

MEMORANDUM

DATE: June 21, 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 #413, Week of May 31 – June 4, 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.

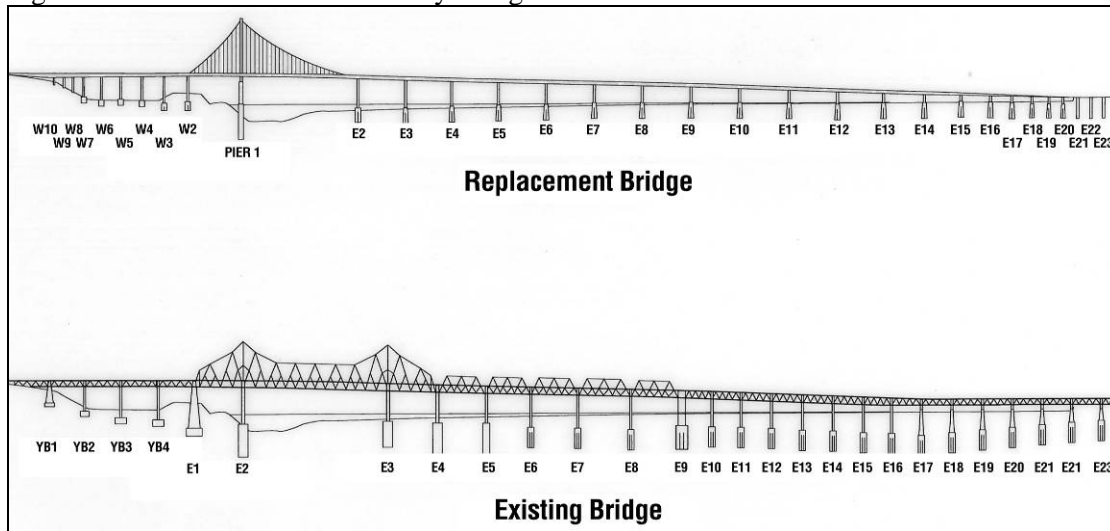
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 and document any take of these three 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 31 – June 4, 2010.

Bird Monitoring Activities

LSA conducted monitoring of the active construction areas from GANDA's boat; GANDA conducted peregrine falcon monitoring from Pier W2 on Yerba Buena Island; 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 Oakland Touchdown, South-South Detour, and Self-Anchored Suspension construction sites and crew boat traffic on San Francisco Bay. Construction activity during the peregrine monitoring included welding and welding-related activities for the orthographic box girder (OBG) lifts.

The weekly bird survey was conducted from 1327 to 1627 hours on June 4, 2010. Peregrine falcon monitoring was conducted from 1520 to 1620 hours on June 1, 2010, 1415 to 1515 hours on June 2, 2010, and 1045 to 1225 hours on June 4, 2010. Canada goose monitoring was conducted from 1740 to 1816 hours on June 4, 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 1433 hours, a young peregrine falcon was observed exercising its wings in the nest site at existing Pier E2. At 1438 hours, an adult was perched on the traveler east of existing Pier E2. At 1600 hours, a young falcon was seen in the nest site.

Double-crested Cormorant: Approximately 350 double-crested cormorants were observed. Approximately 300 were observed under the existing bridge (including one carrying nesting material) and 50 were observed foraging in other parts of the study area.

Western Gull: Approximately 75 western gulls were observed; including approximately 20 perched under the existing bridge, 5 perched under the new bridge, and 50 foraging in other parts of the study area. Three active nests were noted. One was on the cable-crossing structure and two were on the base of existing Pier E14.

Observations of Additional Bird Species: The other bird species observed during the survey (and the approximate number of individuals) were Canada goose (11), Clark's grebe (24), western grebe or Clark's grebe (60), Brandt's cormorant (12), snowy egret (1), pigeon guillemot (8), and rock pigeon (1). In addition, five black-crowned night-herons were seen in the cypress tree on the south shore of Treasure Island, next to Clipper Cove.

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 June 1, 2010, one of the three nestlings had fledged from the nest site on existing Pier E2 and was perched in a recessed cavity on the north-facing side of Pier E2, approximately 5 meters (16 feet) below the nest site. Two nestlings remained in the nest site. The nestling that fledged is a male and is banded on the left tarsus with a visual identification band (VID) 65/P. The nestlings that have not fledged are also banded on the left tarsus with VID bands. One is a male (78/S) and the other is a female (16/R). At 1555 hours, the adult female flew to the recently fledged (juvenile) male and perched briefly before flying off to the north. At 1615 hours, the adult female flew to a perch located just below the fledged juvenile male. At this location, she vocalized briefly before flying off to the north again, out of view.

On June 2, 2010, two nestlings were observed in the nest site and one juvenile male was located in a recessed cavity on the north-facing side of Pier E2, approximately 5 meters (16 feet) below the nest site (i.e., in the same locations where they were located on June 1, 2010). The adult female was perched on the traveler immediately east of Pier E2.

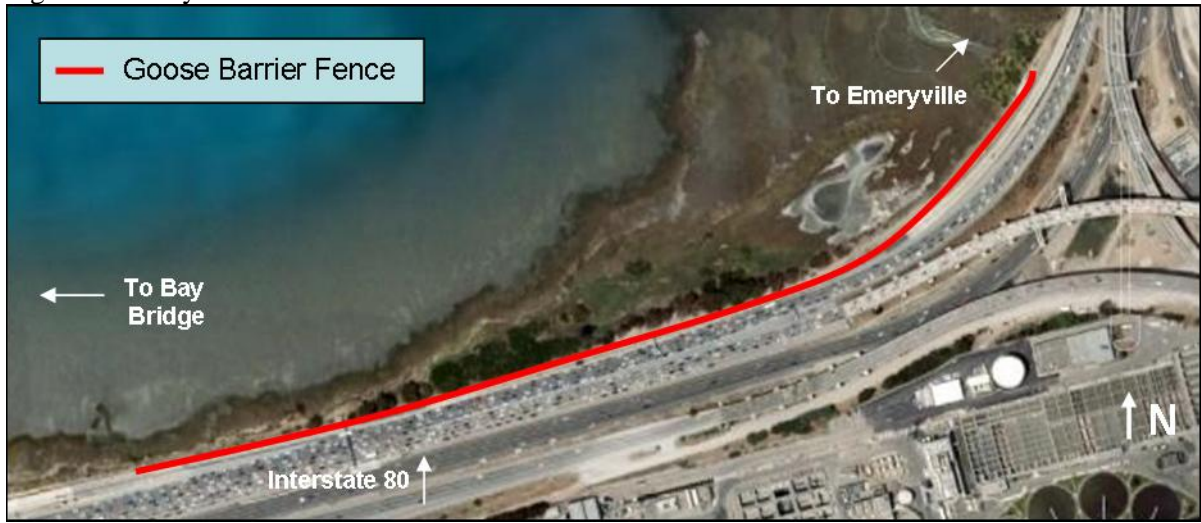
On June 4, 2010, the nestling female (16/R) was observed at the nest site. The juvenile male that fledged first (65/P) was no longer in the cavity below the nest site. The second juvenile male that fledged (78/S) was on the north side of the falsework for T1. At 1134 hours, the juvenile male (78/S) flew west approximately 30 meters (98 feet) to an OBG, where he perched on a railing. At 1135 hours, this same male flew to the existing bridge and then back to the falsework structure. At 1152 hours, the adult male peregrine falcon flew to the red crane on the north side of the new bridge and perched near the top. At 1155 hours, the juvenile male (65/P) was perched on the falsework near the Torpedo Building. At 1159 hours, the adult male flew from the red crane and soared around in the area north of the new bridge while vocalizing. At 1209 hours, the juvenile male (65/P) flew from the falsework near the Torpedo Building to the roof of the building. At 1215 hours, the juvenile male (65/P) flew from the Torpedo Building to the Left Coast Lifter crane, then south to the existing bridge and eventually to the falsework below the new bridge. He appeared to fly well.

Other Bird Species Observed: The other bird species observed during the peregrine monitoring were brown pelican, double-crested cormorant, pelagic cormorant, snowy egret, 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



Forty-one Canada geese (35 adults and 6 young) were observed in the vicinity of the goose fence:

- Thirty-one adults were approximately 305 meters (1,000 feet) north of the “0 – 100 feet” marked fence interval; and
- Four adults and six young were observed at approximately 122 meters (400 feet) north of the “2,200 – 2,300 feet” marked fence interval.

The corner post at the far western end of the fence needs to be reset. It is leaning inward toward the roadway and the fence is sagging.

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