

MEMORANDUM

DATE: June 30, 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 #414, Week of June 7 – 11, 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.

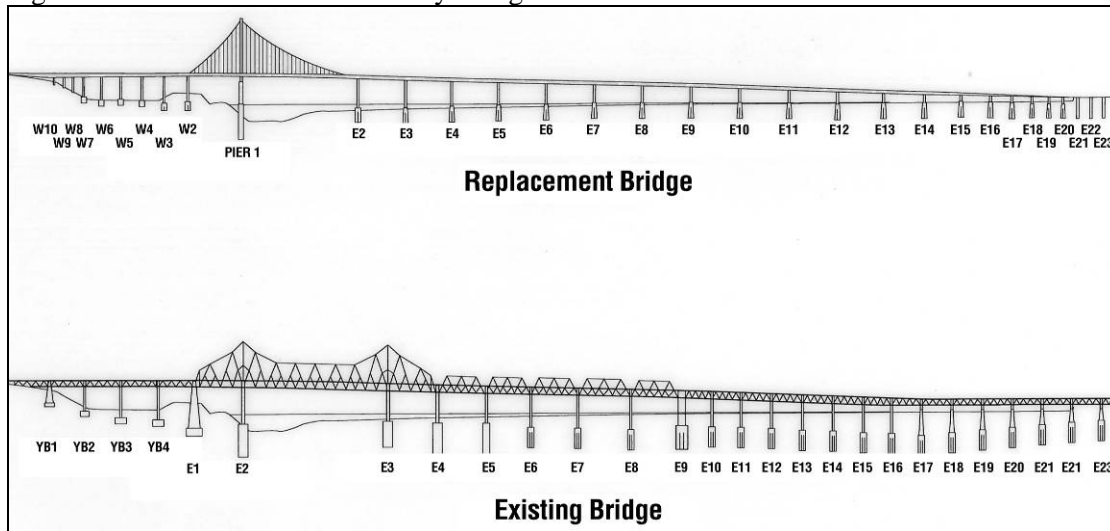
Figure 1. San Francisco-Oakland Bay Bridge Seismic Safety Project Location Map



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 June 7 – 11, 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 activities during the peregrine monitoring included welding and welding-related activities.

In addition to regular monitoring activities, Meredith Elliot (PRBO Conservation Science), Eric Lichtwardt (LSA), Jason Minton (GANDA), and Mark Rauzon (PRBO Research Associate and Marine Endeavors) conducted the annual double-crested cormorant nest count on the East Span of the San Francisco-Oakland Bay Bridge and the Richmond-San Rafael Bridge. See the Double-crested Cormorant Nest Count Section below for more details.

The weekly bird survey was conducted from 0920 to 1224 hours on June 11, 2010. Peregrine falcon monitoring was conducted from 1420 to 1510 hours on June 7, 2010. Canada goose monitoring was conducted from 1254 to 1322 hours on June 11, 2010. The cormorant nest count was conducted from approximately 0840 to 1050 hours on June 9, 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 1017 hours, an adult peregrine falcon was perched at the top of the south side of the superstructure above existing Pier E2. At 1026 hours, this bird flew east along the existing bridge and then perched under the bridge on the top of existing Pier E5. At 1114 hours, likely the same individual as observed at 1026 hours, attacked a double-crested cormorant near the base of existing Pier E6 and then flew west along the bridge and out of view.

Double-crested Cormorant: Approximately 370 double-crested cormorants were observed. Approximately 350 were perched under the existing bridge and approximately 20 were flying, foraging, or resting in other parts of the study area.

Western Gull: Approximately 40 western gulls were observed in the study area. Active nests on the existing bridge were located on Piers E4, E7, E8, E9, E11 (2 nests), E12, and E15, and one nest was located on the cable-crossing structure. These observations, combined with the two nests located on the base of existing Pier E14 during the June 4, 2010 survey, provide a total of 11 nests counted in the study area this year.

Observations of Additional Bird Species: The other bird species observed during the survey (and the approximate number of individuals) were Clark's grebe (28), western grebe (8), Clark's or western (20), Brandt's cormorant (3), snowy egret (1), pigeon guillemot (5), Wilson's warbler (1), song sparrow (1), white-crowned sparrow (1), and house finch (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.

At 1420 hours, the adult male peregrine falcon was observed soaring in circles around the Left Coast Lifter crane near the mouth of Clipper Cove, north of the new bridge. At 1426 hours, the adult male landed on the Left Coast Lifter and perched near the top of the crane. At 1435 hours, the juvenile female (16/R) was observed soaring over the temporary truss east of T1. After flying for approximately 2 minutes, she landed on a steel structure on the east end of the orthotropic box girders (OBGs). At 1438 hours, the adult male flew from the Left Coast Lifter and pursued an osprey flying west along the north shoreline of Clipper Cove.

At 1445 hours, the two juvenile males were observed flying east under the temporary truss and the OBGs, chasing a white rock pigeon. Both of the juvenile males appeared to be flying well, despite having less than one week's experience since fledging.

At 1452 hours, the juvenile female 16/R was observed flying over the temporary truss for approximately 2 minutes before landing on the top of the temporary truss.

At 1500 hours, the juvenile male 65/P was observed perched on the hand rail for the temporary truss just east of the OBGs. Nearby welding and construction work did not cause the bird to flush from its perch.

Observations recorded during this monitoring effort suggest that all three juvenile peregrine falcons have successfully fledged and are flying well during their first week post-fledging.

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



No Canada geese were observed in the vicinity of the goose fence during this week's survey.

The fence was sagging in the "1,700 - 1,800 feet" marked fence (in the vicinity of a light pole and the 50 mph speed limit sign); and the corner post at the far western end of the fence needs to be reset, as it is leaning towards the roadway and the fence is sagging.

Double-crested Cormorant Nest Count

Two-hundred and fifty (250) double-crested cormorant nests were counted on the existing San Francisco-Oakland Bay Bridge. This number of nests is approximately three times the number of nests (83) that were counted in 2009. Nests were concentrated around Pier E8. Several cormorants were carrying nesting material and a few males were displaying courtship behavior, suggesting that pairs are still attempting to nest. Similar to observations in 2009, no double-crested cormorants were observed on the cable-crossing structure.

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