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Solving Environmental Challenges

August 2, 2011

Jemellee Cruz, P.E.
Flood Maintenance Division
County of Los Angeles Department of Public Works
900 South Fremont Avenue
Alhambra, CA 91803-1331

Subject: Pre-Construction Nesting Bird Survey and Johnson Field Western Toad Presence/Absence Survey Report for the Devil's Gate Interim Measures Project, in the City of Pasadena, Los Angeles County, California.

Dear Ms. Cruz:

Chambers Group, Inc. (Chambers Group) was retained by the Los Angeles County Flood Control District (LACFCD), a division of Los Angeles County Department of Public Works (LACDPW), to conduct a pre-construction nesting bird survey within the Interim Measures work boundary and buffer and a presence/absence survey for western toad (*Bufo boreas*) within Johnson Field, for the Devil's Gate Interim Measures Project (Project) located in the City of Pasadena, Los Angeles County, California. The nesting bird survey was required to remain in compliance with the Migratory Bird Treaty Act since the Project activities would occur during the bird breeding season (March 1 to August 31). This report summarizes the nesting bird survey and Johnson Field survey results.

Project Location and Description

Devil's Gate Dam and Reservoir is situated on the south facing slopes of the San Gabriel Mountains. The Project site is located north of Interstate 210, west of North Arroyo Blvd., and east of Oak Grove Drive, in the City of Pasadena, Los Angeles County, California. The site is within the U.S. Geological Survey (USGS) Pasadena, California 7.5-minute topographic quadrangle in Section 7 of Township 1 north, and Range 12 west. The elevation range at the site is between approximately 1,000 and 1,300 feet above mean sea level (amsl). The reservoir is within the Hahamongna Watershed and is a tributary to the Arroyo Seco, which drains into the Los Angeles River and ultimately into the Pacific Ocean.

The work proposes to regrade the access road from the abutment to the sluice gate area of the dam, replace existing wooden boom logs with foam/plastic boom logs to more efficiently catch floating debris, install new anchor points to safely anchor boom logs, clear approximately 25,000 cubic yards (CY) of sediment from approximately 100 feet from the face of the dam to minimize clogging and/or other impacts to dam operations, stockpile sediment within Johnson Field (within the reservoir area), modify and extend existing sluice gates to prevent clogging, install 200 feet of new catwalk on the upstream face of the spillway for safe access of maintenance crews, modify the Altadena west storm drain since sediment is higher than the drain outlet, and replace 100 feet of damaged ladder system on the upstream face of the dam for safe access of maintenance crews.

Methodology

Chambers Group biologists conducted a pre-construction nesting bird survey throughout the proposed interim measures footprint and included a buffer area of 300 feet for passerines and 500 feet for raptors. The survey was conducted by walking transects and using binoculars to achieve 100 percent visual coverage of the proposed work and buffer areas. Data was collected on active nests, nesting behavior, pair bonding behavior, and wildlife species observed in the work area (Attachment 2). Nesting locations were recorded using a handheld Global Positioning System (GPS) and were photo-documented (Attachment 3).

Additional time was spent in Johnson Field to check for the presence or absence of western toads. The survey was conducted by walking transects to achieve 100 percent visual coverage of Johnson Field. Data was collected on species present. Sensitive/listed species were recorded using a handheld Global Positioning System (GPS) and were photo-documented.

Results

Nesting Birds

The nesting bird survey was conducted between the hours of 0630 and 1215 by Heather Franklin, Corey Vane, and Sean Vogt on July 28, 2011. Weather conditions included temperatures from 64 degrees to 76 degrees Fahrenheit, wind speeds from 0 to 3 miles per hour, and cloud cover varying from 0 to 100 percent cover throughout the day. A total of 30 species of birds were observed during the nesting bird survey. Birds were observed foraging together and were not exhibiting territorial behaviors, which are typical when birds are nesting. One group of active cliff swallow nests was observed at the time of the survey (Attachment 1 and 3). No other pair bonding or nesting behaviors/activity was observed within the work area boundary or buffer. Details on the active cliff swallow nests are described below and provided in Table 1.

- One group of active cliff swallow nests were observed along the Spillway Crest along an approximately 250 foot stretch east and west of the tower and on both the north and south sides of the bridge. Parents were observed feeding nestlings throughout the day.

Table 1
Summary of Nesting Birds on the
Devil's Gate Interim Measures Work Project Site

Nesting Species	Nest Location	Nest Coordinates* West End		Nest Coordinates* East End		Nest Stage
		Easting	Northing	Easting	Northing	
Cliff Swallow	North and South sides of the Spillway Crest	391726	3783333	391803	3783322	Parents Feeding Nestlings

* = UTM Coordinates in Meters: Zone 11S, NAD 83

Other Wildlife

In addition to bird species observed during the nesting bird survey, additional wildlife including: pacific chorus frog (*Hyla regilla*), western toad, western fence lizard (*Sceloporus occidentalis*), southern pacific rattlesnake (*Crotalus viridis viridis*), and desert cottontail (*Sylvilagus audubonii*), were also observed. Many young and very common western toads were observed throughout the entire reservoir area, including along access roads, and within upland and riparian vegetation communities.

Johnson Field

Western toads were first observed present within Johnson Field, during a site visit to Johnson Field, conducted by Paul Morrissey on June 15, 2011, for the Devil's Gate Interim Measures Project. At the time of the survey on June 15th, ponded water had recently dried and young western toads were observed throughout the field. At that time, vegetation cover was very low and the toads had few places for cover to stay cool and hide from predators; therefore, it was thought that the toads would likely leave the field to find areas with more moisture and cover.

During the nesting bird survey on July 28th, western toads, as well as pacific chorus frogs, were observed throughout Johnson Field. Most of the toads and frogs were observed on the west side of the field where weedy plant species are now growing (now that water has dried up) and providing cover for the animals. Western toads were observed in fewer numbers than when they were first observed on June 15, so it does appear that they are slowly migrating out. While adult toads will migrate to leaf litter of upland habitat during the dry season, young toads are more susceptible to desiccation so will most likely migrate to areas with water or moist conditions within the reservoir for the duration of the season and throughout winter.

Conclusions and Recommendations

Nesting Birds

One group of active cliff swallow nests was observed within the buffer of the proposed work footprint. The nests are located approximately 20 linear feet from the limits of Sediment Removal, 60 linear feet from the vehicular access only road, and approximately 100 feet from the staging area (Attachment 1). In addition, the nests are approximately 50 feet from the ground; therefore, the smallest distance of the nests to construction is approximately 70 feet. The nests are located along the north and south side of the Spillway Crest, east and west of the tower for an approximately 250 foot stretch. The parents were observed flying in and out of nests, feeding nestlings. The bridge contains a number of inactive cliff swallow nests as well; therefore, it is likely the observed active nests with nestlings will fledge within a couple of weeks, at which point the nests will become inactive.

Cliff swallows are a common resident that nest under eaves of homes or business buildings, under the overhangs of bridges, and on sheltered cliffs. This species is able to tolerate a significant amount of human disturbance. Because the bridge, access road, and entire reservoir are open to the public, the individuals nesting approximately 50 feet from Oak Grove Drive, are adapted to vehicular noise,

vibrations and air emissions, as well as daily human disturbance including; walking, running, biking, horseback riding, and dog walking. Due to the large amount of human disturbance at and near the active nests, it is unlikely that the proposed construction activities will have an impact on these active nests.

In order to document that the nesting pairs exhibit normal nesting behaviors during construction activities, a biological monitor will check the nests 2 to 3 times a week, depending on work locations and activities, until the nests become inactive, or the young have fledged and are independently capable of leaving the work area. Monitoring will continue until there are no active nests within 300 feet of any construction activities.

The LACFCD has elected to implement the following minimization measures in order to minimize impacts to the active cliff swallow nests and in order to stay in compliance with Migratory Bird Treaty Act.

- A biological monitor will be present during construction to monitor the active cliff swallow nests. If the pairs show signs of stress and the monitor believes that one or more nests will fail due to the work activities, the biologist will determine an appropriate exclusionary buffer, or the work will be postponed until the nests become inactive or the young have fledged and are independently capable of leaving the Project area.

- When conducting the nest monitoring, the biological monitor will also identify any new nests within the Project footprint or within the 300-foot buffer area. If new nests are identified, the monitor will flag an appropriate buffer around the nest and inform the crew to avoid the area. The biologist will monitor the nest as described above.

The nesting bird survey conducted on July 28, 2011, is valid if vegetation removal/ground disturbing activities begin within one week of this date. If more than one week passes since this survey was conducted, another nesting bird survey is required no more than one week prior to vegetation removal/ground disturbing activities, if these activities are scheduled during bird breeding season (March 1 through August 31).

Other Wildlife

At the time of the survey ponded water existed in the two most northern spreading basins and water is flowing in the stream within the reservoir. There is a potential for sensitive amphibian and reptile species to be present during construction; therefore, one or more biological monitors will be present on an as-needed basis during construction activities. The number of biological monitors will depend on work load and activities.

The LACFCD has elected to implement the following minimization measures during construction activities, which are scheduled to begin on Wednesday August 3, 2011.

- Biological monitors will be present on the site daily, during ground disturbing activities including but not limited to; grading, sediment removal, and sediment hauling, to conduct clearance surveys for any sensitive species directly ahead of construction.

  - Although western toads are not a listed or sensitive species, the biological monitor will relocate western toads from within the construction footprint to a safe distance from work areas, where feasible.

- If at some point during construction activities the biologist deems it necessary to install exclusion fencing for amphibian and/or reptile species on site and implement a Trapping and Relocation Plan, then the biologist will communicate that with LACFCD immediately so that fencing will be installed immediately, under the supervision of a qualified biologist.

- Speed on the haul road will be limited to 20 miles per hour (mph) during work activities.

- All trash will be cleaned up and removed from the site daily to prevent attracting predators to the work area.

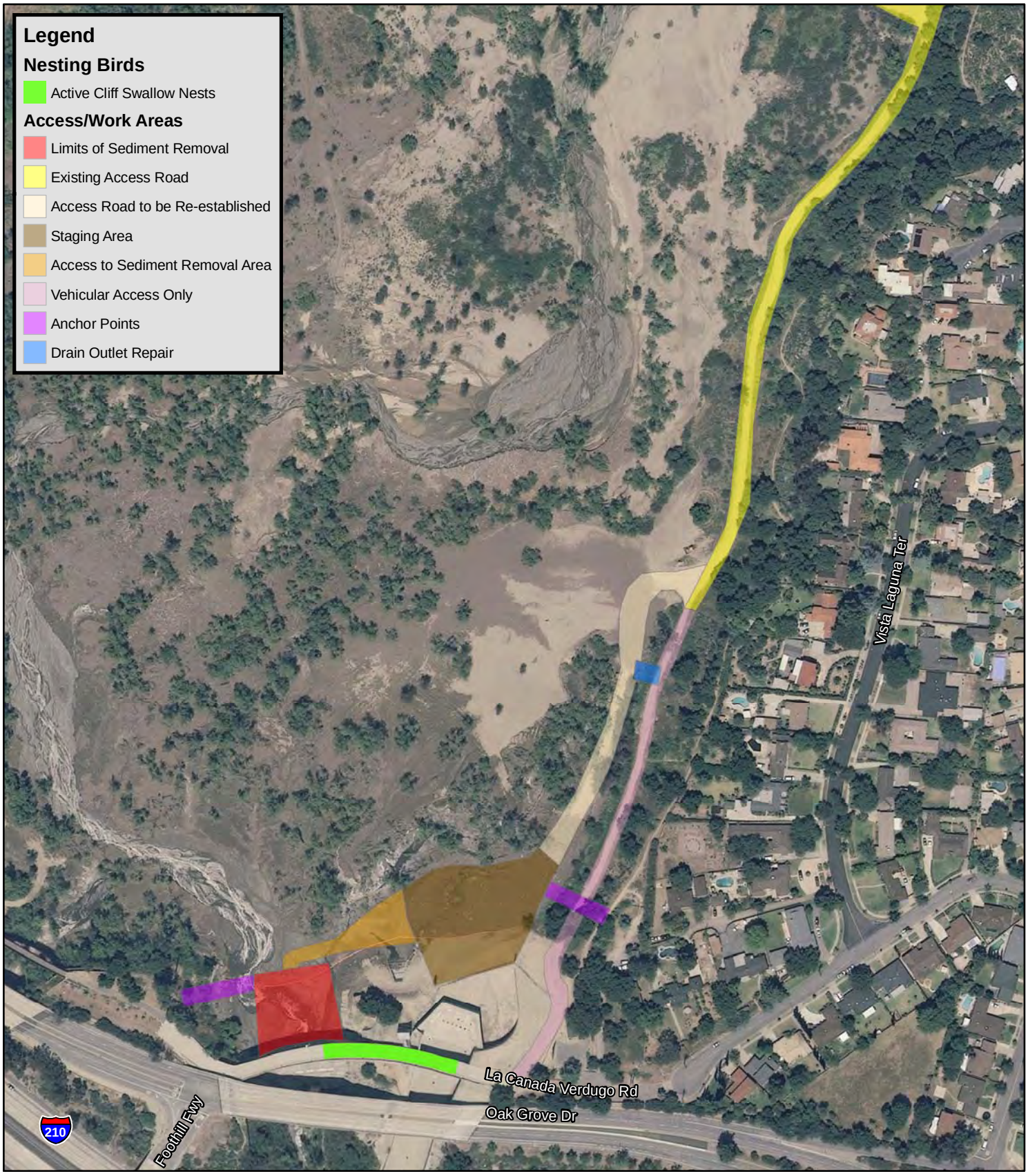
Please do not hesitate to contact me at (909) 335-7068 extension 7330, or on my cell phone at (909) 239-0655, to discuss any questions or concerns.

Sincerely,

Saraiah Skidmore

Saraiah Skidmore
Staff Biologist/Botanist
sskidmore@chambersgroupinc.com

Attachment 1: Devil's Gate Interim Measures Nesting Bird/Wildlife Map
Attachment 2: Wildlife Species Observed/Detected
Attachment 3: Devil's Gate Interim Measures Nest/Wildlife Photographs



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Devil's Gate Interim Measures
Nesting Bird/Wildlife Map

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Chambers Group Inc.

Wildlife Species Observed/Detected During the Nesting Bird Survey for the Devil's Gate Interim Measures Project

Scientific Name	Common Name
CLASS AMPHIBIA	**AMPHIBIANS**
BUFONIDAE	**TRUE TOADS**
Bufo boreas boreas	western toad
HYLIDAE	**TREEFROGS**
Hyla regilla	pacific chorus frog
CLASS REPTILIA	**REPTILES**
PHRYNOSOMATIDAE	**ZEBRA-TAILED, EARLESS, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNY LIZARDS**
Sceloporus occidentalis	western fence lizard
VIPERIDAE	**VIPERS**
Crotalus viridis viridis	southern pacific rattlesnake
CLASS AVES	**BIRDS**
ARDEIDAE	**HERONS, BITTERNS**
Ardea herodias	great blue heron
ANATIDAE	**DUCKS, GEESE, SWANS**
Anas platyrhynchos	mallard
ACCIPITRIDAE	**HAWKS, KITES, EAGLES**
Buteo jamaicensis	red-tailed hawk
ODONTOPHORIDAE	**NEW WORLD QUAIL**
Callipepla californica	California quail
COLUMBIDAE	**PIGEONS & DOVES**
Columba fasciata	band-tailed pigeon
Zenaida macroura	mourning dove
TROCHILIDAE	**HUMMINGBIRDS**
Calypte anna	Anna's hummingbird
Selasphorus rufus	rufous hummingbird
PICIDAE	**WOODPECKERS**
Picoides nuttallii	Nuttall's woodpecker
TYRANNIDAE	**TYRANT FLYCATCHERS**
Sayornis nigricans	black phoebe
Tyrannus verticalis	western kingbird
HIRUNDINIDAE	**SWALLOWS**
Petrochelidon pyrrhonota	cliff swallow
Hirundo rustica	barn swallow
Stelgidopteryx serripennis	northern rough-winged swallow
CORVIDAE	**JAYS & CROWS**
Aphelocoma californica	western scrub-jay
Corvus brachyrhynchos	American crow

Scientific Name	Common Name
Corvus corax	common raven
AEGITHALIDAE	**BUSHTITS**
Psaltriparus minimus	bushtit
TROGLODYTIDAE	**WRENS**
Thryomanes bewickii	Bewick's wren
TIMALIIDAE	**BABBLERS**
Chamaea fasciata	wrentit
MIMIDAE	**MOCKINGBIRDS, THRASHERS**
Mimus polyglottos	northern mockingbird
Toxostoma redivivum	California thrasher
PARULIDAE	**WOOD WARBLERS**
Geothlypis trichas	common yellowthroat
EMBERIZIDAE	**EMBERIZIDS**
Pipilo crissalis	California towhee
Pipilo maculatus	spotted towhee
FRINGILLIDAE	**FINCHES**
Carduelis psaltria	lesser goldfinch
Carpodacus mexicanus	house finch
CLASS MAMMALIA	**MAMMALS**
LEPORIDAE	**HARES & RABBITS**
Sylvilagus audubonii	desert cottontail
SCIURIDAE	**SQUIRRELS**
Sciurus niger	fox squirrel
Spermophilus beecheyi	California ground squirrel

SITE PHOTOGRAPHS

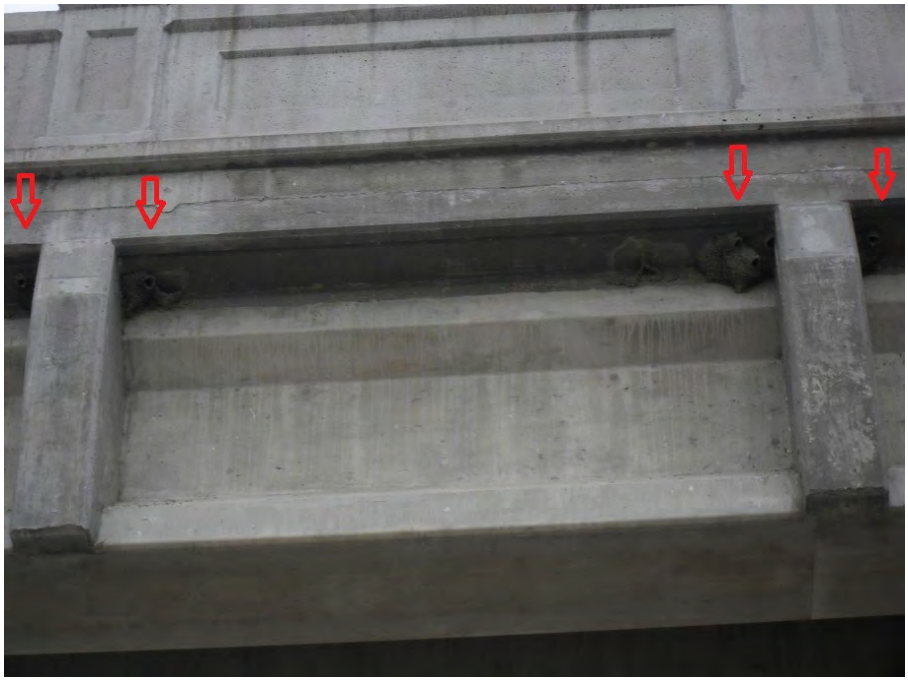

Photo 1: Facing south depicting north side of the Spillway Crest with active cliff swallow nests under the overhang on each side of the support beams.

Photo 2: Facing south depicting north side of the Spillway Crest with active cliff swallow nests under the overhang on each side of the support beams.

Photo 3: One of hundreds of young western toads that are found within Johnson Field as well as the entire Devil's Gate Reservoir area including access roads.

Photo 4: Western toads observed on site were all young as visible by their size. Adult western toads will grow to be 2 – 5 inches.