

## MEMORANDUM

**DATE:** March 31, 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 #402, Week of March 15 – 19, 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.

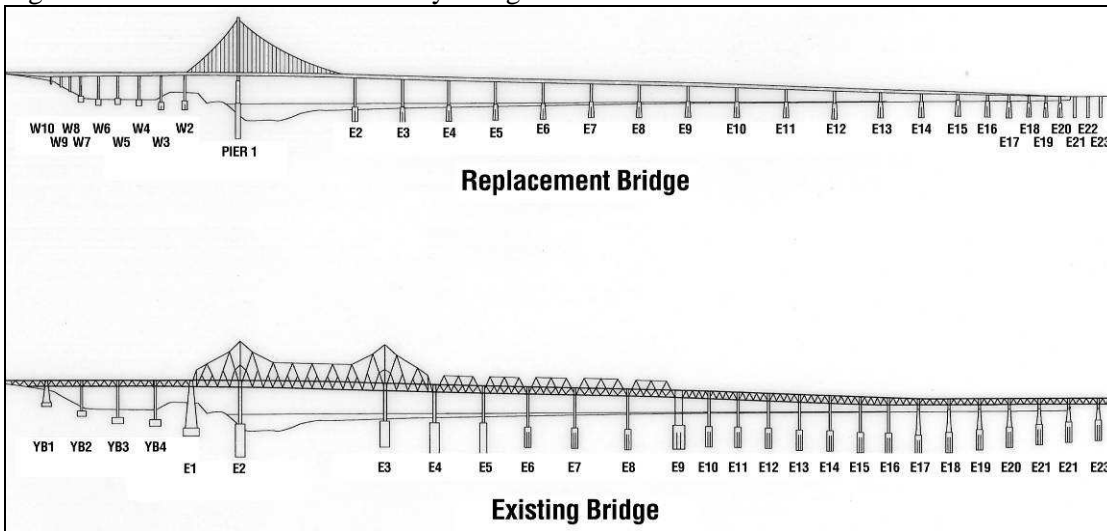
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 March 15 – 19, 2010.

## **Bird Monitoring Activities**

LSA and GANDA conducted monitoring of the active construction areas from GANDA's boat, GANDA conducted peregrine falcon monitoring from a temporary truss north of the existing bridge, 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 light traffic of crew boats on San Francisco Bay. Construction activities during the peregrine falcon monitoring included moving a deck section into place for the Self-Anchored Suspension, welding on deck sections, and land-based pile-driving.

The weekly bird survey was conducted from 0933 to 1233 hours on March 18, 2010. Peregrine falcon monitoring was conducted from 1550 to 1650 hours on March 17, 2010 and 1540 to 1610 hours on March 19, 2010. Canada goose monitoring was conducted from 1259 to 1335 hours on March 18, 2010.

## **Results**

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

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

*California Brown Pelican:* No brown pelicans were observed.

*Peregrine Falcon:* At 1026 hours, an adult peregrine falcon was perched on a railing below the traditional nest site on the north side of existing Pier E2.

*Double-crested Cormorant:* Approximately 36 double-crested cormorants were observed in the study area, including 13 perched under the existing bridge, 5 observed at nests just west of existing Pier E9, 4 were adding nest material to old nests, and 1 was constructing a new nest. The others were resting, flying, or foraging in other parts of the study area.

*Western Gull:* Approximately 30 western gulls were observed in the study area, resting, foraging, or flying.

*Observations of Additional Bird Species:* Other bird species observed during the survey (and the approximate number of individuals) were Canada goose (35), greater scaup (15), surf scoter (30), bufflehead (30), red-throated loon (1), common loon (2), horned grebe (4), eared grebe (1), western grebe (100), Clark's grebe (21), western grebe or Clark's grebe (15), Brandt's cormorant (5), red-tailed hawk (1), willet (4), mew gull (1), and white-crowned sparrow (1). A flock of about 40 blackbirds (too distant to identify their species) were at the Oakland Touchdown. In addition, one black-crowned night-heron was observed in the cypress tree on the south shore of Treasure Island.

### **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 up to 7 days a week for an active nest adjacent to active construction or demolition.

On March 17, 2010, no peregrine falcons were observed during the hour-long monitoring period.

On March 19, 2010, the adult male peregrine falcon was observed incubating at the same nest site used in 2009, a trapezoid-shaped cavity on the north-facing side of the north leg of existing Pier E2. It was previously thought that this year's nesting location might be at the south leg of existing Pier E3, but this week's observations confirm that the nest site is located at Pier E2.

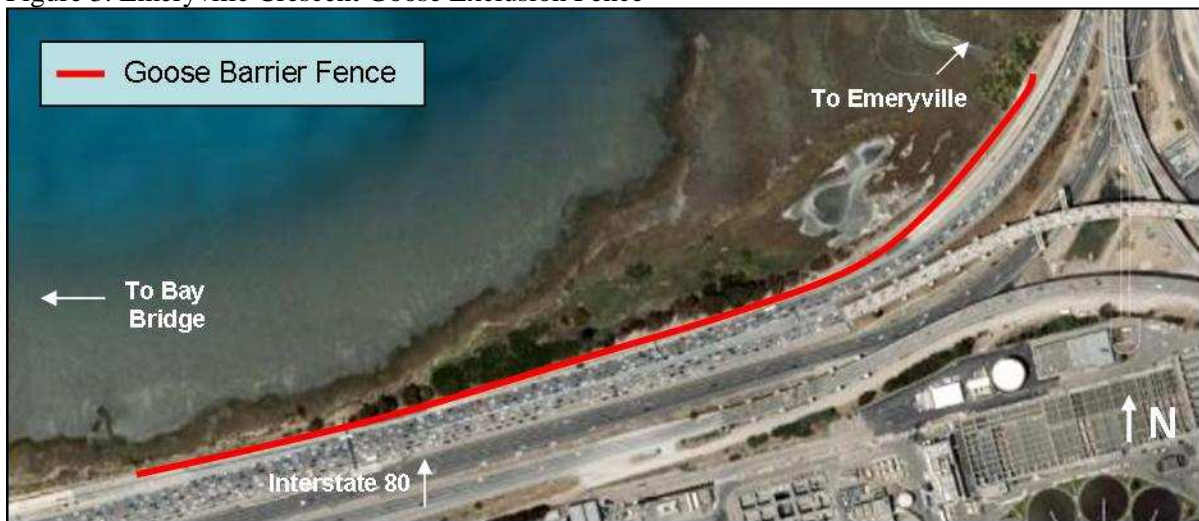
The last time the male and female were observed at the same time was on March 1, 2010, when they were copulating on the temporary truss. Full-time incubation started sometime after March 1, 2010, probably during the first week of March. If the nest is successful, hatching is expected to occur in early April.

*Other Bird Species Observed:* Other bird species observed during the peregrine monitoring were surf scoter, double-crested cormorant, western gull, Anna's hummingbird, and house finch. 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



Four Canada geese were observed in the vicinity of the goose fence:

- two adults were observed on the ground approximately 76 meters (250 feet) north of the “900 – 1,000 feet” marked fence interval; and
- two adults were on the ground approximately 53 meters (175 feet) north of the “1,300 – 1,400 feet” marked fence interval.

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