

Memorandum

Date: April 4, 2018
To: Ms. Nadia Parker, Los Angeles Department of Water and Power
From: Arthur Popp and John Parent, AECOM Biologists
Subject: 2018 Silver Lake Reservoir Complex Great Blue Heron Surveys

Background

Construction of the Silver Lake Reservoir Complex (SLRC) Bypass Project (Project) was completed in 2017, at which time Silver Lake Reservoir (SLR) was refilled with water to previous levels, after being drained of water in late 2015 to accommodate construction across the reservoir bottom. Throughout Project construction, great blue herons (GBHE; *Ardea herodias*) utilized nests in a stand of eucalyptus trees on the west side of the SLR for annual nesting. Known for having high nest site fidelity, GBHE have been returning for a number of years to this rookery in the SLRC for breeding, nesting, and raising fledglings. Up to about 15 active nests have been documented in the SLRC heron rookery over the past years.

Since water was drained from SLR to accommodate construction, GBHE have not resumed nesting at the SLRC rookery. However, nesting activities have been observed immediately adjacent to the north of the SLRC, and herons have been observed inside the SLRC to forage for food and water, as well as to gather nesting materials. The most recent nesting inside the SLRC occurred in 2016. Due to concerns from some residents in the SLRC neighborhood that GBHE are not returning to nest in the SLRC since Project construction was completed and the reservoir has been refilled, Los Angeles Department of Water and Power (LADWP) requested that AECOM determine if GBHE have returned to nest in SLRC again for the 2018 nesting season, and if they have not, to investigate where they may be nesting and their general nesting status for the season.

Field Surveys

AECOM biologists performed site visits to the SLRC and the surrounding area on February 7, 15, and 23, and March 15 and 29, in order to determine the nesting status of GBHE. In advance of the first survey, local residents informed LADWP that GBHE

appeared to be actively nesting in a cedar tree on the northwest corner of Tesla Avenue and Rokeby Street, just across Tesla Avenue from the SLRC. This cedar tree is tall and provides the sturdy branch structure required to support large GBHE nests. Additionally, this tree occurs a similar distance from open water, in this case Ivanhoe Reservoir, as nests occurring in the north and south colonies of the rookery inside the SLRC, which lie in close proximity to SLR. AECOM biologists were also made aware of a group of GBHE that were nesting in tall cedars in the Atwater Village neighborhood, approximately 1.2 miles north of SLRC.

AECOM biologists conducted surveys on the dates indicated above at these two locations where GBHE were known to be present during the current nesting season, and at the stand of eucalyptus trees inside the western portion of SLRC, where they have not nested since 2016. Surveys were conducted in the mornings to early afternoons, generally for a few hours sometime between 0700 and 1400. In addition to the five visits to the SLRC and Atwater Village sites, AECOM biologists on February 7 conducted a survey along the nearby Los Angeles River for the presence of GBHE and active nests.

Results

Observations made during the field surveys are summarized in Table 1 below.

Date			
Survey Time	SLRC	Tesla/Rokeby	Atwater Village
Surveyors			
February 7 0700-1200 John Parent Art Popp	One GBHE was observed flying towards the north colony, but was chased away by a red-tailed hawk (RTHA; <i>Buteo jamaicensis</i>) before it was able to land. No other GBHE or nests observed in the SLRC.	Up to 6 GBHE observed in cedar tree, generally 3-4 GBHE were present at a time. Two nests appear to be present in tree. Nests do not appear active.	Three GBHE, each roosting near a nest were observed. Nests do not appear active.
February 15	No GBHE or active nests observed. RTHA	One GBHE observed in cedar tree during	Five GBHE observed in various trees.

1020-1200	not detected during this survey.	survey. Nests do not appear active.	Nesting behaviors detected; however, nests do not appear active.
February 23 0645-1000 John Parent Art Popp	No GBHE observed inside the SLRC. A RTHA nest was identified in the south colony. Appears to be nest of hawks that have been chasing GBHE away from the SLRC rookery.	Only one GBHE was observed in the cedar tree during this survey. Nests do not appear active.	Three GBHE, each roosting near a nest were observed. Nests do not appear active; however, nesting appears imminent.
March 15 0830-1000 John Parent	Confirmed that an active RTHA nest is present in the south colony. No GBHE observed inside the SLRC.	Two active nests with incubating GBHE.	Three active nests with incubating GBHE.
March 29 1030-1400 Art Popp	A GBHE pair was observed roosting in the south colony for a few minutes, and then flying to the east side of SLR. The pair was then chased away by a RTHA from this location. No active nests observed inside the SLRC.	Two, possible three, active nests present. A GBHE (3 total) observed standing near or on each nest.	Three, possibly four, active nests present. A GBHE (4 total) observed in each nest.

During the February 7 survey of an approximate 4-mile stretch of the Los Angeles River that occurs between the SLRC and Atwater Village sites, up to about a dozen foraging GBHE were observed along the river; however, no old or active nests, or GBHE nesting behaviors were observed along the river. Generally, willow trees present in the river's riparian habitat do not provide sufficient structure to support a GBHE nest. However, GBHE do go to the river to forage. As a result, GBHE are not anticipated to nest in riparian trees along the Los Angeles River and no more surveys for GBHE were conducted along the river.

Discussion

To date, GBHE have not resumed active nesting in the SLRC rookery since the 2016 nesting season. It is likely that a lack of water in the reservoir during late 2016 into 2017 kept GBHE from nesting in the SLRC and to look elsewhere for suitable nesting sites. The appearance of nesting GBHE in the cedar across from the SLRC and in a cluster of cedars in Atwater Village coincided with the lack of GBHE nesting inside the SLRC, and it is likely that the GBHE at these locations are individuals that formerly nested inside the SLRC. Although SLR is currently full of water, it appears that GBHE are being deterred from nesting within the rookery inside the SLRC this season by an aggressive pair of RTHA which have been observed chasing away GBHE during two of the site visits. It is the opinion of AECOM biologists that GBHE have resumed nesting activities in the SLRC area, given the proximity of the active nests on Tesla; however, whether nesting within the SLRC rookery will occur this nesting season yet is undetermined. As its getting late for GBHE to start nesting, its very likely that they will not return this season to the SLRC rookery. However, as in past years when SLR was drained and GBHE did not return the following season to nest in the rookery, it is expected that they will return again as they have in the past, likely when there are enough GBHE present to dissuade the RTHA from trying to chase them all away. The RTHA pair was detected during 2015 and 2016; however, a large number of GBHE returned to the SLRC rookery during those years and they were not chased away by RTHA.

It is not believed that Project activities caused GBHE to move out of the SLRC. During Project monitoring efforts between 2015-2017, when Project construction occurred within close proximity of the GBHE rookery, GBHE were generally not disturbed by Project construction, and only occasionally during this time period did they exhibit any startle behaviors when disruptive construction activities occurred. At most GBHE would stretch their necks out and look in the direction of a noise; however, they were never observed to leave an active nest during this time period or appear otherwise distressed by construction around them. AECOM reported no impacts to nesting GBHE during Project monitoring over the past few years. GBHE generally seemed acclimated to loud and sometimes disruptive urban noises that occur within close proximity of their nests, including loud garbage trucks and house renovation activities (power tools and hammering) that have been observed by the monitors over the past few years around the SLRC.

As LADWP prepares to install a walking path for the public through the northwest portion of the SLRC, questions have been raised by the public of the potential effects of this proposed work on GBHE nesting in the cedar tree at the corner of Tesla and

Rokeby. LADWP is prepared to construct a ramp in support of the walking path at the corner of Tesla and West Silver Lake Drive, approximately 300 feet west of the cedar at Tesla and Rokeby. LADWP anticipates the use of small equipment such as a backhoe and bobcat, with an occasional dump truck and concrete truck present at the site during construction of the ramp. Since this site is 300 feet from the cedar tree and sustained, loud disruptions are not anticipated by the equipment proposed for use, impacts and disruptions to nesting GBHE are not anticipated. Construction of the ramp is not anticipated to be more disruptive than other urban activities that have been observed by AECOM biologists in the neighborhood over the past few years. Currently there is steady vehicle and foot traffic immediately below the cedar tree at Tesla and Rokeby and such urban actions have not dissuaded GBHE from nesting and remaining at this location. To ensure that impacts to nesting GBHE would not occur during ramp/walking path construction, AECOM suggests that LADWP provide a biological monitor to observe GBHE behaviors while work at the corner of Tesla/West Silver Lake Drive occurs.

Should you have any questions or comments regarding this memo, or if additional information is required, please feel free to contact us.

Sincerely,



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