

MEMORANDUM

DATE: March 20, 2009

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 #349, Week of March 9 - 13, 2009
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

In order to improve the seismic safety of the San Francisco-Oakland Bay Bridge (SFOBB), the State of California, Department of Transportation (Caltrans) is replacing the existing SFOBB East Span with a new bridge immediately to the north. This 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.

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 Caltrans monitor the double-crested cormorant colony and American peregrine falcon during the breeding season and prevent the birds from nesting on the existing bridge where potential impacts by construction activities could occur.

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 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 potential impacts to the breeding efforts of American peregrine falcons and double-crested cormorants on the existing SFOBB East Span. The monitoring also assesses potential impacts on breeding activities of western gulls, which are now known to nest on the existing bridge and new Pier E10E. Monitoring was conducted in accordance with the *Revised*

Final Bird Monitoring and Management Plan (Caltrans 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 #8-01, Special Condition F-6.

This memo summarizes the SFOBB East Span's construction bird monitoring activities conducted by LSA Associates, Inc. (LSA), Garcia and Associates (GANDA), and Marcus H. Bole & Associates (MHBA) during the week of March 9 - 13, 2009.

Bird Monitoring Activities

LSA, GANDA, and MHBA conducted monitoring of the active construction areas from GANDA's boat; GANDA conducted peregrine falcon nest monitoring from the eastern shoreline of 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 bird survey included workers conducting various activities at the Oakland Touchdown Westbound, South-South Detour, and Self-Anchored Suspension construction sites; and crew boat, tug, and barge traffic on the bay. A construction worker was on the base of existing Pier E3 during a portion of the survey.

Construction activities during the peregrine survey included work on the South-South Detour and the new bridge sections located on Yerba Buena Island. Several barges and crew boats were moving through the bay from Pier T1 to the Oakland Touchdown. On March 11, 2009, a construction worker was on the base of existing Pier E2. This worker was picked up by a crew boat that later moored at the base of existing Pier E3.

The bird survey was conducted from 1000 to 1300 hours on March 13, 2009. Peregrine falcon monitoring was conducted on from 1600 to 1700 hours on March 9, 2009, from 1430 to 1630 hours on March 11, 2009, and from 1030 to 1130 hours on March 12, 2009. Canada goose monitoring was conducted from 1030 to 1130 hours on March 14, 2009.

Results

Monitoring of Active Construction Areas

California Least Tern: No least terns were observed.

California Brown Pelican: No brown pelicans were observed.

Peregrine Falcon: Two peregrine falcons were observed: at 1000 hours. One was perched on the top of the superstructure above existing Pier E3. At 1103 hours, it flew to the west, circling high over Clipper Cove until lost from view. At 1115 hours, another peregrine falcon was perched under the existing bridge on a side beam just west of existing Pier E8. This bird was dark with heavy barring on the breast and under parts and did not look like a member of the SFOBB East Span nesting pair.

Double-crested Cormorant: Three double-crested cormorants were seen flying or resting in the study area. No cormorants were observed under the existing bridge or on the nesting platforms on the new bridge.

Western Gull: Twenty-three western gulls were observed in the study area. Most were flying over the bay or resting on shore or the existing bridge.

Observations of Additional Bird Species: The other species observed during the bird survey (and the approximate number of individuals) were Canada goose (15), American wigeon (11), Eurasian wigeon (1), greater scaup (70), surf scoter (10), bufflehead (45), common goldeneye (4), ruddy duck (8), horned grebe (14), western grebe (5), Clark's grebe (6), western grebe or Clark's grebe (115), Brandt's cormorant (2), great blue heron (1), American coot (1), spotted sandpiper (1), mew gull (47), black turnstone (1), belted kingfisher (1), and European starling (50). The Brandt's cormorants had breeding plumes.

American Peregrine Falcon Nest Monitoring

On March 9, 2009 at 1620 hours, an adult male peregrine falcon was observed flying from the vicinity of Pier E5 on the existing bridge. The male flew south for a short distance and returned back to the bridge, where it perched on the railing below the lower deck on the south leg of existing Pier E4. The male remained perched at this location for approximately 30 minutes. At 1648 hours, the male flew south for a short distance and circled back to the south leg of Pier E4. It appeared that the male perched on the east-facing side of Pier E4, out of view from the observation area, but this could not be confirmed.

On March 11, 2009, no peregrines were observed during the initial 1 hour and 14 minutes of monitoring. At 1544 hours, the male was observed flying north from the vicinity of existing Pier E5 toward the new bridge (for a short distance) before flying back to the existing bridge and perching near Pier E5 in an area out of view. At 1548 hours, the male flew from Pier E5 to the south leg of Pier E4. He perched on the southern core beam, just east of the south leg of Pier E4, below the lower deck. After 11 minutes perched at this location, the male flew west over the upper deck of the existing bridge (but below the top of the bridge). The male was not observed again for the remaining 30 minutes of the monitoring period.

On March 12, 2009 at 1505 hours, an adult female peregrine was observed flying into the lowest ladder platform on the north tower of existing Pier E4 with prey in her talons. She proceeded to eat the prey until 1520 hours, when she flew to the core beam on the north side of the E4-E5 span, carrying prey remains. She stashed these remains on the north core beam between Piers E4 and E5. From this location she flew to the south tower of Pier E5 to a perch site located out of view. No other observations were made for the remainder of the monitoring period.

During the time the female was consuming prey, careful observation through a spotting scope confirmed that she had leg bands on each tarsus. Her right tarsus appeared to have a VID band that might be blue, and her right tarsus appeared to have a silver-colored USFWS band. No number or letter codes could be read on the VID band to confirm the female's identity.

Based on the observations made this week and during previous monitoring periods, the pair is apparently in the egg-laying period. There was no evidence that the peregrine falcons were disturbed by the construction activities. Two construction activities were observed that could potentially disturb the peregrines: a construction worker on the base of existing Pier E2 and a crew boat moored at the base of existing Pier E3.

Other Bird Species Observed: The other species observed during the peregrine monitoring were common loon, eared grebe, double-crested cormorant, snowy egret, western gull, and belted kingfisher. The number of other bird species observed during the peregrine falcon monitoring is not recorded 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

A pair of Canada geese was seen approximately 120 meters (400 feet) north of the goose exclusion fence along I-80 (at the 300- to 400-foot interval markers). Both birds acted wary and alert, suggesting there could be an active nest in the vicinity. A second pair of geese was seen approximately 75 meters (250 feet) north of the 800- to 900-foot fence interval markers and a nest containing four eggs was found in this area. The nest is on a narrow strip of upland habitat north of a salt pan and salt marsh area. The exclusion fence is in satisfactory condition and requires no repairs at this time.

Conclusions

The monitors did not observe any indications that birds were disturbed due to SFOBB East Span construction activities.

cc: Monica Gan, Caltrans