State of California Department of Transportation

San Francisco – Oakland Bay Bridge
East Span Seismic Safety Project

2006 ANNUAL BIOLOGICAL MITIGATION STATUS REPORT

In Accordance with California Department of Fish and Game
Incidental Take Permit No. 2081-2001-021-03

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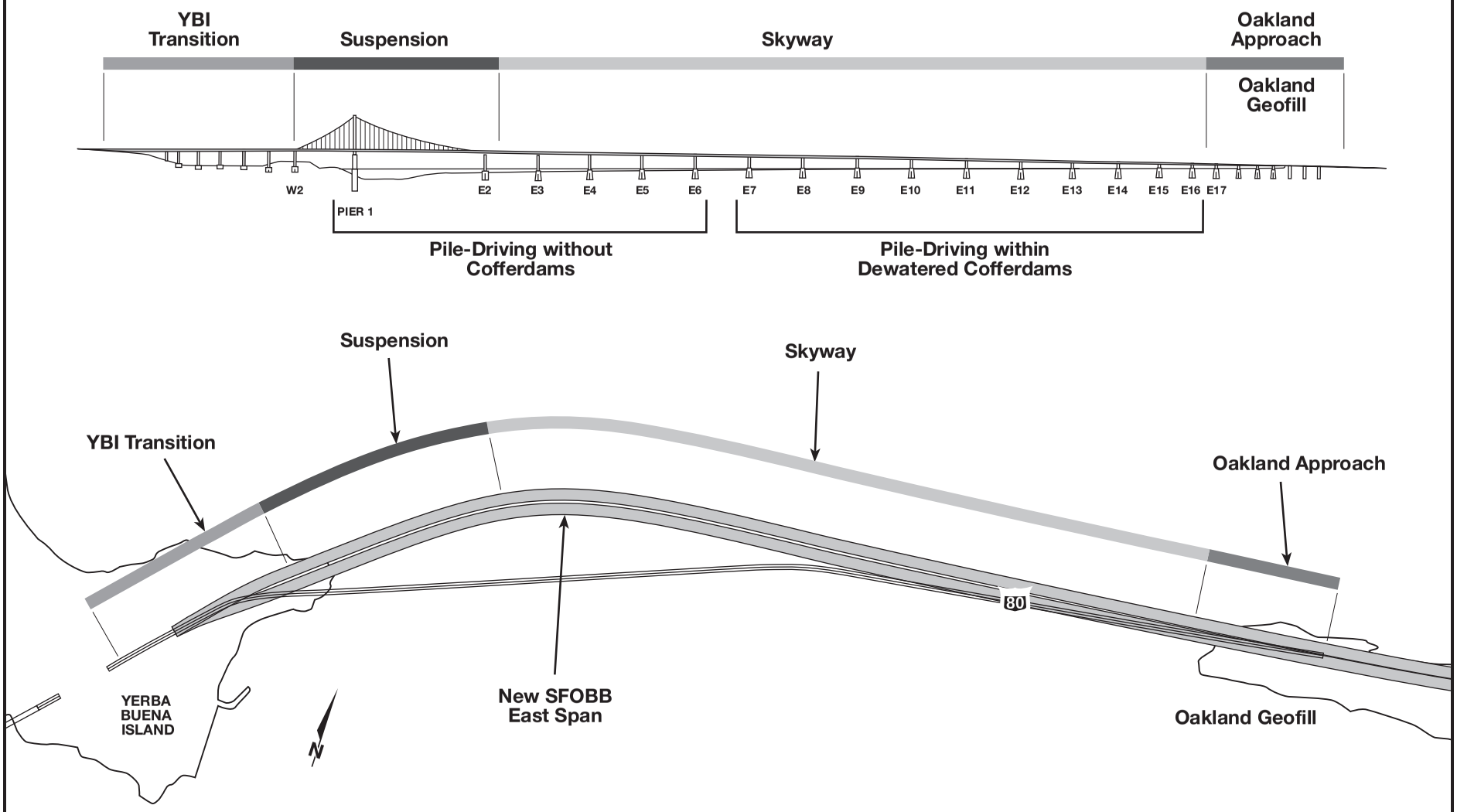
Introduction:
Per Condition 3.j of California Endangered Species Act Incidental Take Permit No. 2081-2001-021-03 for the East Span Project, this yearly status report provides the following: "1) a general description of the project's status, including actual or projected completion dates, if known; 2) the current status of each avoidance, minimization, and mitigation measure; and 3) an assessment of the effectiveness of each completed or partially completed avoidance, minimization, and mitigation measure."

Background:
The purpose of the East Span Project is to provide a seismically upgraded crossing for current and future users between Yerba Buena Island (YBI) and Oakland. The construction period is approximately eight years for construction of the new East Span and two years to remove the existing structure. Construction activities will take place on land as well as in the Bay and include activities such as dredging, excavation, pile-driving, construction of temporary and permanent structures, and removal of the existing bridge.

The project has four primary components (see Figure 1):

- Geofill at the Oakland Touchdown
- Oakland Approach Structures
- Skyway
- Self-Anchored Suspension/Yerba Buena Island transition structure

To facilitate an efficient and cost-effective building program, the YBI component has been separated into several construction contracts. In addition, Caltrans will pursue a separate contract to remove the existing bridge. Figure 1



SFOBB
EAST SPAN
SEISMIC SAFETY
PROJECT

Project Components

4/3/02

Project Construction Activities During July 2005 – June 2006:

Skyway Contract (February 2002 – Estimated Completion Spring 2007)
The Skyway Contract involves construction of the bridge component that will connect to the Oakland approach structures on the eastern shore and to the main span on the west side. In general, work will proceed from east to west from Piers E16 to E3, beginning with the eastbound structure.

During this report period work has involved a variety of activities related to construction of pier foundations (which was completed in October 2005), pier columns, pier tables, and superstructure. All eastbound and westbound piers were worked on during the year. Large diameter pile-driving outside of cofferdams with the use of a bubble curtain system occurred during five days in January/February for temporary casings at Pier T1 and four days in May for Pier E2.

Self-Anchored Suspension Bridge Marine Foundations [Piers T1 and E2] Contract
This contract constructs the tower foundation at Pier T1 and the eastern most foundations and columns of the self-anchored suspension bridge at Pier E2.

After more than a year delay, this contract was resumed in January 2006. Temporary casings at Pier T1 were driven in January and February. Drilling for the cast-in-drilled-hole (CIDH) concrete pilings at Pier T1 began in February and will continue into the summer. Pile-driving at Pier E2 began in late May.

Yerba Buena Island South-South Detour Contract (July 2004 – Estimated Completion Summer 2007)
This contract creates temporary bypass structures that will redirect I-80 traffic around the construction area. Work conducted for the South-South Detour Contract included cast-in-drilled-holes (CIDH) piling work at the viaduct, limited work at Bents 47 – 53, and utility relocation.

Status of Mitigation:
Attached to this report is a table which shows the status of the mitigation measures listed in the Permit. The following is a summary of the mitigation measures.

1) Monitoring for the California least tern, California brown pelican, and American peregrine falcon included land-based and boat reconnaissance surveys. During this report period (July 1, 2005 – June 30, 2006) all three species were observed.

   The majority of sightings were California brown pelicans with a total of 209 observed within the study area as of June 15. Ninety-six pelicans were observed in May 2006. They were observed in smaller numbers in July – December 2005 and June 2006. Five California least terns were observed during the year, in May and June 2006.

Based on observations, it was presumed that the peregrine falcon pair known to nest on the existing East Span was in hard incubation between March 17 and March 22, with hatching expected around April 22.

The peregrines nesting at Pier E2 failed in their first nesting attempt for the 2006 season. Observations during late May/early June indicate that peregrines are in the egg-laying phase of their second nesting attempt for the 2006 season.

2) A bubble curtain was used to attenuate underwater sound pressure levels when large piles were driven without cofferdams. This occurred at Pier T1 during installation of temporary casings and at Pier E2 for permanent piles. Bubble curtain performance was monitored and sound pressure levels were also periodically monitored as part of the marine mammal monitoring program. Hydroacoustic measurements indicated that use of the bubble curtain resulted in sound pressure levels of 179 decibels (root-mean-square) or less at distances between 30 and 430 meters during pile-driving at Pier T1. Data taken at Pier E2 on June 27 are still be analyzed.

3) The Fisheries and Hrdroacoustic Monitoring Program was completed in May 2005. Therefore, no fisheries monitoring was completed in the period from July 2005 to June 2006.

4) An agreement between Caltrans, NOAA – Fisheries and the National Fish and Wildlife Foundation (NFWF) regarding the off-site fisheries restoration program was executed on July 29, 2004. Caltrans transferred the funds for this program from its escrow account to NFWF. NFWF will administer the program, but spending of the funds will be at the discretion of NOAA - Fisheries and the California Department of Fish and Game (CDFG), in consultation with Caltrans and the Federal Highway Administration. Grant monies were awarded in excess of $2,178,000 to eleven projects as part of the 2005 Request for Proposals.

5) Caltrans, California Department of Parks and Recreation, East Bay Regional Park District, CDFG, San Francisco Bay Conservation and Development Commission (BCDC), U.S. Fish and Wildlife Service (USFWS), and NOAA - Fisheries have agreed to go forward with a pilot program at the North Basin site to determine if the site is suitable for Caltrans' eelgrass and sandflat mitigation program. Eelgrass was planted at the North Basin site during the first week of July 2005. Monitoring of eelgrass will continue through July 2006.

6) Per Condition 3.f of the Incidental Take Permit for the East Span Project, Caltrans established an escrow account of $10.5 million for enhancing habitat in the North and Central Bay. One of the enhancements included Caltrans providing up to $8 million to remove hazardous materials and infrastructure at NSGA-Skaggs Island in the North Bay. This would facilitate the transfer of approximately 3,300 acres of diked historic baylands at NSGA-Skaggs Island from the Navy to USFWS.

The General Services Administration (GSA) has screened the property and has requested letters of interest from agencies. CDFG has put in a letter of interest and is pursuing ownership of the property. Caltrans has requested another time extension from BCDC in order to allow for sufficient time for the property transfer.

Assessment:

There was no apparent response to construction activity from the California brown pelican, least tern or peregrine falcon. Hydroacoustic monitoring indicated that the bubble curtain was successful in reducing sound pressure levels and likely impacts to fish and marine mammals in the vicinity of the construction area.

California Department of Fish and Game
Incidental Take Permit No. 2081-2001-021-03
2006 Annual Biological Mitigation Status Report

Table of Minimization and Mitigation Measures

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status/Date/Initials
1	Permitee shall fully implement and adhere to the conditions in the "Bubble Curtain Background Specification"	Permittee	During Construction	Permittee	Pile-driving including the use of a bubble curtain (i.e., pile-driving without cofferdams) occurred at Pier T1 during installation of temporary casings and at Pier E2 for permanent piles.
2	Install and maintain an effective air bubble sound attenuation curtain around all large steel piles (i.e., 5.9-8.2 feet in diameter) during pile driving activities, unless other equally effective methods (e.g., cofferdams) are used, or as otherwise directed by the Department and the National Marine Fisheries Service (NMFS) for the purpose of collecting performance data. "Effective" for purposes of this permit shall mean a continuous stream of air bubbles enclosing all permanent in-water and/or pile groups from the bottom of San Francisco Bay to its water surface. Airflow to the bubble curtain system shall be sufficient to provide a bubble flux of three cubic meters of air per minute per linear meter of pipeline in each concentric ring.	Permit	During Construction	Permittee	Bubble curtain performance has been monitored. Hydroacoustic measurements indicated that use of the bubble curtain resulted in sound pressure levels of 179 decibels (root-mean-square) or less at distances between 30 and 430 meters during pile-driving at Pier T1. Data taken at Pier E2 are still be analyzed.
3	To monitor the performance of the bubble curtain and assess the level of impact to fisheries, Caltrans, in conjunction with the Federal Highways Administration (FHWA), shall prepare and implement a fisheries and hydroacoustic monitoring program. The monitoring include the following components: (1) underwater sound measurements at various distances and depths from pile driving operations; (2) observations of predation by gulls and other birds; and (3) experiments using fish in cages at different distances and depths from pile driving operations to evaluate fish mortality and injury rates. The fish cage experiments shall be designed to document near-term fish mortalities and the likelihood of delayed mortality of differing sizes and species of fish that have swim bladders. Caltrans shall submit the above-described monitoring program to the Department and NMFS for review and approval at least ninety days prior to the initiation of pile driving. Data collected from the monitoring program shall be made available to the Department on a real-time basis. An interim report shall be provided to the Department by December 31, 2002, and a final report shall be provided to the Department by June 1, 2004.	Permit	During Construction Interim report due by December 31, 2002 Final report due by June 1, 2004	Permittee	The Fisheries and Hrdroacoustic Monitoring Program was completed in May 2005. Therefore, no fisheries monitoring was completed in the period from July 2005 to June 2006.
4	Pile driving shall be restricted to daylight hours to the extent practicable and the use of artificial lights shall be minimized.	Permit	During pile driving	Permittee	Pile-driving has been restricted to daylight hours to the extent practicable.
5	Caltrans shall provide $4 million for the purpose of monitoring construction related impacts and restoring the habitat in tributaries to central and south San Francisco Bay of anadromous salmonids listed under CESA and/or ESA, including the covered species ("salmonids"). Caltrans shall make available a portion of the $4 million, not to exceed $500,000, prior to the initiation of project construction activities, which shall be used to fund the monitoring of fisheries impacts, sound pressure levels, and other environmental conditions associated with pile driving after project construction activities commence.	Permit	Prior to installation of project construction activities	Permittee	Funds were placed in an escrow account on August 13, 2002 as required by amendment to BCDC Permit 8-01 and was subsequently transferred to the National Fish and Wildlife Foundation (NFWF) in August 2004. A portion of the funds (<$500,000) was used to fund the fisheries and hydroacoustic monitoring program.

Table of Minimization and Mitigation Measures (Continued)

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status/Date/Initials
6	The remainder of the $4 million ("restoration funding") shall be used for off-site, out-of-kind mitigation to offset project-related injury and mortality of salmonids.	Permit	December 31, 2004	Permittee	Caltrans transferred the funds for this program from its escrow account to NFWF. NFWF will administer the program, but spending of the funds will be at the discretion of NOAA - Fisheries and the California Department of Fish and Game (CDFG), in consultation with Caltrans and the Federal Highway Administration. Grant monies were awarded in excess of $2,178,000 to eleven projects as part of the 2005 Request for Proposals.
7	Prior to December 31, 2003, Caltrans shall deposit the restoration funding into an escrow account. Expenditures from the account shall be made at the discretion of the Department and NMFS in consultation with Caltrans and FHWA.	Permit	December 31, 2003	Permittee	Funds were placed in an escrow account on August 13, 2002.
8	Caltrans shall provide additional mitigation at off-site locations to offset the direct impacts of the project by establishing an escrow account of $10.5 million to be used as follows: (1) a minimum of $2.5 million to the East Bay Regional Park District (EBRPD) to restore, enhance, and/or create new aquatic habitat and transitional uplands at the Eastshore State Park and within central San Francisco Bay at the following sites or other suitable locations: Radio Beach Area, Brickyard Cove, Albany Beach Area, and Hoffman Marsh; (2) up to $8 million to acquire approximately 3,200 acres of diked historic baylands at Skaggs Island in Sonoma County, demolish structures and facilities on the site, and take other actions necessary to restore the site to tidal marsh. If any of the $10.5 million described above has not been fully expended by the time the project is completed, Caltrans shall consult with the Department and other interested state and federal permitting agencies to identify other projects that can be funded with the remaining monies that will offset the project's adverse impacts on fish and wildlife resources.	Permit	February 28, 2002	Permittee	Funds were placed in an escrow account on August 13, 2002. Caltrans, California Department of Parks and Recreation, East Bay Regional Park District, CDFG, San Francisco Bay Conservation and Development Commission (BCDC), U.S. Fish and Wildlife Service (USFWS), and NOAA - Fisheries have agreed to go forward with a pilot program at the North Basin site to determine if the site is suitable for Caltrans' eelgrass and sandflat mitigation program. Eelgrass was planted at the North Basin site during the first week of July 2005. Monitoring of eelgrass will continue through July 2006.

					The General Services Administration (GSA) has screened the property and has requested letters of interest from agencies. CDFG has put in a letter of interest and is pursuing ownership of the property. Caltrans has requested another time extension from BCDC in order to allow for sufficient time for the property transfer.
9	Caltrans proposes to restore up to 1.73 acres of barge access channel to its pre-construction bathymetry and replant the channel with eelgrass. Stockpiled dredged material and sand will be used to restore the appropriate contours of the channel and the area will be replanted using eelgrass from an adjacent donor site. Caltrans will monitor the replanted eelgrass to evaluate its success. This mitigation proposal is contingent on approval by the Bay Conservation and Development Commission to change its policy governing the use of dredged material for in-bay habitat restoration.	Permit	Post-construction	Permittee	The first phase of the On-site Eelgrass Restoration Program (experimental eelgrass transplanting) was completed in August 2003. The Final Data Report was released in March 2004. On-site eelgrass design will be finalized later this year.
10	For the duration of construction activities, the permittee shall conduct compliance inspections at least once every week to ensure compliance with all measures specified in this permit to avoid the take of the covered species and to minimize and mitigate project impacts on the covered species and other fish and wildlife resources, especially those associated with pile driving activities ("avoidance, minimization, and mitigation measures or "measures")	Permit	Weekly	Permittee	Weekly compliance checks have been conducted.
11	Every month for the duration of construction activities, the permittee shall provide the Department with a written compliance report. The compliance report shall document Caltrans' compliance with, and effectiveness of, all avoidance, minimization, and mitigation measures, including, but not limited to the bubble curtain. After the pile driving is complete, Caltrans shall submit a monitoring report to the Department on a quarterly basis.	Permit	Monthly during pile driving, quarterly thereafter	Permittee	Reports have been submitted monthly
12	Beginning in 2002 and continuing for the duration of the project, the permittee shall provide the Department a status report by July 1 of every year. Each status report shall include, at a minimum, the following information: (1) a general description of the project's status, including actual or projected completion dates, if known; (2) the current status of each avoidance, minimization, and mitigation measure; and (3) an assessment of the effectiveness of each completed or partially completed avoidance, minimization, and mitigation measure.	Permit	Annually	Permittee	Reports are being submitted annually.
13	No later than 45 days after completion of the project, including completion of all avoidance, minimization, and mitigation measures, the permittee shall provide the Department with a final mitigation report. The final mitigation report shall be prepared by a knowledgeable, experienced biologist and shall include, at a minimum, the following information: (1) a report showing when each of the measures was implemented; (2) all available information about project-related incidental take of covered species; (3) information about other project impacts on covered and non-covered species; (4) project construction dates; (5) an assessment of the effectiveness of the avoidance, minimization, and mitigation measures included in this permit on the covered species, especially the bubble curtain; and (6) recommendations on how such measures might be changed to more effectively avoid, minimize, and mitigate the impacts of similar future projects on the covered and non-covered species.	Permit	At projection completion	Permittee	Project currently in progress.