

September 28, 2017

Rafael Contreras
City of Anaheim
200 S Anaheim Boulevard, Suite 276
Anaheim, CA 92805

SUBJECT: Results of a Biological Resources Assessment for the Orangewood Avenue Bridge Widening Over Santa Ana River in the City of Orange, California.

Dear Mr. Contreras:

Michael Baker International (Michael Baker) has prepared this letter report to document the results of a biological resources site assessment for the Orangewood Avenue Bridge Widening Over Santa Ana River.

Methods

Prior to the site visit, Michael Baker conducted a 4-quadrangle records search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) RareFind 5 and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants. Other sources included the U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS) Critical Habitat online mapper, U.S. Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) Web Soil Survey, Federal Emergency Management Agency (FEMA) 100-Year Flood Zones, and USFWS National Wetlands Inventory (NWI) maps online.

On September 13, 2017, between the hours of 7:45 a.m. and 9:00 a.m., Michael Baker biologists Linda Nguyen and Stephen Anderson conducted a biological resources site assessment. Weather conditions consisted of overcast skies, and a temperature ranging between approximately 65 to 70 degrees Fahrenheit. The survey was conducted by walking around the project site documenting all plant and wildlife species observed (Attachment 1) and photographing existing site conditions (Exhibit 4). The area of study included 100 feet upstream and downstream of the Orangewood Avenue bridge.

Results

The project area consists of the Santa Ana River that conveys perennial flows from north to south. To the east of the Santa Ana River, the State Route 57 (SR-57) runs north and south. East and southwest of the project boundary consists of existing residential and commercial developments. The Angel Stadium property is located directly west of the Santa Ana River.

Soils mapped by the USDA/NRCS within the project boundary consist of Hueneme fine sandy loam, drained (158); Metz loamy sand, moderately fine substratum (164), and Riverwash (191).

The Santa Ana River is sand-bottomed, regularly maintained, and was void of vegetation communities. Minimal vegetation was present along the sediment of the river bed including common knotweed (*Persicaria lapathifolia*), castor bean (*Ricinus communis*), rough cocklebur (*Xanthium strumarium*), and white sweetclover (*Melilotus albus*). The disturbed banks primarily contained sugar bush (*Rhus ovata*),

California buckwheat (*Eriogonum fasciculatum*), Hottentot fig (*Carpobrotus edulis*), Russian thistle (*Salsola tragus*), and bush sunflower (*Encelia californica*). A complete list of plants and wildlife species observed during the survey is provided in Attachment 1.

The NWI identifies the Santa Ana River as Lake. The FEMA maps indicate that the Santa Ana River is located in Zone A, areas subject to inundation by the 1-percent-annual-chance flood event, with the surrounding areas within the project site designated as Zone X, an area with reduced risk due to levee. The Santa Ana River was observed with no surface flows at the time of the visit. The ordinary high water mark (OHWM), which is used to identify the non-wetland waters of the U.S. limits subject to jurisdiction of the U.S. Army Corps of Engineers (Corps) and regional Water Quality Control Board (Regional Board) pursuant to the Federal Clean Water Act (CWA) Sections 404 and 401, respectively, varied between approximately 255 to 265 feet wide. Streambed and active banks subject to CDFW jurisdiction pursuant to the California Fish and Game Code Sections 1600 *et seq.* averaged approximately 300 feet wide to the top of banks.

No special-status plant or wildlife species were observed on-site. Based on the records search, a total of four (4) special-status plant species and eighteen (18) special-status wildlife species have been recorded within the vicinity of the project by the CNDDDB and CNPS online inventory. Most of these species have a low potential or are not expected to occur on-site due to a lack of habitat suitable to support them. There is a potential for various special-status species to occur within the project site, including, but not limited to, American peregrine falcon (*Falco peregrinus anatum*), coast horned lizard (*Phrynosoma blainvillii*), whiptails (*Aspidoscelis* spp.), Swainson's hawk (*Buteo swainsoni*), and bats (Order *Chiroptera*). Of the twenty-two (22) species, the records search includes two (2) wildlife species that are listed under the Federal Endangered Species Act and/or the California Endangered Species Act warranting protection from take. Due to the disturbed nature of the site and a lack of suitable habitat, none of the listed species known to occur within the vicinity of the project area are expected to occur on-site. Further, the project area is not located within mapped USFWS-designated Critical Habitat.

Recommendations

It is highly recommended that the delineation results be forwarded to each of the regulatory agencies for their concurrence. The concurrence/receipt would be valid up to five years and would solidify findings noted within this report.

Please contact me at (949) 472-3436 or at linda.nguyen@mbakerintl.com with any questions you may have regarding this project.

Sincerely,



Linda Nguyen
Biologist/Regulatory Analyst
Natural Resources/Regulatory Permitting

Attachment 1: Plant and Wildlife Species Observed List

Scientific Name*	Common Name
Plants	
<i>Carpobrotus edulis</i>	Hottentot fig
<i>Encelia californica</i>	bush sunflower
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Melilotus albus</i>	white sweetclover
<i>Persicaria</i> ssp.	Persicaria
<i>Rhus ovata</i>	sugarbush
<i>Ricinus communis</i>	castor bean
<i>Salsola tragus</i>	Russian thistle
<i>Xanthium strumarium</i>	Rough cocklebur
Birds	
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Columba livia</i>	rock dove
<i>Corvus brachyrhynchos</i>	American crow