

# MEMORANDUM

**DATE:** May 18, 2010

**TO:** Ivy Edmonds-Hess  
Parsons Brinckerhoff

**FROM:** Steve Granholm, Bird Monitoring Task Leader  
LSA Associates, Inc.

**FOR:** California Department of Transportation

**SUBJECT:** Bird Monitoring Memo #409, Week of May 3 – 7, 2010  
San Francisco – Oakland Bay Bridge East Span Project

**PURSUANT TO:** US Fish and Wildlife Service Biological Opinion and California Department of Fish and Game Incidental Take Permit

## Introduction

The California Department of Transportation (Department) is in the process of replacing the East Span of the San Francisco-Oakland Bay Bridge (SFOBB) with a new bridge immediately to the north of the existing span (Figure 1). Construction of the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project (SFOBB Project) is a multi-year effort that will involve a number of construction activities on land as well as in San Francisco Bay. Some of these activities could potentially affect federally and State endangered or threatened bird species and other bird species of special concern.

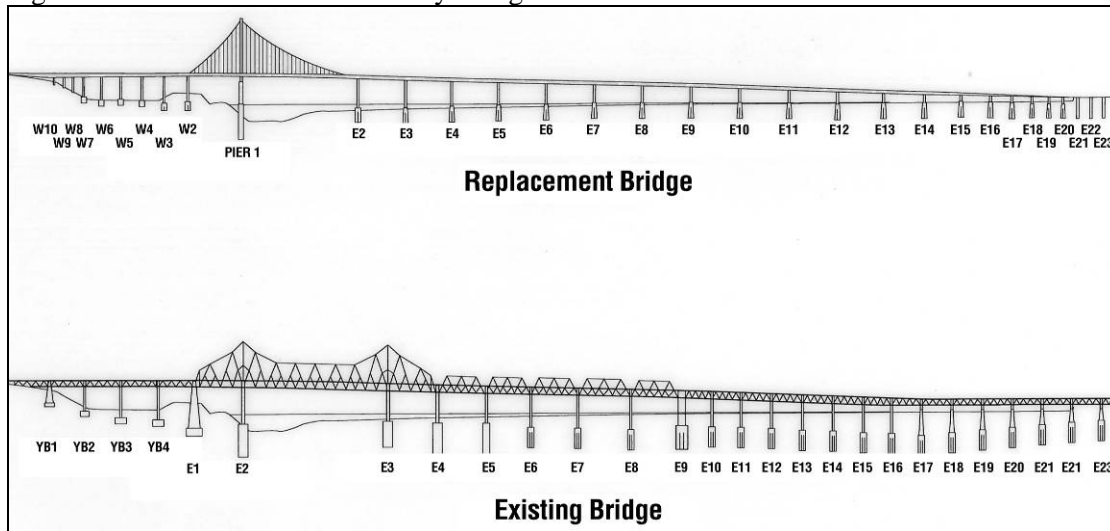
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



The U.S. Fish and Wildlife Service (USFWS) Biological Opinion (page 22) and the California Department of Fish and Game (CDFG) Incidental Take Permit (Fully Protected Species Items 1 and 2 on pages 4 and 5) require monitoring of the California least tern and California brown pelican. The CDFG is also concerned about potential impacts to the American peregrine falcon and the double-crested cormorant and required a management plan for these species (Fully Protected Species Item 3 on page 5). In addition, the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project Final Environmental Impact Statement/Statutory Exemption and Final Section 4(f) Evaluation (FEIS) (page 4-130) requires that the Department monitor the double-crested cormorant colony and American peregrine falcon during the breeding season.

As required by the USFWS Biological Opinion and CDFG Incidental Take Permit, the monitoring efforts are focused primarily on three endangered species: the California least tern, California brown pelican, and American peregrine falcon. The primary objectives of these monitoring efforts are to minimize impacts to these three species and document any take of these species resulting from construction activities. In addition, monitoring is conducted to assess: 1) potential impacts to the behavior of American peregrine falcons and double-crested cormorants on the existing SFOBB East Span; 2) seasonal Canada goose activities along an exclusion fence built between a portion of the Emeryville Crescent and I-80; and 3) potential impacts on breeding activities of western gulls, which are known to nest on both the existing and new bridges (Figure 2). Monitoring is conducted in accordance with the *Final (Revised) Bird Monitoring and Management Plan* (Department, 2003). This plan incorporated the requirements of the USFWS, the CDFG, and the FEIS, as well as those of the San Francisco Bay Conservation and Development Commission (BCDC) Permit No. 8-01, Special Condition F-6.

Figure 2. San Francisco-Oakland Bay Bridge Pier Locations



The bird monitors are required to conduct a survey once a week for three hours, if construction activities are underway. This memo summarizes the SFOBB Project bird monitoring activities conducted by LSA Associates (LSA) and Garcia and Associates (GANDA) during the week of May 3 – 7, 2010.

## **Bird Monitoring Activities**

LSA and GANDA conducted monitoring of the active construction areas from GANDA's boat, GANDA conducted peregrine falcon monitoring from Pier W2 construction site on Yerba Buena Island (YBI), and LSA conducted Canada goose monitoring from the Emeryville Crescent side of the goose exclusion fence along I-80. Construction activities during the weekly bird survey included crew boat traffic on San Francisco Bay and general construction activities on YBI and at the Self-Anchored Suspension (SAS) construction site. Construction activities during the peregrine falcon monitoring included welding on the orthotropic box girders and demolition of the existing bridge tunnel approach section.

The weekly bird survey was conducted from 1411 to 1715 hours on May 5, 2010. Peregrine falcon monitoring was conducted from 1530 to 1600 hours on May 3, 2010; 1535 to 1605 hours on May 5, 2010; and 1400 to 1500 hours on May 6, 2010. Canada goose monitoring was conducted from 1743 to 1826 hours on May 5, 2010.

## **Results**

### **Monitoring of Active Construction Areas**

*California Least Tern:* No least terns were observed.

*California Brown Pelican:* Nine brown pelicans were observed. At 1437 hours, one was flying south from Clipper Cove, then detoured around the Left Coast Lifter Crane and headed south under the new and existing bridges. At 1526 hours, one adult was foraging approximately 400 meters (1,312 feet) north of the new bridge. At 1529 hours, three adults were perched on the cable-crossing structure. At 1547 hours, four adults were foraging in the Port of Oakland Outer Harbor approximately 400 meters (1,312 feet) south of the Oakland Touchdown. At 1659 hours, one was foraging in Clipper Cove approximately 500 meters (1,640 feet) from the SAS construction site.

*Peregrine Falcon:* Two peregrine falcons were observed. At 1441 hours, an adult was observed in the traditional nest site on the north side of existing Pier E2. At 1508 hours, an adult was perched on the south side of the traveler east of existing Pier E2. At 1648 hours, one adult and another large individual (possibly the other adult) were in the nest site.

*Double-crested Cormorant:* Approximately 410 double-crested cormorants were observed in the study area. Approximately 350 double-crested cormorants were perched under the existing bridge (including nesting pairs between Piers E8 and E10). Approximately 40 were perched on the footings of the new bridge and approximately 20 were foraging at other locations in the study area. One individual was seen in Clipper Cove, carrying nesting material.

*Western Gull:* Approximately 25 western gulls were observed foraging in the study area and another 20 were perched under the existing bridge. No nests were seen.

*Observations of Additional Bird Species:* Other bird species observed during the survey (and the approximate number of individuals) were surf scoter (6), great scaup (6), western or Clark's grebe (100), Brandt's cormorant (18), great blue heron (1), pigeon guillemot (1), and barn swallow (1). In addition, four black-crowned night-herons were seen in the cypress on the south shore of Treasure Island, adjacent to Clipper Cove.

### **American Peregrine Falcon Nest Monitoring**

American peregrine falcon nests on the SFOBB East Span are monitored in addition to and separately from weekly bird monitoring in active construction areas. The peregrines are monitored at least weekly from December until the end of the peregrine nesting season. At the discretion of the lead peregrine falcon monitor, the survey frequency can be increased to as much as 7 days a week for an active nest adjacent to active construction or demolition.

During each of the monitoring efforts, the adult female peregrine falcon was observed brooding at existing Pier E2. On May 6, three nestlings were observed while the adult female shifted positions. No sign of an unhatched egg was observed, although previous observations documented that four eggs were present.

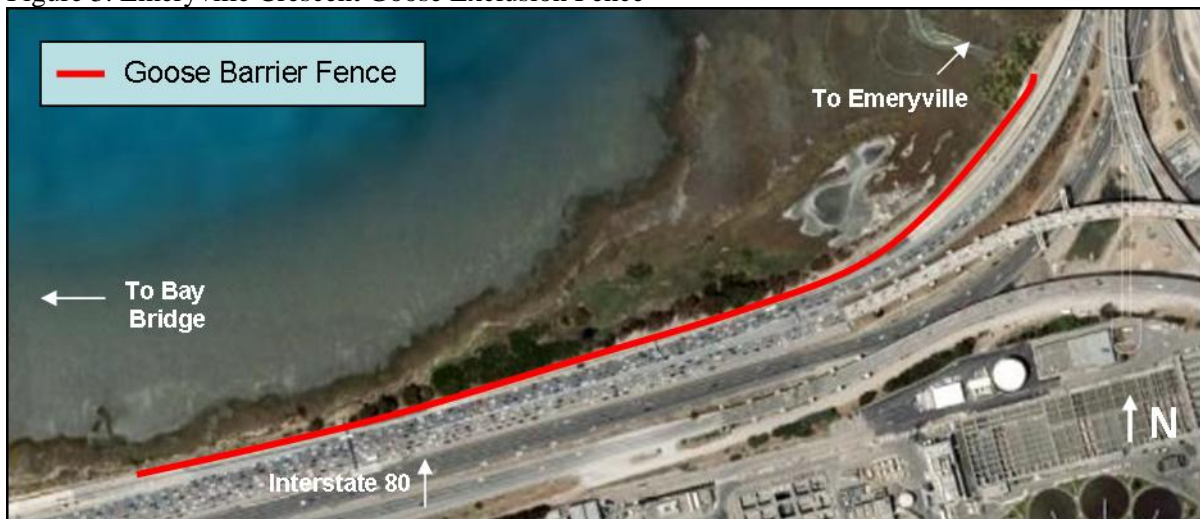
Based on the observations this week, it is assumed that three eggs have hatched and that the young will fledge on or about June 1.

*Other Bird Species Observed:* Other bird species observed during the peregrine monitoring were brown pelican, double-crested cormorant, and western gull. The peregrine monitor does not count the number of individuals of other bird species, because this activity would distract the monitor from watching for peregrine falcons.

### **Canada Goose Monitoring along the I-80 Roadway Adjacent to the Emeryville Crescent**

Bird monitors are required to conduct Canada goose monitoring along the I-80 roadway adjacent to the Emeryville Crescent during March through August (Figure 3). The monitoring season may be extended through September or October, if warranted, based on the presence of geese that may be at risk. The monitoring objective is to assess the effectiveness of an 850-meter (2,800-foot) long fence that was designed to exclude Canada geese from entering the I-80 roadway.

Figure 3. Emeryville Crescent Goose Exclusion Fence



Ten Canada geese (6 adults and 4 young) were observed in the vicinity of the goose fence:

- four adults were approximately 23 meters (75 feet) north of the “1,600 – 1,700 feet” marked fence interval;
- two adults and four young were approximately 9 meters (30 feet) north of the “2,400 – 2,500 feet” marked fence interval.

Goose droppings were observed at various locations along the San Francisco Bay side of the fence; droppings were also observed approximately 1.5 meters (5 feet) south (freeway side) of the “200 – 300 feet” marked fence interval.

The western section of fence (perpendicular to the freeway) is sagging because the corner post is loose; otherwise the fence is in good condition.

### **Conclusions**

The monitors did not observe any indications that birds were disturbed due to SFOBB Project construction activities.

cc: Stefan Galvez, California Department of Transportation