

MEMORANDUM

DATE: April 29, 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 #407, Week of April 19 – 23, 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.

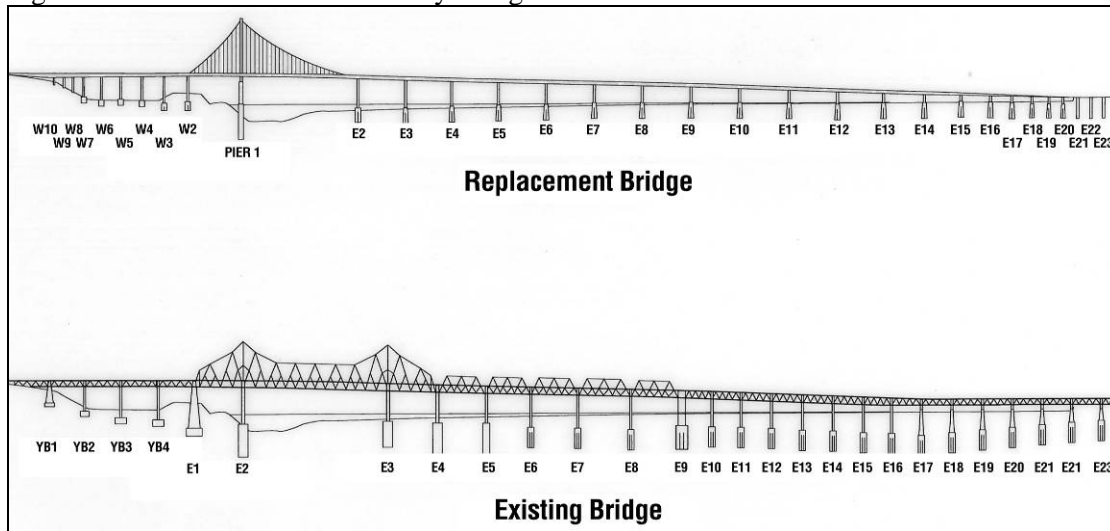
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 19 – 23, 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 were minimal and included light crew boat traffic on San Francisco Bay and on-land work on Yerba Buena Island. Construction activities during the peregrine falcon monitoring included installation of railings on the orthotropic box girders and demolition of the existing bridge tunnel approach section.

The weekly bird survey was conducted from 1328 to 1628 hours on April 21, 2010. Peregrine falcon monitoring was conducted from 1340 to 1500 hours on April 19 and from 1445 to 1535 hours on April 22, 2010. Canada goose monitoring was conducted from 1144 to 1212 hours on April 21, 2010.

Results

Monitoring of Active Construction Areas

California Least Tern: No least terns were observed.

California Brown Pelican: Six brown pelicans were observed. At 1526 hours, five were foraging approximately 100 meters (328 feet) north of new Piers E7 and E8 and one was flying north between existing Piers E5 and E6.

Peregrine Falcon: No peregrine falcons were observed.

Double-crested Cormorant: Approximately 190 double-crested cormorants were observed in the study area. Approximately 160 were under the existing bridge, including several nesting pairs between Piers E7 and E9 and other individuals carrying nesting material and building nests. The remainder were resting, flying, or foraging in other parts of the study area.

Western Gull: Approximately 45 western gulls were observed resting, foraging, or flying in the study area. Several pairs (but no nests) were seen on the existing bridge.

Observations of Additional Bird Species: Other species observed during the survey (and the approximate number of individuals) were greater scaup (5), surf scoter (2), common goldeneye (1), red-throated loon (1), common loon (3), horned grebe (2), western grebe (36), Clark's grebe (21), Brandt's cormorant (24), pigeon guillemot (1), and California gull (4). In addition, five black-crowned night-herons were 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 April 19, 2010, the adult female peregrine falcon was observed incubating at existing Pier E2. She remained on the nest for the duration of the monitoring period.

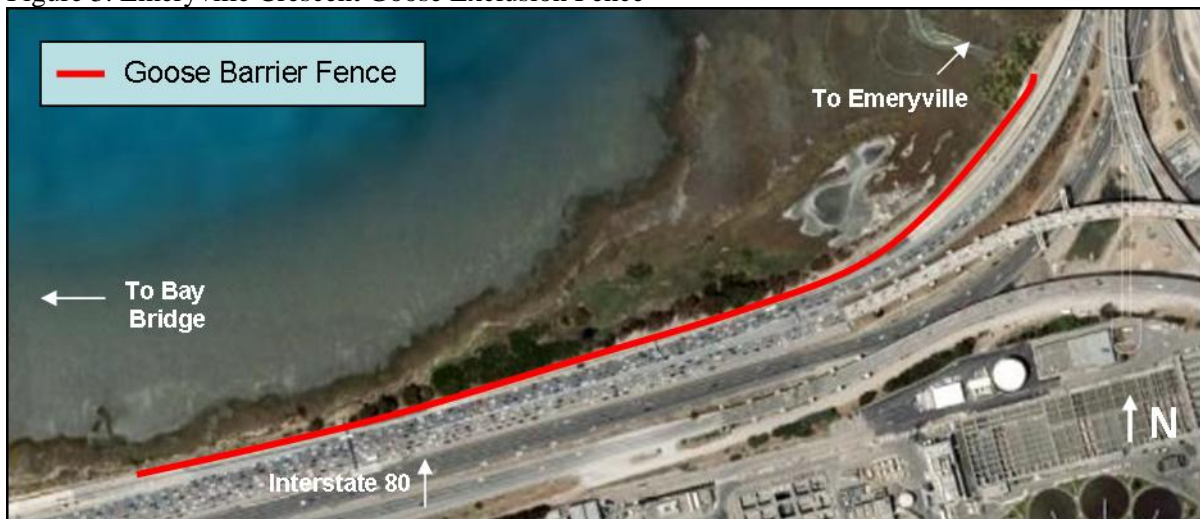
On April 22, 2010, the adult female peregrine falcon was observed incubating at existing Pier E2. At 1522 hours, the male flew to the nest site, vocalized briefly and then flew off to the south. One nestling and an egg shell fragment were seen at the nest. The peregrine monitor estimated that the remaining three eggs would hatch within a few days of this observation. Based on these hatching dates, the young are expected to fledge on approximately June 1.

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

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



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

- one adult was on the ground approximately 46 meters (150 feet) north of the “700 – 800 feet” marked fence interval;
- four adults were on the ground approximately 122 to 152 meters (400 to 500 feet) north of the “1,000 – 1,1000 feet” marked fence interval; and
- one adult was on the ground about 152 meters (500 feet) north of the “1,400 – 1,500 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