

## MEMORANDUM

**DATE:** April 28, 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 #405, Week of April 5 – 9, 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.

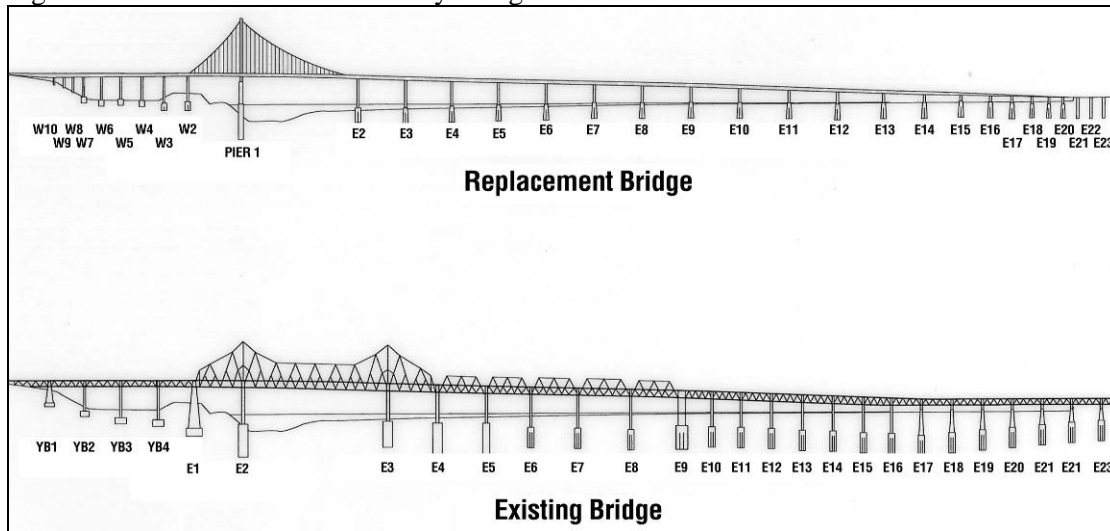
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 April 5 – 9, 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 during the weekly bird survey included various activities at the South-South Detour, Self-Anchored Suspension (SAS), and Oakland Touchdown construction sites, including crane work at SAS and crew boat traffic on San Francisco Bay. The Left Coast Lifter Crane was also hoisting a deck section into place at the SAS site. Construction activities during the peregrine falcon monitoring included on-land pile driving and welding on deck sections.

The weekly bird survey was conducted from 0810 to 1110 hours on April 7, 2010. Peregrine falcon monitoring was conducted from 1615 to 1645 hours on April 8, 2010. Canada goose monitoring was conducted from 1150 to 1300 hours on April 7, 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:* No peregrine falcons were observed.

*Double-crested Cormorant:* Approximately 57 double-crested cormorants were observed. Thirty-five were perched under the existing bridge (where approximately 10 nests were observed), two were carrying nesting material and the others were resting, flying, or foraging in other parts of the study area.

*Western Gull:* Approximately 140 western gulls were observed foraging or resting in the study area, including a flock of approximately 75 in Clipper Cove. Some of them were paired.

*Observations of Additional Bird Species:* Other bird species observed during the survey (and the approximate number of individuals) were Canada goose (5), greater scaup (10), surf scoter (7), bufflehead (10), red-throated loon (1), common loon (1), horned grebe (3), eared grebe (1), western grebe (11), Clark's grebe (9), western grebe or Clark's grebe (40), Brandt's cormorant (5), glaucous-winged gull (1), pigeon guillemot (2), spotted sandpiper (1), belted kingfisher (1), black phoebe (1), and song sparrow (1). In addition, six black-crowned night-herons were seen 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 the 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.

The adult female peregrine falcon was observed incubating in the nest site that the pair used in 2009, a trapezoid-shaped cavity on the north-facing side of the north leg of existing Pier E2. A single downy feather was observed at the edge of the scrape, suggesting that one or more eggs have hatched, but hatching was not confirmed.

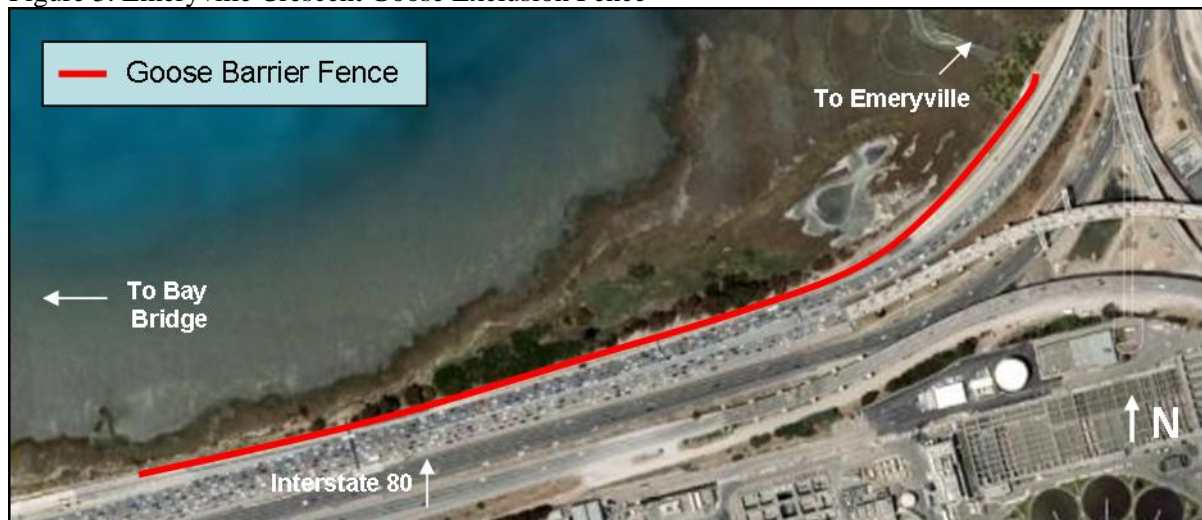
Based on previous observations, full-time incubation is estimated to have started during the first week of March. If the nest is successful, hatching is expected to occur in early April.

*Other Bird Species Observed:* Other bird species observed during the peregrine monitoring were 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**

The bird monitors are required to conduct Canada goose monitoring along the I-80 roadway adjacent to the Emeryville Crescent from 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



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

- two adults were on the ground approximately 76 meters (250 feet) and 152 meters (500 feet) north of the “0 – 100 feet” marked fence interval;
- three adults were on the ground approximately 106 meters (350 feet) and 183 meters (600 feet) north of the “200 – 300 feet” marked fence interval;
- two adults were on the ground approximately 183 meters (600 feet) north of the “300 - 400 feet” marked fence interval;
- two adults were about 122 meters (400 feet) and 210 meters (700 feet) north of the “500 – 600 feet” marked fence interval;

- two adults were approximately 210 meters (700 feet) north of the “600 – 700 feet” marked fence interval;
- one adult was about 61 meters (200 feet) north of the “700 – 800 feet” marked fence interval;
- one adult was approximately 183 meters (600 feet) north of the “900 – 1,000 feet” marked fence interval; and
- two adults were observed approximately 30 meters (100 feet) north of the “1,600 – 1,700 feet” marked fence interval.

The goose 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