

MEMORANDUM

DATE: June 4, 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 #411, Week of May 17 – 21, 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.

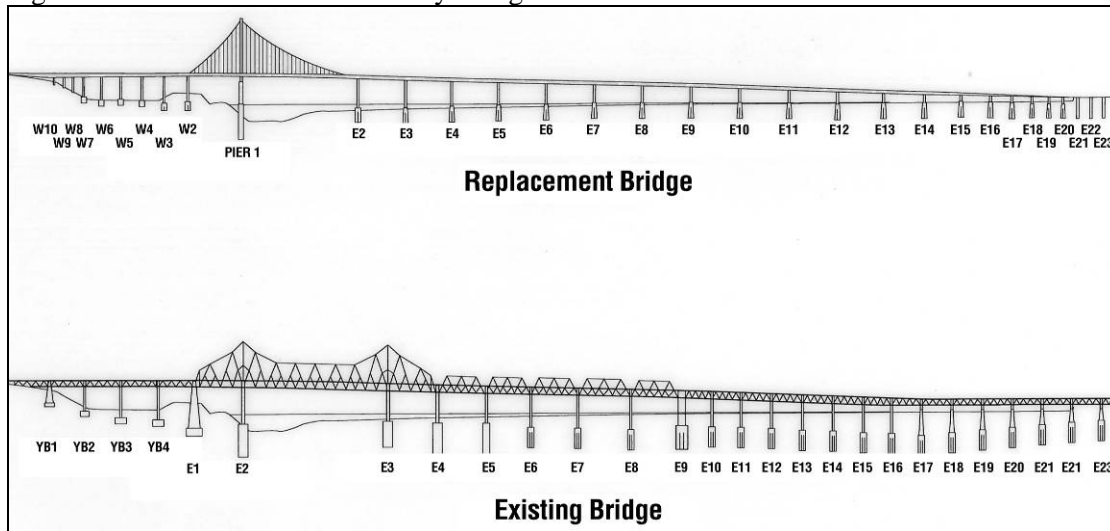
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 17 – 21, 2010.

Bird Monitoring Activities

LSA conducted monitoring of the active construction areas from various land-based sites (the monitoring boat is currently being repaired), including the Oakland Touchdown (OTD), the Skyway, and Yerba Buena Island (YBI); GANDA conducted peregrine falcon monitoring from Pier W2 on 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 various activities at the OTD, South-South Detour, and Self-Anchored Suspension (SAS) construction sites, including load riveting on the temporary truss for the SAS and crew boat traffic on San Francisco Bay. 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 1015 to 1200 hours and from 1220 to 1340 hours on May 21, 2010. Peregrine falcon monitoring was conducted from 1120 to 1240 hours on May 18, 2010 and from 1440 to 1600 hours on May 20, 2010. Canada goose monitoring was conducted from 0917 to 0945 hours on May 21, 2010.

Results

Monitoring of Active Construction Areas

California Least Tern: No least terns were observed.

California Brown Pelican: No brown pelican were observed.

Peregrine Falcon: An adult peregrine falcon was perched on the railing of the temporary truss at the SAS site at 1318 hours. The bird remained perched at this site until monitoring from YBI ended at 1340 hours.

Double-crested Cormorant: Approximately 60 to 80 double-crested cormorants were observed under the existing bridge (mostly between Piers E8 and E11). Some were seen carrying nesting material, but it was difficult to count nests from the bird monitor's vantage point.

Western Gull: Approximately 15 western gulls were observed in the study area, resting, foraging, or flying. One was carrying nesting material, but no nests were visible from the survey sites.

Observations of Additional Bird Species: Other bird species observed during the survey (and the approximate number of individuals) were western grebe or Clark's grebe (3), Forster's tern (2), Caspian tern (1), pigeon guillemot (3), red-tailed hawk (1), rock pigeon (1), Anna's hummingbird (2), white-crowned sparrow (4), and American robin (1).

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 seven days a week for an active nest adjacent to active construction or demolition.

On May 18, 2010, at 1120 hours, the nest site was occupied by three nestlings and the adult female was perched on the traveler east of existing Pier E2. At 1135 hours, the adult female flew to the nest site, and at 1138 hours, she flew north under the new bridge from the nest site and then back to the traveler east of existing Pier E2. From 1140 to 1240 hours, the nestlings were huddled together and relatively motionless. At 1150 hours, the adult male peregrine falcon was perched on top of the south leg of existing Pier E3, where he remained for the duration of the monitoring period.

On May 20, 2010, at 1440 hours, the nest site was occupied by three nestlings and no adults were observed in the immediate vicinity. At approximately 1530 hours, two adult peregrine falcons were observed chasing an adult red-tailed hawk south of the existing bridge. Following this chase, the female peregrine flew to the hand railing on the temporary truss and the male flew to the top of the Left Coast Lifter crane, which was moored north of the new bridge. Both adults appeared to be wet, as if they may have been in contact with Bay waters. While perched at these locations, both adults preened continuously for the remainder of the monitoring period.

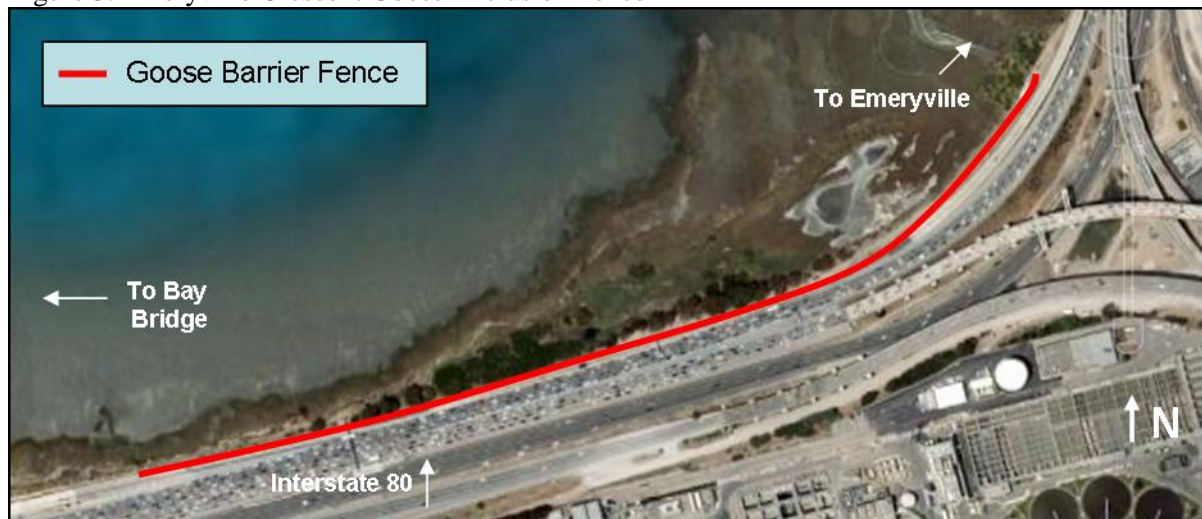
Based on the appearance of the nestling falcons and previous observations, the nestlings are estimated to be approximately four weeks old as of May 20, 2010. The nestlings are expected to fledge (take their first flight) on or about June 1, 2010.

Other Bird Species Observed: Other bird species observed during the peregrine monitoring were double-crested cormorant, red-tailed hawk, 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



Eleven Canada geese (5 adults and 6 young) were observed in the vicinity of the goose fence:

- two adults and three young were approximately 30 meters (100 feet) north of the “1,400 – 1,500 feet” marked fence interval;
- two adults and three young were approximately 49 meters (160 feet) feet north of the “1,400 – 1,500 feet” marked fence interval; and
- one adult was approximately 55 meters (180 feet) north of the “1,400 – 1,500 feet” marked fence interval.

In general, the goose fence is in good condition, but at one location in the “1,700-1,800 feet” marked fence interval, the fencing material is sagging and torn from the support post due to abundant vegetation growth. The fence in this area is likely to still exclude geese from the freeway, but it should be repaired to prevent further damage.

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