts should mitigation for lost wetlands be considered.
21. The goals of the California Wetlands Conservation Policy (Executive Order W-59-93, signed August 23, 1993) include ensuring “no overall loss” and achieving a “...long-term net gain in the quantity, quality, and permanence of wetland acreage and values....” Senate Concurrent Resolution No. 28 states that “[i]t is the intent of the legislature to preserve, protect, restore, and enhance California’s wetlands and the multiple resources which depend on them for benefit of the people of the State.” Section 13142.5 of the CWC requires that the “[h]ighest priority shall be given to improving or eliminating discharges that adversely affect...wetlands, estuaries, and other biologically sensitive areas.”
22. The California Environmental Quality Act (CEQA) requires that all projects approved by State agencies comply with CEQA. On September 18, 1998, Caltrans filed a Notice of Exemption indicating that the Project, as an emergency project, is exempt from CEQA, pursuant to CSHC Section 180.2 and Pub. Res. Code Section 21080 and 14 Cal. Code of Regs. Section 15269. The Board finds that the Project is exempt from CEQA pursuant to 14 Cal. Code of Regs. Section 15269.

23. The Board has notified the U.S. Army Corps of Engineers (the Corps) and other interested agencies and persons of its intent to issue Water Quality Certification for the Project.
24. The Board, in a public meeting, heard and considered all comments pertaining to the Project.

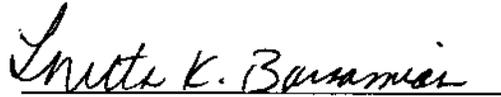
IT IS HEREBY ORDERED that, with the incorporation of the following conditions, the Board certifies that any discharge from Caltran's Project described herein, will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. The following conditions are associated with this certification:

1. Caltrans shall submit a Report of Waste Discharge Form 200 to the Board's Executive Officer by November 16, 2001. Upon the Board's issuance to Caltrans of Waste Discharge Requirements pursuant to CWC Section 13263 for the Project, Caltrans shall immediately comply with such requirements.
2. Caltrans shall comply with all necessary approvals and/or permits for the Project and its mitigation projects from applicable government agencies, including, but not limited to, Bay Conservation Development Commission, California Department of Fish and Game, NMFS, USFWS, and the Corps, and submit copies of such approvals and/or permits to the Board's Executive Officer prior to the start of construction activity.
3. Not later than 60 days prior to the beginning of construction activity, Caltrans shall submit a construction-phasing schedule.
4. Not later than 60 days prior to the beginning of dredging, Caltrans shall submit, acceptable to the Executive Officer, a Dredging Operations Plan. Upon the Executive Officer's determination that the Plan is acceptable, the Executive Officer may determine that work may begin sooner than 60 days following submittal of the acceptable Plan. Submittal of plans for later phases (e.g., dredging for demolition access) may be completed at future dates, but not later than 90 days prior to the beginning of construction activity/demolition, including staging and dredging, for those phases.
5. Not later than one year following the contract award for the Skyway, Caltrans shall submit, acceptable to the Executive Officer, a plan that addresses the proposed on-site mitigation for special aquatic sites including eelgrass beds and sand flats. The plan shall include all appropriate detail for earthwork and plantings, as well as an implementation schedule, performance standards, and monitoring.
6. Not later than 60 days prior to the beginning of construction activity, Caltrans shall submit, acceptable to the Executive Officer, a final implementation plan describing the additional mitigation activities to be undertaken with EBRPD and USFWS. The

implementation plan shall include detailed descriptions of the proposed activities, including appropriate project plans, an implementation schedule, and reporting. The plan or subsequent report shall demonstrate that Caltrans has fully funded \$10.5 million or has \$10.5 million in funds available for all activities identified in Finding 11 to be completed by a third party by no later than 60 days prior to the beginning of construction activity. Upon the Executive Officer's determination that the plan is acceptable, the Executive Officer may determine that work may begin sooner than 60 days following submittal of the acceptable plan.

7. Within one year of contract award for the Skyway, Caltrans shall submit, acceptable to the Executive Officer, a conceptual post-construction SWMP including appropriate design measures and storm water treatment controls to address the project's urban runoff impacts to waters of the State. The SWMP shall provide for the appropriate treatment of at least 85% percent of average annual runoff from the area to be treated and shall include appropriate design details, implementation and completion schedules, planting plans, maintenance plans, funding mechanism(s), and all other information, as appropriate.
8. Not later than 30 days prior to the beginning of construction activity of the design measures and treatment controls in the conceptual SWMP, Caltrans shall submit, acceptable to the Executive Officer, a final SWMP with final construction details and all other information, as appropriate, for all appropriate information included in the conceptual SWMP.
9. As soon as feasible following contract award for the Skyway, and not later than 30 days prior to the beginning of construction activity, Caltrans shall submit, acceptable to the Executive Officer, a SWPPP to address the Project's expected construction stage impacts. SWPPPs may be submitted separately for each phase of construction activity/demolition, but must all be submitted, acceptable to the Executive Officer, at least 30 days prior to beginning of each phase of construction activity/demolition.
10. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC §13330 and 23 CCR §3867.
11. 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 23 CCR 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.
12. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833) and owed by the applicant. The fee for this certification has been paid in full.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 17, 2001.

  
Loretta K. Barsamian  
Executive Officer