

Appendix B.5



Technical Memorandum

To **Stephanie Standerfer, Vice President**
Albert. A. Webb Associates

Project No. **2055400809**

From **Scott Crawford, Vice President, Biology**
WSP USA, Inc.

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Date **14 May 2024**

Subject Sun Lakes Boulevard Results of 2020-2021 Wet and Dry Season Fairy Shrimp Focused Surveys

At the request of Albert A. Webb Associates (Webb), this memo serves as the results of 2020-2021 wet and dry season fairy shrimp focused surveys. It is the understanding of WSP USA Inc. (WSP, fka Wood) Wood that the Sun Lakes Boulevard project is in the city of Banning, Riverside County, California and includes the extension of Sun Lakes Boulevard eastward from its current termination point at Highland Home Road to the anticipated connection at Sunset Avenue. This memorandum has been updated due to a change is the outline of the proposed impacts and to update all related figures. The updated projects impacts include 19.4 acres of permanent impacts, 9.1 acres of temporary impacts. Surrounding land uses include residential development to the east and west, public facilities along the existing unpaved road, and undeveloped open space to the north and south. Vegetation communities on site consist of grassland and scrubs.

Methods

Following the first storm of the season on 8 November 2021, WSP Senior Biologist John F. Green conducted a survey for inundated pools on 9 November 2021. Surveys were conducted under the authority of USFWS 10a permit number TE054011-8, according to the USFWS protocol: Survey Guidelines for the Listed Large Branchiopods (USFWS 2017). During that survey nine inundated depressions were identified within the project area as meeting the protocol criteria for pooling sufficient to support listed fairy shrimp species. Each ponded area was systematically sampled to account for all areas around the pond and within the entire water column. Dip nets were used to skim the surface, bottom and middle of the ponds. Table 1 lists pools inundated during the 2020-2021 wet season. Surveys were conducted until the rainy season ended and the last inundated pool reached 120 days of continuous inundation on 28 April 2021.

Dry soils were collected on December 24, 2020, and June 8, 2021 by John F. Green of WSP as authorized by USFWS under permit number TE-054011-8 of Section 10(a)(1)(A) of the federal Endangered Species Act (ESA), 16 U.S.C. 1531 et seq., and its implementing regulations. The collected soils were delivered to Helm Biological Consulting for subsequent processing and

analysis. Soils were processed and analyzed by Dr. Brent Helm by on standard practices in order to collect any fairy shrimp cysts. All collected cysts were hatched in isolated environmental chambers to mimic the winter conditions of the project site. A total of three hatching attempts were performed on each soil sample. All fairy shrimp hatchlings were grown until mature enough to be identified.

Results

The common, unlisted versatile fairy shrimp was detected in one pool (9) during the wet season sampling (see Table 1). No other fairy shrimp species were detected.

Table 1. Fairy Shrimp Ponded Areas

Pool Number	Maximum Pool Surface Area (Meters ²)	UTM East	UTM North	Wet Season Fairy Shrimp Detected?	Dry Season Fairy Shrimp Detected?
3	46.99	506577.00	3753080.00	No	No
9	163.40	508144.00	3753080.00	Yes	Yes
14	36.86	508050.00	3753090.00	No	No
15	8.68	508072.00	3753080.00	No	No
16	355.91	507978.00	3753090.00	No	No
21	2.58	507438.00	3753080.00	No	No
33	32.66	506948.00	3753150.00	No	No
40	0.19	507098.00	3753130.00	No	No
41	9.74	506960.00	3753120.00	No	No
46	17.14	507449.00	3753100.00	No	No

Discussion

The wet and dry season surveys did not detect any special-status species of fairy shrimp. Therefore, based on the survey effort, special-status fairy shrimp species are considered absent from the project site and will not be impacted by project related activities.

If you have any questions regarding this update, or require additional information, please contact me at (951) 369-8060 ext. 102 or at scott.crawford@wsp.com.

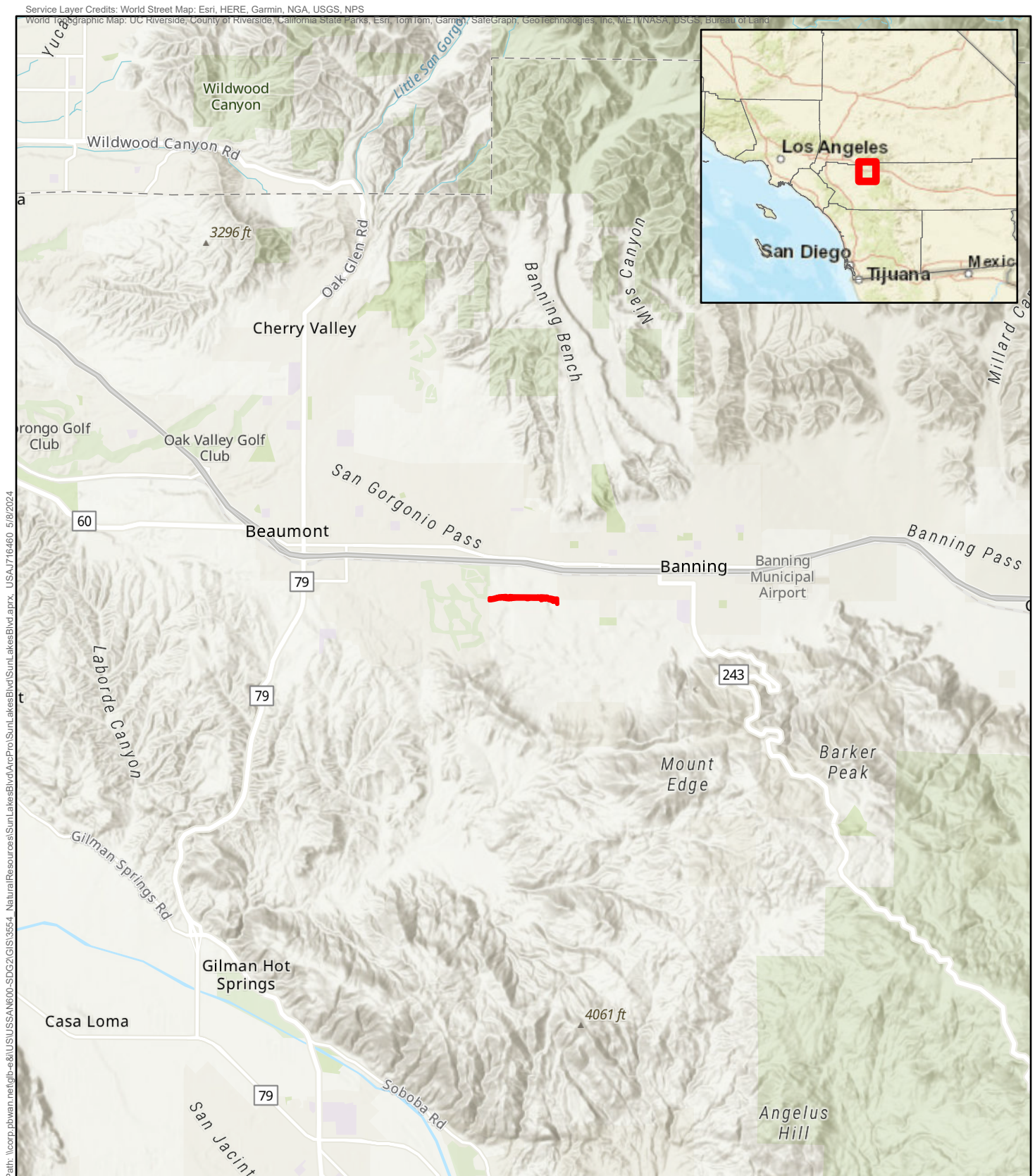
Sincerely,



Scott Crawford
Vice President, Biology
WSP USA, Inc.

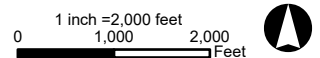
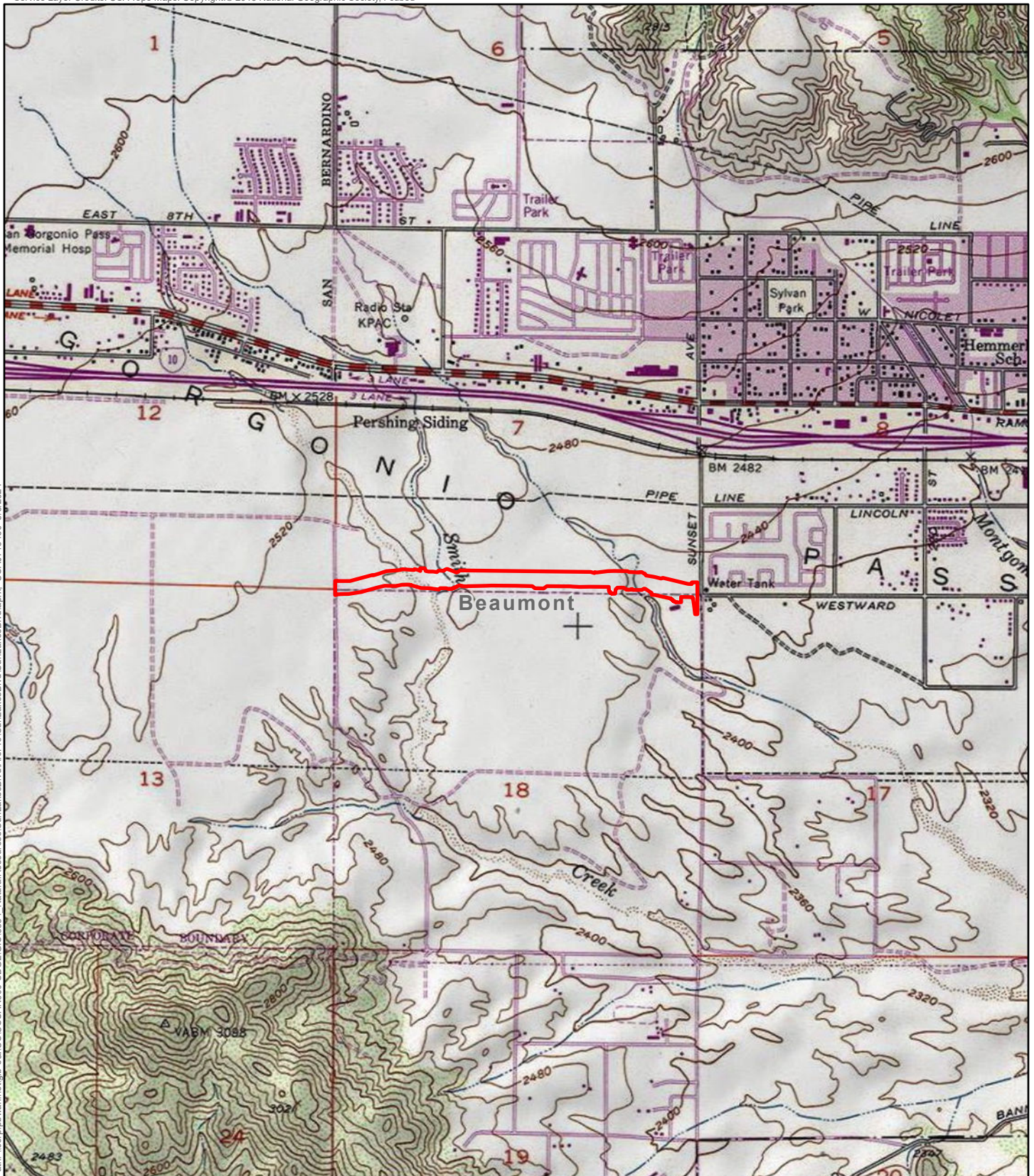
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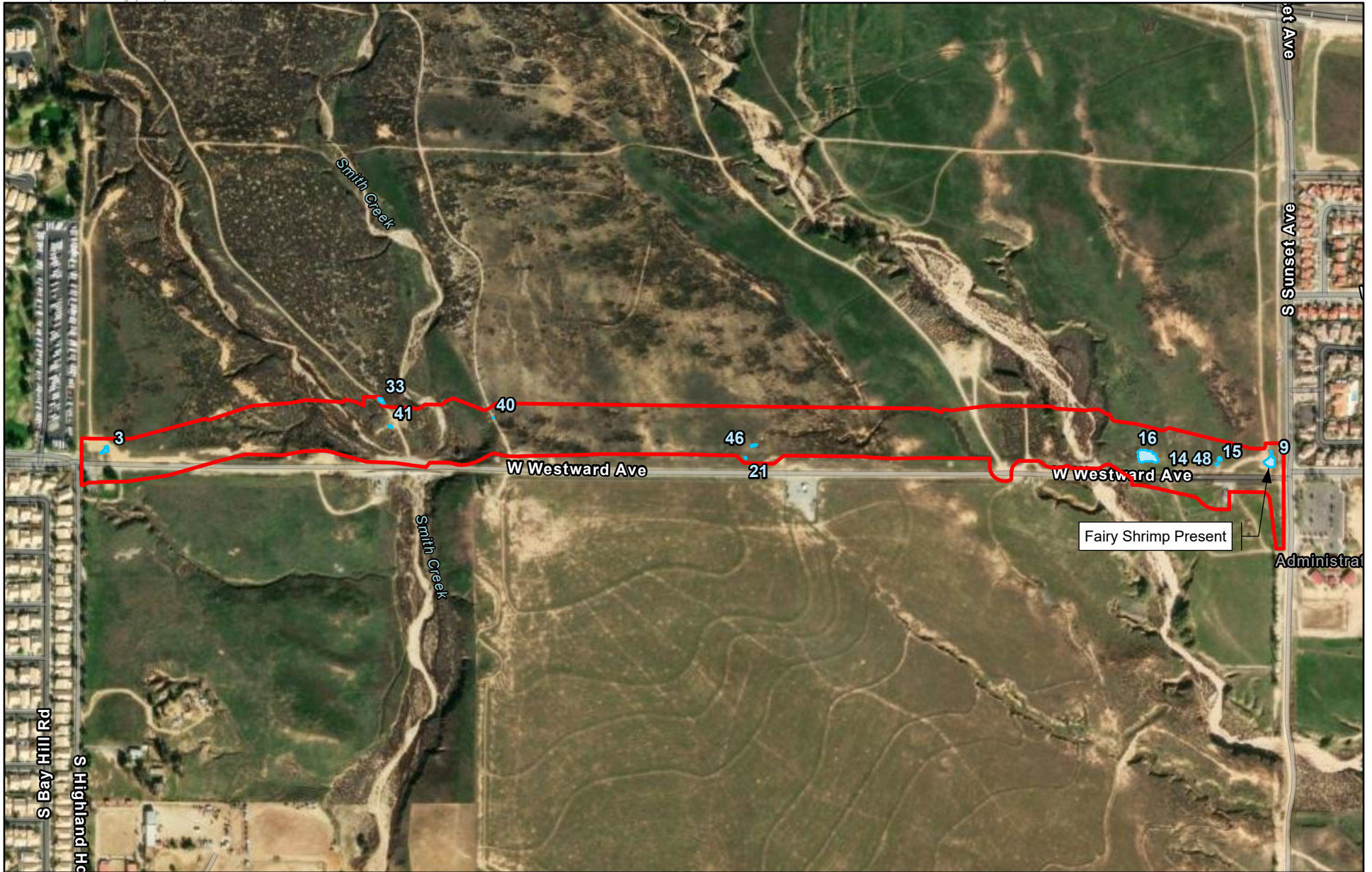
 Project Alignment

FIGURE 1
Project Vicinity and Location
2020-2021 Wet Season Fairy Shrimp Surveys
Sun Lakes Blvd. Realignment Project
Banning, CA



 Project Alignment

FIGURE 2
USGS 7.5' Topo Quad: Beaumont
2020-2021 Wet Season Fairy Shrimp Surveys
Sun Lakes Blvd. Realignment Project
Banning, CA



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-  Project Alignment
-  Fairy Shrimp Sampling Pools

1 inch = 600 feet
0 300 600 Feet



FIGURE 3

Local Vicinity
2020-2021 Wet Season Fairy Shrimp Surveys
Sun Lakes Blvd. Realignment Project
Banning, CA