

MINUTE ITEM
This Calendar Item No. C36 was approved as
Minute Item No. 36 by the California State Lands
Commission by a vote of 3 to 0 at its
12-16-02 meeting.

**CALENDAR ITEM
C36**

A 8
S 4

PRC 8436

12/16/02
W 25852
N. Smith

GENERAL LEASE - PUBLIC AGENCY USE

LESSEE:

California Department of Transportation
PO Box 233660
Oakland, California 94623-0660

AREA, LAND TYPE, AND LOCATION:

Sovereign lands in Suisun Bay, just east of the city of Benicia, Solano County.

AUTHORIZED USE:

Reconstruction of an existing intake channel (approximately 30 feet wide and 400 feet long) to restore tidal circulation to a degraded tidal marsh and dredge 4,000 cubic yards of material, to be disposed of at an upland disposal site.

LEASE TERM:

25 years, beginning December 1, 2002.

CONSIDERATION:

The public use and benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

OTHER PERTINENT INFORMATION:

1. Applicant has a right to use the uplands adjoining the lease premises.
2. The California Department of Transportation (Caltrans) set aside 22.8 acres in the city of Benicia for wetland impacts mitigation as a result of the New Benicia-Martinez Bridge Project; this mitigation focuses on the rehabilitation and restoration of wildlife that might be affected by the New Benicia-Martinez Bridge Project.

CALENDAR ITEM NO. C36 (CONT'D)

3. An EIR was prepared and certified for this project by Caltrans. The California State Lands Commission staff has reviewed such document and the Mitigation Monitoring Program adopted by the lead agency.
4. Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, sections 15091 and 15096) are contained in Exhibit C, attached hereto.
5. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Game and San Francisco Bay Conservation and Development Commission.

EXHIBITS:

- A. Site and Location Map
- B. Findings for the Benicia-Martinez Bridge Project
- C. Mitigation and Monitoring Plan for the New 9.3 Hectare (22.8 acres) Saltmarsh
- D. Notice of Determination

PERMIT STREAMLINING ACT DEADLINE:

03/02/2003

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

FIND THAT AN EIR WAS PREPARED AND CERTIFIED FOR THIS PROJECT BY CALTRANS AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

CALENDAR ITEM NO. C36 (CONT'D)

ADOPT THE FINDINGS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTIONS 15091 AND 15096(h), AS CONTAINED IN EXHIBIT B, ATTACHED HERETO.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

SIGNIFICANT LANDS INVENTORY FINDING:

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

AUTHORIZATION:

AUTHORIZE ISSUANCE TO THE CALIFORNIA DEPARTMENT OF TRANSPORTATION OF A GENERAL LEASE - PUBLIC AGENCY USE, BEGINNING DECEMBER 1, 2002, FOR A TERM OF 25 YEARS, FOR RECONSTRUCTION OF AN EXISTING INTAKE CHANNEL TO RESTORE TIDAL CIRCULATION TO A DEGRADED MARSH AND DREDGE 4,000 CUBIC YARDS ON THE LAND DESCRIBED ON EXHIBIT A, ATTACHED, AND BY THIS REFERENCE MADE A PART HEREOF; CONSIDERATION BEING THE PUBLIC USE AND BENEFIT, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENT IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE'S BEST INTEREST.

CALIFORNIA DEPARTMENT OF TRANSPORTATIONFINDINGS FOR THE BENICIA-MARTINEZ BRIDGE PROJECT
INTERSTATES 680 AND 780 IN CONTRA COSTA AND SOLANO COUNTIES

The following information is presented to comply with Section 15091 of the State CEQA Guidelines and Section 1509.6 of the California Department of Transportation (Caltrans) and California Transportation Commission Environmental Regulations. Reference is made to the Final Environmental Impact Report (Final EIR) which is the source for the information. Mitigation monitoring will be in accordance with Caltrans standard program contained in Article 1-2.4 of the Environmental Handbook, Volume I.

The following effects have been identified in the Final EIR as resulting from the project. Effects found not to be significant have not been included.

BiologyAdverse Environmental Effect:

The proposed project would have an adverse effect on the salt marsh harvest mouse and its habitat, an endangered species under the State and Federal Endangered Species Acts.

Findings:

- a) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Statement of Facts:

To mitigate permanent impacts to 1.62 ha (4.01 acres) of salt marsh harvest mouse habitat, Caltrans has purchased and plans to restore a 9.23 ha (22.8 acre) parcel on diked and filled tidal marsh. This parcel is located in the City of Benicia along Industrial Road.

To provide tidal access to the proposed mitigation site, Caltrans will restore tidal flows in an existing channel which crosses brackish marshland in the Goodyear Slough Unit of the Grizzly Island Wildlife Area. This brackish marshland is managed by the California Department of Fish & Game (CDFG). The brackish marshland is located southeast of the proposed mitigation site and is separated from the proposed mitigation site by railroad tracks operated by Union Pacific Railroad. The tidal channel will access the proposed Caltrans mitigation site through five large-diameter (1 m [36 inches]) pipes to be placed under the railroad tracks. Caltrans will construct a levee to isolate the tidal channel from the remainder of the Goodyear Slough Unit so CDFG can continue to manage the water level on their brackish marsh.

Work on the channel and levee will impact approximately 0.25 ha (0.62 acre) of marshland habitat in the Goodyear Slough Unit. This will increase the overall project impact to 1.87 ha (4.63 acres) of salt marsh harvest mouse habitat. Caltrans will restore 7.08 ha (17.5 acres) of

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tidal marsh to compensate for temporary and permanent impacts to salt marsh harvest mouse habitat.

The final mitigation plan will be developed in consultation with the appropriate regulatory agencies. The plan will include provisions for monitoring and remedial actions, if necessary, and will be approved by the U.S. Fish & Wildlife Service prior to initiation of the proposed project. Following completion of the mitigation project, Caltrans will deed the mitigation site to CDFG, which will then manage the mitigation site for habitat. No public access of the mitigation site is proposed.

The Final EIR and pertinent technical studies are available for public inspection at:

Caltrans, District 4
Benicia-Martinez Bridge Branch
111 Grand Avenue
Oakland, CA 94612

Or by contacting Nino Cerruti, Project Manager, at (510) 286-5129.

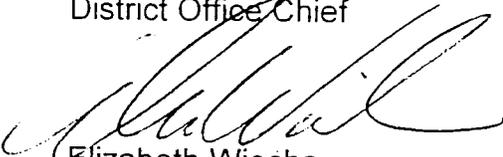
**Benicia Martinez New Bridge
Mitigation and Monitoring Plan
for the
New 9.3 Hectare (22.8 Acre) Saltmarsh**

June 13, 2001

Prepared by: 
Chuck Morton
Senior Environmental Planner

Peer Reviewed by: 
Ahmad Hashemi
District Biologist

Approved by: 
Susan Simpson
District Office Chief

Accepted by: 
Elizabeth Wiecha
Project Manager
Toll Bridge Program

PROJECT DESCRIPTION

Caltrans purchased a former tidal marsh that was backfilled with 2.1 - 3.1m (7-10') of imported material for mitigation of wetlands impacts as a result of the Benicia Martinez New Bridge Project. The proposed mitigation includes the creation of shallow water habitat by restoring tidal flow to both the proposed mitigation site and the adjacent CA Department of Fish & Game (CDFG) lands. The fill materials at the site will be removed and the elevation will be lowered to between MHW and MHHW levels (approximately 0.91m (3') NGVD 1929). Tidal flows are to be supplied to the marsh and the CDFG property via an intake channel to Suisun Bay.

This project was focused on the channel structure design necessary for restoring tidal circulation to a degraded tidal marsh habitat bounded roughly by Lake Herman Road and Industrial Way near the City of Benicia. The design is based on available literature and data from a previous restoration project with a similar setting at San Pablo Bay.

1. Collect necessary survey data:

a. Aerial Photogrammetry work was completed in both electronic and hardcopy forms by Hammon, Jensen, Wallen & Associates to Caltrans in July, 1999.

b. Measurement of existing drainage channel cross-sections showed that most channels fall within the range common to tidal marsh sites with the exception that the typical numerous small channels (<0.91m (3') width & depth) were notably absent.

c. The land elevation range that supports *Salicornia* (Pickleweed) growth at the site is similar to those of other tidal marshes in the Bay area; that is, between MHW and MHHW tidal levels (approximately 0.91m (3') NGVD).

2. Drainage channel design to provide tidal circulation to the 9.3ha (22.8a) parcel west of the Union Pacific Rail Road (UPRR) tracks:

Sheets 1 through 3 illustrate the general drainage channel design configuration and sizes necessary to obtain tidal circulation flows in the mitigation parcel. Based on previous studies at San Pablo Bay marshes, the intake channel 'connecting' the mitigation site to Suisun Bay should have a transition from an approximately 18.3m (60') top by minimum 15.2m (50') bottom width channel extending through the mudflats. The maximum base elevation will be -0.64m (-2.1') NGVD between the Bay and the channel will extend laterally into the CDFG lands. The channel lateral into the CDFG lands begins approximately 366m (1200') from the Bay and should have at least 4.6m (15') top and 3.0m (10') bottom widths before transitioning into the existing channel swale. As it approaches the UPRR tracks the intake channel has a 4.6m (15.3') base width and a slightly greater than 9.1m (30') top width depending on the actual land elevations. Both the intake and lateral channels have 1:1.5 side-slopes and a base elevation of at least -0.64m (-2.1') NGVD to allow adequate tidal flows into the mitigation site.

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The overall design assumes that the mitigation site land elevation is roughly 0.91m (3') NGVD as shown in the rough-grading plan. The intake channel transitions through the UPRR tracks via 5 915mm (36") culverts (with 1067mm (42") casings) that slope upwards from -0.64 m (-2.1') NGVD to -0.33m (-1.1') NGVD into the site. On the west side of the UPRR tracks, the intake channel is slightly reduced in size to a top width of approximately 7.9m (26'), due to the shallower channel depth, and continues for 15.2m - 30.5m (50-100') in order to establish a transition region for the two main channels into the mitigation site. These channels would take off from the intake channel at progressively westerly locations that depend on the soil material remaining after grading the site and terminate prior to reaching the TCE contaminated area. The northern main channel is at least 2.4m (8') wide with 1:1 side-slopes (presuming that these side-slopes can be maintained in the soil material remaining after excavation of the fill) and has two smaller (1.8m (6') width) laterals before splitting into two additional smaller laterals. The southern main channel is at least 3.1m (10') wide with 1:1 side-slopes. The main channels grade from a base elevation of -0.33m (-1.1') NGVD at the intake channel transition to approximately 0.0m (0') NGVD at their extremities. As tidal circulation develops in the marsh, additional smaller channels should develop. The primary concern as these channels develop is the stability (erosion potential) of the site prior to pickleweed establishment.

The structure for passing tidal flows below the UPRR tracks will be 5 - 915mm (36") RCP culverts (with 1067mm (42") casings). This design was considered in terms of its hydraulic capacity using the Army Corps HEC-RAS (v.2.2) hydraulic routing model. Tidal flow should provide enough velocity to minimize sedimentation within the structure. Trash screens on both sides of the culverts that are regularly cleaned may be necessary to maintain their hydraulic capacity. Decreased tidal flows will result in slower drainage (ebb tide flows) from the site as well.

Tidal flooding of the CDFG lands is expected to primarily cover the Bay-side, south-east of the area (approximately 28.3ha (70a) north of the new intake channel. Changes in water levels are expected to be less than 0.3m (1') at the boundaries and less than 0.6m (2') in the swales under the existing conditions. This is due to the limited size of the lateral channel and distances away from the tidal source. Only marginal water level changes are anticipated at the east side of the UPRR tracks with the exception of the transition area associated with the culvert structure below the tracks.

No alteration in the flap-gate control structure at Lake Herman Road is proposed or needed. Flooding of the parking lot that services the pier at the end of Lake Herman Road should not be affected by the tidal restoration project.

Tidally-induced water levels in the mitigation site and in the CDFG lands are expected to be approximately 0.3m - 0.6m (1-2') below actual Bay levels due to flow attenuation via the channels and the distance from the Bay to the mitigation site.

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Sheet 1 illustrates the proposed mitigation site land elevations (relative to NGVD) following rough site grading. Generally the southern portion of the site should be graded to an elevation 0.75m (2.5') NGVD. On the northern third of the site, where TCE contamination has been found in the groundwater, the grading plan elevations should transition smoothly from the boundary buffer zone (30.5m (100') wide) on the north and west sides to elevation 1.5m (5') NGVD, north of the intake channel and culverts near the UPRR tracks.

No impacts from this project are expected on COE managed CDFG lands to the south of the intake channel with the exception of minimal land disturbance from channel excavation operations.

Monitoring Criteria and Project Success

Tidal marsh habitat restoration is primarily dependent on establishment of tidal circulation patterns* and the associated salinity conditions and vegetation coverage. In this case, we are considering establishment of a pickleweed marsh at a site that has not experienced tidal flows and salinity for several decades (if ever) suggesting that rehabilitation will take considerable time. The three primary criteria of concern relative to monitoring the success of the restoration effort include; long-term tidal channel morphological stability, adequate tidal prism volume (and salinity) circulation, and establishment of a self-sustaining marshland.

Measurements of tidal prism volumes, sediment loads and channel cross-sections at fixed locations through complete tidal cycles at six-month intervals during a 5-year period should be adequate to determine if the channels are providing the necessary hydraulic capacity for adequate tidal circulation. These measurements will also provide some indication following channel excavation of the possible need for additional, or larger channels. Similarly, annual assessments of pickleweed coverage in the mitigation site should provide some insight into how well circulation patterns are distributing salinity and plants. Presuming less than 20% pickleweed recruitment initially, a stand establishment rate of 10-15% additional coverage per year such that there is 60-80% site coverage after 5 years should be considered successful.

Restoration Monitoring Data

Data will be collected to monitor characteristics of marsh development yearly for five years or as determined by the project manager. The methods will follow those listed above. The adaptive monitoring design will be developed for the projects with a practical number and arrangement of plots or transects from the data collected in as-built surveys. Comparisons will be made to examine changes in variables through time.

Sediments: Rate of sedimentation at each sediment pin will be estimated seasonally. In addition, ground surveys will be conducted annually with GPS survey equipment to verify elevational changes.

Hydrology: Water level, flow, and tidal datum will be monitored each month or season depending on the rate of change during the project to evaluate water distribution and tidal datum.

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Water Quality: Water samples will be taken and analyzed for water quality during each of the first 3 years of the restoration project and in the fifth year. Samples will be collected during both winter and summer seasons at each study plot in the slough channels.

Plants: Vegetation cover will be monitored annually. As the total area of slough channels and upland types changes as the project proceeds, plots or transects may be added to sample developing slough channels.

Invertebrates: Invertebrate sampling will follow the initial study design on an annual basis for the first 3 years followed by sampling in the fifth year. The scope of sampling may be expanded after restoration is initiated to examine colonization of newly inundated areas and developing slough systems.

Fishes: Surveys will be conducted annually for the first 3 years to examine changes in abundance and species diversity, followed by sampling in the fifth year.

Birds: Surveys will be conducted annually for the first 3 years and fifth year to examine changes in bird abundance and species diversity.

REPORTS, MEETINGS AND/OR DELIVERABLES

Quarterly reports will be submitted to Caltrans summarizing the collected monitoring data. Annual reports will be prepared by the monitor summarizing the quarterly reports. The annual reports may include suggested remediation efforts which may have to be undertaken to meet the success criteria. A final report will be prepared at the conclusion of the monitoring period summarizing the monitoring data and making observations as to the effectiveness of this type of monitoring activity as it pertains to this type of construction project.

NOTICE OF DETERMINATION

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: California Department of Transportation
1120 N Street
Sacramento, CA 95814

Subject:
Filing of Notice of Determination in compliance with Section 21108 of the Public Resources Code.

Project Title: Benicia - Martinez Bridge Project

87111007	Nino Cerruti	(510) 286-5129
State Clearinghouse Number	Lead Agency Contact Person	Area Code/Telephone

Project Location (include county):
Contra Costa County - Route 680 - KP 34.1/41.0 (PM 21.2/25.5)
Solano County - Route 680 - KP L0.0/21.1 (PM L0.0/13.1)
Solano County - Route 780 - KP(1.1/11.9 (PM 0.7/7.4)
Solano County - Route 80 - KP R16.9/26.6 (PM R10.5/16.5)

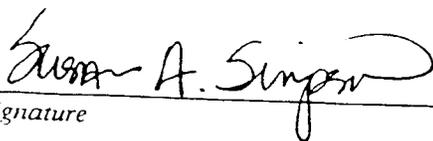
Project Description: Provide an additional Benicia-Martinez Bridge across Carquinez Strait to provide five freeway lanes for northbound vehicles, four freeway lanes for southbound vehicles, new toll plaza facilities, and new freeway approach lanes.

This is to advise that the California Department of Transportation, as the [Lead Agency ___ Responsible Agency] has approved the above described project on September 29, 1997 and has made the following determinations regarding the above described project:

1. The project (will/___ will not) have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
___ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures (were/___ were not) made a condition of the approval of the project.
4. A Statement of Overriding Considerations (___ was/ was not) adopted for this project.
5. Findings (were/___ were not) made pursuant to the provisions of CEQA.

The above identified document with comments, responses, and record of project approval is available to the General Public at:

Caltrans, District 4,
111 Grand Avenue,
Oakland, CA 94612


Signature

9/29/97
Date

Chief, Office of Environmental Planning, North
Title

Date Received for filing at OPR:

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