

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 #401, Week of March 8 – 12, 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.

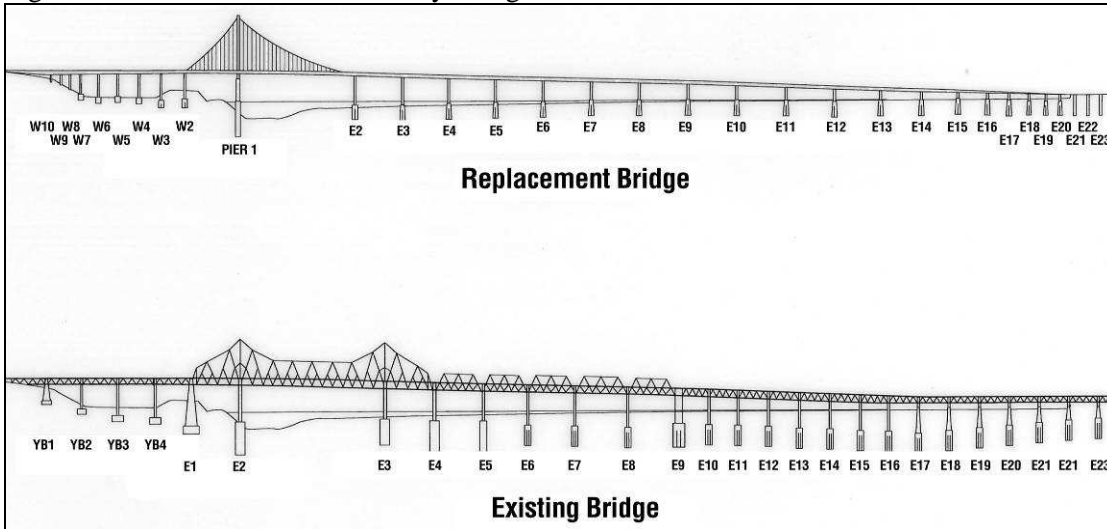
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 8 – 12, 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 crew boat traffic and various other activities at the Self-Anchored Suspension (SAS) construction site and on-land pile-driving at the South South Detour construction site on Yerba Buena Island. Construction activities during the peregrine falcon monitoring included installation of deck sections for the SAS. Approximately 30 to 40 workers were on the temporary truss during the monitoring period.

The weekly bird survey was conducted from 1350 to 1650 hours on March 10, 2010. Peregrine falcon monitoring was conducted from 1415 to 1515 hours on March 9, 2010 and 1400 to 1500 hours on March 10, 2010. Canada goose monitoring was conducted from 1714 to 1751 hours on March 10, 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 1610 hours, an adult peregrine falcon was in the traditional nest site on the north side of existing Pier E2.

Double-crested Cormorant: Approximately 2,325 double-crested cormorants were observed in the study area. Approximately 2,300 were perched under the existing bridge and 25 were foraging. The cormorants under the bridge included immature birds and adults in non-breeding and breeding plumage.

Western Gull: Approximately 30 western gulls were observed in the study area: 20 were perched under the existing bridge and 10 were foraging.

Observations of Additional Bird Species: Other bird species observed during the survey (and the approximate number of individuals) were Canada goose (2), greater scaup (110), surf scoter (60), bufflehead (50), common loon (2), horned grebe (7), eared grebe (1), western grebe (5), Clark's grebe (3), western grebe or Clark's grebe (60), Brandt's cormorant (100), and American coot (2). The Brandt's cormorants were in breeding plumage. In addition, 14 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 March 9 at 1422 hours, an adult male peregrine falcon was observed flying over the existing bridge from Yerba Buena Island toward the Port of Oakland. At 1446 hours, the male flew to the south leg of Pier E3 on the existing bridge and perched under the lower deck in a location that has been used as a nest site in previous years. At 1447 hours, the male flew to the south side of existing Pier E3 and perched on the railing below the lower deck. At 1452 hours, the male flew to the south leg of existing Pier E2 and perched on the railing below the lower deck.

On March 10, 2010, no peregrine falcons were observed during the hour-long monitoring period.

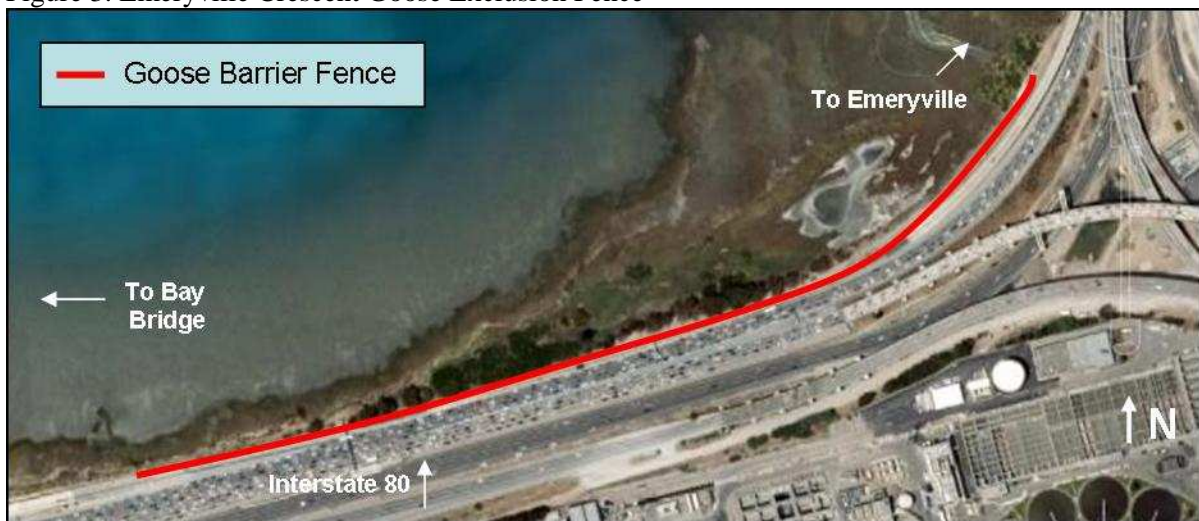
Based on the observations this week, it appears that incubation may have been initiated at the south leg of existing Pier E3. However, no definitive observations have been made to confirm this speculation.

Other Bird Species Observed: Other bird species observed during the peregrine monitoring were greater scaup, 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



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

- 2 adults were on the ground approximately 365 meters (1200 feet) north of “300 – 400 feet” marked fence interval;
- 2 adults were on the ground approximately 30 meters (100 feet) north of the “700 - 800 feet” marked fence interval; and
- 2 adults were on the ground approximately 6 meters (20 feet north) of the “1,300 – 1,400 feet” marked fence interval. Goose droppings were observed approximately 3 meters (10 feet) north of the “800 – 900 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