Appendix B

Biological Resources Assessment



January 28, 2019

Project No: 18-06232

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Via email: jaranda@casitaswater.com

Subject: Casitas Municipal Water District Ojai Water System Improvements Project Biological

Resources Assessment

Dear Ms. Aranda:

Rincon Consultants, Inc. (Rincon) prepared this Biological Resources Assessment (BRA) to provide the Casitas Municipal Water District (CMWD) with an assessment of the potential impacts to biological resources associated with implementation of the Ojai Water System Improvements Project (project). This report documents the existing conditions of the project site and evaluates the potential for impacts to species, sensitive communities, potential jurisdictional waters (including San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek), wildlife movement near the proposed project, and locally protected resources such as native trees. The biological evaluation provided here includes the results of a background literature review and site visit conducted by Rincon on November 13, 2018, to document current site conditions.

Project Location and Description

The proposed project includes the potable water distribution system service area for the City of Ojai (Ojai) in western Ventura County. This system serves an unincorporated area east of Ojai and a small portion of the unincorporated Meiners Oaks community west of Ojai. Ojai is located approximately 15 miles inland from the City of Ventura and is bounded generally by San Antonio Creek to the east and south, State Route (SR) 33 to the west, and the Topa Topa Mountains to the north.

The Ojai Water System Improvements Project (proposed project) primarily involves the replacement of pipeline segments which are undersized and approaching the end of their service life. The general purpose of the proposed project is to improve fire flow and replace aging mains, not to increase pipeline capacity to serve additional customers. The proposed project would replace approximately eight miles of pipeline segments throughout the Ojai system service area. Additionally, the proposed project includes plans to rehabilitate two tanks, demolish three existing tanks, and construct up to one new tank; rehabilitate one booster pump station, upgrade an additional pump station, demolish and construct two new pump stations, and abandon one pump station; and rehabilitate or replace six active wells in the Ojai system. The proposed project also includes potential construction of a new well in the Ojai system. Tank, pump stations, and well rehabilitation would involve replacing existing infrastructure in kind, or with similar capacity infrastructure. Booster pump station upgrades would occur at the

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Heidelberger pump station and involve activities similar to pump rehabilitation, such as replacement of existing pumps, but also include installation of an additional pump.

The proposed project would replace approximately 42,000 linear feet (LF) of potable water pipeline within public rights-of-way in Ojai and surrounding unincorporated areas of Ventura County (Figures 1, 2, 3, and 4) The majority of the pipeline replacement would be in Ojai, with approximately 0.5 mile of pipeline repairs and replacement extending into unincorporated Ventura County. The new pipeline would only replace and rehabilitate existing infrastructure in kind to ensure effective use, and therefore is proposed within previously developed infrastructure.

Pipeline replacement will typically be constructed using open-cut trenching. In the event trenchless methods are required, construction may include pipe bursting, jack and bore, and horizontal directional drilling if preliminary design shows utility conflicts, significant traffic control requirements, or other issues with the potential to interfere with trenching activities. Pipelines would typically be eight to twelve inches in diameter and would require a three-foot wide trench in which to work and place the pipe. Trenches would generally be no more than five feet deep.

In addition to pipeline improvements, the proposed project would also involve demolition, replacement, or improvements to five existing water storage tanks, six existing wells, and four existing pump stations. The project would also involve abandonment of an additional pump station, and may involve construction of an additional well. The project footprint includes the pipeline segment, wells, pump stations, and tanks that are proposed for construction, rehabilitation, or demolition. This analysis assumes that the sites for the new tank and new booster pump station would be similar to the sites for other existing tanks and pump stations and would not contain sensitive biological resources. Depending on the characteristics of the chosen sites, additional CEQA documentation may be required.

Tank construction would require over-excavation to create a suitable pad for the tank and depends on the underlying soil conditions. No more than five feet of over-excavation is anticipated, but this would be confirmed with geotechnical investigation during the project design phase. The diameter of the excavation depends on the size of the tank. Tank piping would be installed underground, with trench depth expected to be less than five feet. Tank construction would require an excavator, wheeled loader, dump truck, crane, water truck, and vibrating compactor. Pipe, fittings and appurtenances, sand for tank bedding, steel tank plates, electrical equipment, concrete for the tank foundation and drainage improvements, and asphalt paving materials would be required for tank construction. Materials would be delivered in phases as needed for construction. An estimated ten material deliveries would occur per day during construction.

The duration of construction would depend on the size of the tank and the site conditions. Assuming an undeveloped parcel, site mobilization and clearing would take approximately four weeks. Excavation and grading would last approximately eight weeks. Underground pipeline construction would take approximately eight weeks. Tank erection, including coating, would require approximately eight weeks. Electrical and instrumentation would last approximately four weeks. Site improvements, such as paving and drainage, would take approximately four weeks, and final testing and acceptance would take an additional approximately four weeks. The total time required for tank construction and testing would be approximately 40 weeks.

Tank rehabilitation may include interior and exterior recoating of the tank, replacing ladders and fall protection equipment, installing cathodic protection, and installing seismic anchors. The tank will have to be empty to facilitate the work. Providing water to customers affected by the temporary loss of tank storage during rehabilitation includes installation of temporary storage tanks and piping. Construction



equipment would typically include work trucks, sand blasting equipment if the existing coating is to be removed, spray equipment for coating application, and pile driving equipment for seismic anchors. Depending on the size of the tank, rehabilitation may take two to three months per tank. Tank rehabilitation usually occurs during the winter when water demands are low.

Demolition of bolted steel tanks includes removal of the roof, then the bolts holding each wall panel in place, followed by removal of the panels from the top down. Scaffolding would be used to support workers and a crane would be used to remove each panel. The panels may be cut into smaller sections to facilitate removal from the site. Aboveground piping would be removed. The concrete foundation, if removed, would be broken up using a jackhammer. Below-grade piping would severed and be abandoned in place. Depending on the size of the tank, demolition would occur over approximately one to two months.

Demolition of a pump station includes removal of pumps, motors, and electrical and other above-grade equipment. Above-grade piping would be removed to approximately three feet below grade and remaining below-grade piping would be abandoned in place. The site would then be graded to a uniform grade. Typical construction equipment would include: a crane to remove pumps, motors, and large electrical equipment, such as a backhoe to excavate pipe, a grader to restore the site, and typical work trucks for construction workers. Pump station demolition would take one to two months.

A new pump station includes site grading, underground and aboveground piping, concrete pads for pumps, piping, and electrical equipment, electrical service from Southern California Edison, installation of pumps, motors and electrical equipment, minor site improvements such as fencing and awnings over equipment, and start-up and testing. Typical construction equipment includes an excavator, grader, crane, and standard work trucks. Depending on the size, pump station construction may take two to three months per station.

Typical pump station rehabilitation includes replacement of pumps nearing the end of their useful life or which have lost efficiency, replacing electrical equipment, upgrading lighting fixtures, recoating aboveground piping, seismic anchoring, and minor site improvements such as fencing. Construction equipment includes work trucks and a crane to install pumps and/or electrical cabinets. Overall pump station rehabilitation would take approximately one to two months per site.

Methodology

Rincon conducted an analysis of the proposed project site to determine if any sensitive biological resources are present that could potentially be impacted by the proposed project. The analysis consisted of a review of relevant background literature, a query of resource agency databases, and a biological reconnaissance survey. The methods used in the literature review and field surveys are provided below.

Literature Review

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) system (USFWS 2018a) and Critical Habitat Portal (USFWS 2018b) as well as the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2018) were queried to establish a list of special-status species potentially occurring on the project site. The online Inventory of Rare Endangered Vascular Plants of California, California Native Plant Society (CNPS 2018) was reviewed.



The results of these queries were used to determine whether any special-status-species, habitats, or jurisdictional waters are known to occur on or adjacent to the project site. Observations are reported within a five-mile radius surrounding the project. The USFWS National Wetlands Inventory (NWI) Wetlands Mapper (USFWS 2018c) was utilized to determine wetland resources in the project area, and the Natural Resources Conservation Service Web Soil Survey (United States Department of Agriculture [USDA], Natural Resources Conservation Service [NRCS], 2018) was queried to determine soil map units in the project area.

Field Reconnaissance Survey

A biological reconnaissance survey was conducted by Rincon biologists, Lindsay Griffin and Danielle Yaconelli, on November 13, 2018, between the hours of 0900-1200. The Biological Study Area (BSA) included the pipeline segments, wells, pump stations, and tanks associated with the project and a 50-foot buffer on both sides of the project footprint (Figures 5, 6, 7, and 8). The survey focused on special-status plant and wildlife species, including an assessment of the potential for special-status species and/or their habitat to occur. During the survey, Ms. Griffin and Ms. Yaconelli noted general site characteristics, documented vegetation, and took representative photographs of the project site.

Existing Conditions

Prior to the establishment of Ojai, the land was dominated by oak woodland habitat. Presently, land uses in and around the BSA are predominantly residential with some commercial, mixed use, and public facilities zoning. The project footprint occurs primarily in roadways and public rights-of-way.

For the purposes of this analysis, the project footprint and associated BSA were divided into four units. Unit A includes the eastern-most edge of the project footprint between San Antonio Creek west to Fox Canyon Barranca (Figure 5). Unit B refers to the middle-north section of the project footprint, generally west of Fox Canyon Barranca and north of Aliso Street (Figure 6). Unit C refers to the middle-south section of the project footprint, west of Stewart Canyon Creek and Fox Canyon Barranca, north of San Antonio Creek, and south of East Ojai Avenue (Figure 7). Unit D refers to the section of the project footprint that is north of Cuyama Road, east of SR 33 (Figure 8).

Unit A

The BSA within Unit A includes developed residential and agricultural land, with the majority of the project footprint occurring along the developed public right-of-way on East Ojai Avenue and Grand Avenue. The proposed project components including the wells, tank, and pump station sites are located east and west of San Antonio Creek and occur within existing CMWD maintained facilities that are fenced-off from the general public. The project components occur on gravel or bare dirt surfaces within the existing developed facility. Several tall eucalyptus (*Eucalyptus* sp.) and coast live oak (*Quercus agrifolia*) trees surround the existing tank structures and both sides of the fence line of the facility. It appears that all herbaceous vegetation within and immediately surrounding the facility is mowed annually for fire clearance.

San Antonio Creek is an ephemeral creek that channels mostly storm flows and nuisance run-off from northeast to southwest through Unit A under Grand Avenue Bridge. The existing pipeline runs underground along the east and west side of Grand Avenue and daylights on Grand Avenue Bridge. The pipeline is suspended below the Grand Avenue Bridge above San Antonio Creek. Riverine habitat was



observed at San Antonio Creek between the top of bank. The remainder of the project footprint within Unit A occurs on the public right-of-way of paved streets in residential developed areas.

Unit B

The BSA within Unit B includes mostly residential development within developed oak woodland. A portion of the pipeline footprint, tank, and two pump stations occur within disturbed oak woodland habitat south of Fairview Road. The differences between developed oak woodland and disturbed oak woodland are discussed in the 'Vegetation' section below. The pipeline runs north underground along the shoulder of El Camino Road within the residential community. The pipeline continues north along the paved public right-of-way of El Camino Road until the road dead ends into a stand of disturbed oak woodland. The pipeline continues northwest underground for approximately 1,000 linear feet through disturbed oak woodland habitat. The pipeline alignment makes a sharp turn at Del Norte Road and proceeds north along paved public right-of-way within developed oak woodland. The portion of the pipe that occurs below ground within disturbed oak woodland habitat is within a private community, and not accessible via a paved road.

The wells, pump stations, and tank sites within Unit B are fenced-off sites that occur on developed land within residential communities on CMWD property. Wire fencing surrounds most of the sites, and tanks, pumps, and wells are situated on gravel or concrete pads. It appears that all herbaceous vegetation within and immediately surrounding the facility is mowed annually for fire clearance. Emergent coast live oak trees and other non-native ornamental trees line the paved roads within the adjacent residential development.

Fox Canyon Barranca, an ephemeral flood control channel, is located on the eastern limit of Unit B and channels storm water and nuisance run-off from the northeast to the southwest. This Barranca is located completely underground and outside of the BSA within this Unit.

Stewart Canyon Creek, an ephemeral creek, channels water from north to south through the middle of Unit B. Most of the creek occurs outside of the BSA. The creek becomes subsurface on the east side of the project footprint and continues south under Aliso Street. The proposed pipeline footprint runs underground along the public right-of-way along the west side of paved roadway. Therefore, the proposed pipeline improvements will not impact Stewart Canyon Creek.

Unit C

The BSA within Unit C includes mostly residential development; with portions of the project footprint occurring in a developed oak woodland. Fox Canyon Barranca channels storm water and nuisance runoff from the northeastern portion of the Unit to the southwest to a confluence with Stewart Canyon Creek in the middle of the Unit. Within Unit C, Fox Canyon Barranca channels water from Unit B, under East Ojai Avenue, and the barranca daylights on the southern side of East Ojai Avenue. The barranca channels water above ground as it continues in the southwesterly direction to the confluence with Stewart Canyon Creek.

Stewart Canyon Creek traverses the middle of the Unit from the north to the south and converges with Fox Canyon Barranca. The creek continues south and terminates at a confluence with San Antonio Creek.

With the exception of the portion of Fox Canyon Barranca that flows underground under East Ojai Avenue, both waterways occur outside of the BSA and project footprint.

Unit D



The BSA within Unit D includes mostly residential development. The portion of the project footprint that occurs within Unit D is located along an approximate 400 foot stretch of public right-of-way north of Cuyama Road. No water features are located within this Unit.

Topography and Soils

The BSA occurs between 600 to 1,500 feet above mean sea level (USGS Topographic Quadrangle Maps, Google Earth 2018). The USDA, Natural Resources Conservation Service (NRCS) Web Soil Survey delineates thirteen soil map units within the BSA. According to the NRCS Web Soil Survey, the BSA is dominated by sandy loam soil types (Figure 9). Sandy loam is generally characterized as 'excessively drained' (USDA 2017). The BSA specifically contains Anacapa gravelly sandy loam ([AnC]; 2 to 9 percent slopes), azule loam ([AuB]; 0 to 5 percent slopes), Cortina stony sandy loam ([CrC]; 2 to 9 percent slopes), Garretson gravelly loam ([GbC]; 2 to 9 percent slopes), Kimball sandy loam ([KmC2]; 2 to 9 percent slopes), Lodo rocky loam ([LkF]; 30 to 50 percent slopes), Ojai stony fine sand loam ([OsE2]; 15 to 30 percent slopes, eroded), Ojai stony fine sand loam ([OsD2]; 2 to 15 percent slopes, eroded), Ojai very fine sandy loam ([OhC2]; 2 to 9 percent slopes, eroded), Riverwash (RW), Salinas clay loam ([SaA]; 0 to 2 percent slopes), Sespe clay loam ([SoF]; 30 to 50 percent slopes), and Sorrento clay loam ([SzD]; 9 to 15 percent slopes).

Three of these soil map units including, Anacapa gravelly sandy loam, Cortina stony sandy loam, and Riverwash are designated as hydric soils in the Ventura Area (USDA, NRCS 2018).

Vegetation

Historically, Ojai was developed primarily within oak woodland habitat. Presently, the BSA is dominated by residential development situated around remnant oak trees. The project footprint is primarily located within paved, developed or disturbed areas that are devoid of vegetation (i.e., public rights-of-way). Numerous ornamental species are present throughout the BSA, reflecting Ojai's current and historic use as residential, commercial, mixed use, and public facilities zoning. Examples of ornamental species observed include pepper tree (*Schinus molle*), Russian olive (*Elaeagnus angustofolia*), agave (*Agave* sp.), Japanese maple (*Acer palmatum*), oleander (*Nerium oleander*), and French lavender (*Lavandula stoechas*). Emergent coast live oak, valley oak (*Quercus lobata*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans californica*) were observed throughout the BSA. The emergent species were observed to be overhanging the project footprint. The majority of the understory is mowed annually for fuel clearance.

Within a small location of the BSA adjacent to San Antonio Creek (Unit A) coast live oak trees are codominant in the tree layer with California sycamore, willow (Salix sp.), and eucalyptus present. The shrub layer is dominated by laurel sumac (Malosma laurina). The herbaceous layer adjacent to the creek is dominated by non-native, invasive species such as smilo grass (Stipa miliacea), red brome (Bromus madritensis), and wild oats (Avena fatua). Within this unit, no vegetation was observed within the project footprint. Riverine vegetation was observed within San Antonio Creek that includes willow and non-natives such as castor bean (Ricinus communis) and tree tobacco (Nicotiana glauca).

An approximate 0.25-mile stretch within the western section of Unit B contains disturbed oak woodland. As with the developed oak woodland, developed parcels surround the project footprint. The project footprint in this location does not occur along developed public rights-of-way but is located within private properties that contain vegetation including coast live oak and valley oaks. The project footprint within the disturbed oak woodland is proposed to replace previously developed infrastructure in kind.



The majority of the project footprint occurs within previously developed areas or disturbed bare ground. Remnant coast live oak, valley oak, and California sycamore trees are outside of the project footprint, but the canopy driplines of these species may overhang the project footprint in some locations.

All vegetation observed during the field reconnaissance survey is listed in Attachment B.

Sensitive Plant Communities

The CNDDB lists three sensitive plant communities in the nine quadrangles that surround the BSA (Attachment C). One of these communities, southern California steelhead stream, is present in the BSA (i.e. San Antonio Creek in Unit A). The other two communities, southern coast live oak riparian forest and southern sycamore alder riparian woodland, were not observed within the BSA.

General Wildlife

The BSA provides suitable habitat for wildlife species that commonly occur in semi-rural, residential areas. The wildlife species detected on site are common, widely distributed, and adapted to living in proximity to human development. Common avian species detected on or adjacent to the site include Anna's hummingbird (*Calypte anna*), California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhyncos*), acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), and house finch (*Haemorhous mexicanus*). Other wildlife species observed include western fence lizard (*Sceloporus occidentalis*), western brush rabbit (*Sylvilagus bachmani*), and California ground squirrel (*Otospermophius beecheyi*).

Special-Status Species

Local, state, and federal agencies regulate special-status species and require an assessment of their presence, or potential presence, to be conducted on site, prior to the approval of any proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites near the survey area, and previous reports for the project site. The potential for each special-status species to occur in the survey area was evaluated according to the following criteria:

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Low Potential. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.



High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Present. Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

Attachment C provides a discussion of the special-status species, their habitat requirements, and species' occurrence potential in the BSA. A total of 54 special-status plant species have been recorded from the project region. Fourteen special-status wildlife species were listed in the CNDDB and are known from the project region.

Special-Status Plants

A total of 54 special-status plant species have been recorded from the project region. No special-status plant species were observed within the BSA. Areas of oak woodland and chaparral observed within the BSA could provide suitable habitat for some special-status species [e.g. Douglas' fiddleneck (*Amsinckia douglasiana*), Plummer's baccharis (*Baccharis plummerae* ssp. *Plummerae*), Brewer's calandrinia (*Calandrinia breweri*), Catalina mariposa-lily (*Calochortus catalinae*), and others [see Attachment C, Table 2 for full list]) require habitat observed in the BSA (i.e. oak woodland). While elements of oak woodland were observed within the BSA, the habitat does not occur within the project footprint. No special-status plant species were found to have potential to occur within the project footprint due to lack of suitable habitat.

Special-Status Wildlife

Special-status wildlife species typically have specific habitat requirements that include vegetation communities, elevations, topography, and availability of primary constituent elements (i.e., space for individual and population growth, breeding, foraging, and shelter).

Fourteen special-status wildlife species were listed in the CNDDB and are known from the project region. No special-status wildlife species were observed within the BSA during the field reconnaissance survey. Four special-status wildlife species were determined to have a low potential to occur in the BSA:

- Steelhead Southern California DPS (Oncorhynchus mykiss irideus) Federally endangered; State
 Species of Special Concern
- San Bernardino ringneck snake (Diadophis punctatus modestus) State Special Animal
- Coast patch-nosed snake (Salvadora hexalepis virgultea) State Species of Special Concern
- Hoary bat (Lasiurus cinereus) State Special Animal

Below is a discussion of each special-status animal species and their potential to occur within the BSA.

Federal and State Listed and Fully Protected Species

<u>Steelhead – Southern California Distinct Population Segment (DPS) (Oncorhynchus mykiss irideus) – Federally endangered; State Species of Special Concern:</u> The Ventura River watershed is listed as critical habitat and a high priority watershed for the recovery of steelhead trout (*Oncorhynchus mykiss, [O. Mykiss]*). In 2012, seven *O. mykiss* from 45 to 51 centimeters (cm) in length were observed in 20 pools in the lower Ventura River between Foster Park and San Antonio Creek (Normandeau 2012). Below Matilija



Dam, southern California steelhead have access to the entire 16 miles of mainstem Ventura River, except during the summer and fall months of most years when six miles of channel below Robles Diversion Dam goes dry. At the bottom of the dry reach immediately upstream of San Antonio Creek, upwelling groundwater produces a consistent source of cooler water that provides over summering rearing habitat in the mainstem Ventura River for fry, juvenile and adult (resident) individuals. The southern California steelhead has potential to occur in the BSA. Suitable habitat occurs within San Antonio Creek for the species (Unit A and Unit C).

Special-Status Terrestrial Species and Protected Nesting Birds

San Bernardino ringneck snake (*Diadophis punctatus modestus*) – State Special Animal. San Bernardino ringneck snake has a low potential to occur in the BSA. The species is most common in open, relatively rocky areas and occurs often in moist microhabitats near intermittent streams. Elements of open, rocky areas was observed within the BSA adjacent to Heidelberger Tank within Unit B. Elements of moist microhabitats near intermittent streams were not observed within the BSA because all water features were dry at the time of the survey. Moist areas near intermittent streams could occur within the BSA adjacent to San Antonio Creek in Unit A and adjacent to the daylighted portions of Fox Canyon Barranca and Stewart Canyon Creek within Unit C. The species was observed in 2015 along Stewart Canyon Creek on the east side of South Ventura Street in oak and sycamore duff within a residential area (CNDDB 2018).

<u>Coast patch-nosed snake</u> (<u>Salvadora hexalepis virgultea</u>) - <u>State Species of Special Concern</u>. The coast patch-nosed snake has a low potential to occur in the BSA. The species is most common in brushy or shrubby vegetation and requires small mammal burrows for refuge and overwintering. Elements of brushy or shrubby vegetation were observed within the BSA adjacent to San Antonio Creek in Unit A, within the BSA in disturbed oak woodland habitat located in Unit B, and adjacent to Fox Canyon Barranca and Stewart Canyon Creek within Unit C. The species has been observed in 2016 at the north end of Matilija Lake on the side of the Forest Route Road, approximately 0.25 mile southwest of SR-33 (CNDDB 2018). This sighting was approximately 3.7 miles northwest of the BSA.

Hoary bat (Lasiurus cinereus) – State Special Animal. The hoary bat has a low potential to occur in the BSA. The species is most common in habitats with access to trees for cover and open areas or habitat edges for feeding. The hoary bat roosts in dense foliage of medium to large trees, feeds primarily on moths, and requires water. Medium to large trees and open areas or habitat edges occur within the BSA adjacent to San Antonio Creek in Unit A, within the developed and disturbed woodland in the BSA in Unit B, and adjacent to the BSA near Fox Canyon Barranca and Stewart Canyon Creek in Unit C.

<u>California Fish and Game Code and Migratory Bird Treaty Act</u>. In addition to the special-status wildlife species discussed above, several bird species protected by California Fish and Game Code (CFGC) 3503 and the Migratory Bird Treaty Act (MBTA) may also nest in trees and shrubs within the BSA. Native vegetation and trees are present in and surround the project footprint, which could provide suitable habitat for nesting birds. Several species of birds common to the area, that typically nest in the habitats found within the BSA, such as Anna's hummingbird, California scrub-jay, American crow, acorn woodpecker, California quail, and house finch were detected during the reconnaissance survey. Although no raptor nests were detected during focused surveys, any of the larger trees within the BSA could be utilized by raptors for nesting.



Jurisdictional Waters and Wetlands

The BSA is located in the Ventura River watershed. As stated above, San Antonio Creek flows from northeast to southwest through Unit A and flows under Grand Avenue Bridge, within the BSA. The creek continues in the southwesterly direction, outside of the BSA. The creek was dry during the survey conducted on November 13, 2018, and naturally-lined with silt, sand, rocks, and boulders within the streambed. As mentioned previously, San Antonio Creek is an ephemeral creek that ultimately terminates at its confluence with Ventura River. San Antonio Creek is subject to the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. San Antonio Creek is a tributary to the Ventura River. The Ventura River is a relatively permanent water (RPW) because it contains flows for at least 3 months out of most years and connects to the Pacific Ocean, a traditional navigable water (TNW). San Antonio Creek is located outside of the project footprint because the pipeline will be suspended above the creek under the Grand Avenue Bridge. The project footprint is located outside the top of bank. No construction equipment is proposed within San Antonio Creek.

Fox Canyon Barranca is a flood control channel that transverses through Ojai from north to south. The barranca is subsurface west of the BSA in Unit B and continues underground until the barranca daylights approximately 30 feet south of the project footprint at Grand Avenue (Unit A, Figure 5). The exposed barranca is a concrete-lined flood control channel that is devoid of vegetation. The barranca continues south from Grand Avenue until it transitions underground at Ojai Avenue, approximately 60 feet north of the project footprint. The barranca daylights approximately 30 feet south of Ojai Avenue. From Ojai Avenue to approximately 0.25 mile south, the barranca is concrete-lined until it becomes a naturally lined creek-bed surrounded by native riparian vegetation. The barranca continues southwest until it converges with Stewart Canyon Creek, located outside of the BSA (Unit C, Figure 7). Stewart Canyon Creek terminates at its confluence with San Antonio Creek. Fox Canyon Barranca is jurisdictional because it has a direct hydrologic surface connection to Stewart Canyon Creek, which has a direct hydrologic surface connection to San Antonio Creek. As stated before, San Antonio Creek is a tributary to the Ventura River, a RPW. Fox Canyon Barranca is located within the BSA, and outside of the project footprint.

Stewart Canyon Creek transverses Ojai from north to south, from the mountains to San Antonio Creek (Unit A, Figure 5). The creek is mostly subsurface until it daylights approximately 250 feet south of East Ojai Avenue when it becomes a concrete-lined channel devoid of vegetation. From there, it flows in a southerly direction until it becomes a naturally-lined channel, approximately 900 feet south of Ojai Avenue. The segment of naturalized creek is surrounded by native vegetation, including coast live oak and California sycamore trees. Stewart Canyon Creek is jurisdictional because it converges with San Antonio Creek approximately 0.5 mile south of East Ojai Avenue. Stewart Canyon Creek has a direct hydrologic surface connection to San Antonio Creek, a tributary to the Ventura River, a RPW. Stewart Canyon Creek is located within the BSA, and outside of the project footprint.

San Antonio Creek, Stewart Canyon Creek, and Fox Canyon Barranca are subject to the jurisdiction of the USACE, RWQCB, and CDFW because each feature has a hydrologic surface connection to the Ventura River, a RPW.

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations.



Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats in the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be located in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large- and small-scale. Regionally, the northern portion of the BSA occurs within an Essential Connectivity Area (ECA) as mapped in the report, *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (2010). ECAs represent principle connections between Natural Landscape Blocks. ECAs are regions in which land conservation and management actions should be prioritized to maintain and enhance ecological connectivity. ECAs are mapped based on coarse ecological condition indicators, rather than the needs of particular species and thus serve the majority of species in each region. Small scale habitat corridors are also present within the BSA and include drainages and other topographic features that facilitate movement such as San Antonio Creek, Stewart Canyon Creek, and Fox Canyon Barranca. The Ventura River also provides a means to facilitate regional connectivity for a number of species including, but not limited to the steelhead – Southern California DPS, California red-legged frogs and southern western pond turtle.

San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek intersect the BSA and could act as movement corridors for wildlife species. Fully developed properties are present adjacent to the BSA for Fox Canyon Barranca and Stewart Canyon Creek and common wildlife adapted to urban and suburban areas (e.g., raccoon [*Procyon lotor*] and striped skunk [*Mephitis mephitis*]) could use the concrete-lined ephemeral drainages for local movement. Wildlife species could also use the riverine habitat of San Antonio Creek for local movement. The proposed project would not modify any of these features, nor substantially increase the level of disturbance beyond that which is present under ambient conditions.

The northern-most tank (Heidelberger Tank) and the two tanks north-west of Fairview Road (Running Ridge Tanks) (Unit B, Figure 6) are located within the ECA at the boundary of the corridor and developed portions of Ojai. The ECA lies north of the city of Ojai. The ECA surrounds the entire northern section of Ojai and is approximately ten miles across to the north of the city. The tanks are located between developed city and the ECA; the developed tank is approximately 50 feet in diameter. The tanks are located on the boundary of the ECA and do not limit wildlife movement between wildlife habitat because there is approximately 10 miles of ECA around the tank for wildlife movement. The proposed project would not increase the level of disturbance beyond that which is present under ambient conditions at this location.

Local Policies and Ordinances

Ventura County



Protected trees are defined by the County Municipal Code (County 2018) as Historical, Heritage, Oak, Sycamore (collectively referred to as "Protected Trees"), denoted by their species or diameter at breast height (DBH; also known as "caliper") as follows:

- "Heritage tree" is considered any species of tree with a single trunk of ninety (90) or more inches in girth or with multiple trunks, two of which collectively measure seventy-two (72) inches in girth or more. In addition, species with naturally thin trunks when full grown (such as Washington Palms), species with naturally large trunks at an early age (such as some date palms), or trees with unnaturally enlarged trunks due to injury or disease (e.g., burls and galls) must be at least sixty feet tall or 75 years old to be considered as a heritage tree.
- "Historical tree" is any tree or group of trees identified by the County or a city as a landmark or identified on the Federal or California Historic Resources Inventory to be of historical or cultural significance, or identified as contributing to a site or structure of historical or cultural significance.
- "Oak tree" shall mean any species of tree of the genus *Quercus* with minimum girth of 9.5 inches for a single-trunk tree and 6.25 inches for a multiple-trunk tree.
- "Sycamore tree" shall mean the species *Platanus racemose* with a minimum of 9.5-inch girth trunk.

Per the County Code, no person shall alter, fell, or remove a Protected Tree except in accordance with the provisions of Section 8107-25 et seq. If tree alteration, felling, or removal is part of a project requiring a discretionary permit, then the tree permit application and approval process should accompany the parent project discretionary permit. (Sec. 8107-25.3). This ordinance, which applies in the unincorporated areas of the County outside the coastal zone, regulates—through a tree permit program—the removal, trimming of branches or roots, or grading or excavating within the root zone of a "protected tree." Individual trees are the focus of the ordinance, while oak woodlands are additionally protected as "locally important communities." The ordinance allows removal of five protected trees (only three of which can be oaks or sycamores; none of which can be heritage or historical trees) through a ministerial permit process. Removal of more/other than this may trigger a discretionary tree permit.

Coast live oak trees, valley oak trees, sycamore trees, and potential heritage trees were observed within the BSA in Units A, B, C, and D.

Ventura County General Plan

The Ventura County General Plan contains policies which also strongly protect wetland habitats.

Biological Resources Policy 1.5.2-3 states:

Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7½ minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.

Biological Resources Policy 1.5.2-4 states:

 Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats to mitigate the potential impacts on said habitats. Buffer areas may be increased or decreased upon



evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100-foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area. The requirement of a buffer (setback) shall not preclude the use of replacement as a mitigation when there is no other feasible alternative to allowing a permitted use, and if the replacement results in no net loss of wetland habitat. Such replacement shall be "in kind" (i.e. same type and acreage) and provide wetland habitat of comparable biological value. On-site replacement shall be preferred wherever possible. The replacement plan shall be developed in consultation with California Department of Fish and Game.

San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek (jurisdictional water features described above) were located within the BSA in Units A, B, and C.

Wildlife Migration Regulations

The Ventura County General Plan (County 2016) specifically includes wildlife migration corridors as an element of the region's significant biological resources. In addition, protecting habitat connectivity is critical to the success of special-status species and other biological resource protections. Potential project impacts to wildlife migration are analyzed by biologists on a case-by-case basis. The issue involves both a macro-scale analysis—where routes used by large carnivores connecting very large core habitat areas may be impacted—as well as a micro-scale analysis—where a road or stream crossing may impact localized movement by many different animals.

The northern-most tank (Heidelberger Tank) and the two tanks north-west of Fairview Road (Running Ridge Tanks) (Unit B, Figure 6) are located within the ECA at the boundary of the corridor and developed portions of Ojai.

The Ventura County General Plan also identifies locally important species as significant biological resources to be protected from incompatible land uses and development.

City of Ojai

The Ojai Municipal Code (Ojai 2018) contains policies which strongly protect sensitive habitats.

Ojai Municipal Code Sec. 4-11.01 states:

- Oak, sycamore, heritage and other mature trees as significant historical, aesthetic and ecological resources and to create favorable conditions for the preservation and propagation of this unique irreplaceable plant heritage for the benefit of current and future residents of the City. It is the intent of this chapter to recognize the special value of tree species that are native to the City because they are especially adapted to the local environment, provide important wildlife habitat and contribute to the goals of a sustainable community. An equally important goal of this chapter is to maintain and enhance the public health, safety and welfare through the mitigation of soil erosion and air pollution. In addition, this chapter is designed to preserve and enhance property values by enhancing the distinctive and unique aesthetic character of many areas of the City in which oak, sycamore, heritage and other mature trees live.
- Except as otherwise set forth herein, a permit shall be required when any person wishes to:
 - a) Remove, cut down, destroy or relocate an oak or a sycamore, heritage or mature tree;



- b) Trench, grade, fill, compact or place construction material of any type in the drip line of an oak or a sycamore, mature or heritage tree;
- c) Prune live limbs over four (4") inches in diameter of an oak or a sycamore or heritage tree;
- d) Remove more than twenty-five (25%) percent of the canopy of an oak, sycamore, heritage or mature tree.

Ojai Municipal Code Sec. 4-11.06 states:

- Applications for a permit to remove, destroy or relocate an oak or a sycamore, mature or heritage tree shall be accompanied by a report to be prepared by an arborist certified by the International Society of Arboriculture ("ISA") at the applicant's expense.
- Applications for a permit involving grading, trenching, filling or placing materials in the drip line of a tree shall be accompanied by a report prepared by an ISA-certified arborist pursuant to Section 4-11.04 or deposit funds so that the City can arrange for an arborist's report at the applicant's expense.

Ojai Municipal Code Sec. 7-1.503 states:

The trimming of trees shall be permitted only when and in the manner authorized by a permit so that the shapeliness of the tree may be preserved. The removal of non-hazardous live trees shall require Council approval; dead or hazardous trees may be removed at the discretion of the Director. The removal of trees will be approved, and a permit issued, only when a necessity for removal exists. When a tree is removed, the entire stump shall be taken out at least one foot below the existing or proposed subgrade, unless otherwise specified in the permit, and the hole back-filled and compacted. All debris from trimming or removal shall be removed from the site, and the right-of-way shall be restored to its former condition. A suitable replacement tree may be required.

Ojai Municipal Code Sec. 9-11.203 states:

Applications for grading permits shall include a tree and floral assessment containing the following information: A description of the trees and vegetation to be affected by grading; a description of the efforts to be undertaken to retain trees and vegetation within the proposed grading area; and a description of the methods of disposal of selected trees and vegetation.

As stated above, coast live oak trees, valley oak trees, sycamore trees, and potential heritage trees were observed within the BSA in Units A, B, C, and D.

Ojai Municipal Code Sec. 10-2.1004 states:

- All structures (e.g., buildings, decks, fences) shall be set back a minimum of twenty-five (25') feet from a blue line creek's top of bank. Additional setbacks may be necessary to protect sensitive environmental resources (e.g., vernal pools). Setbacks adjacent to creekside paths or open spaces shall be measured from the outside boundary of the path or open space.
- Structures, parking access, parking spaces, paved areas, swimming pools, or utilities (e.g., overhead or underground) shall not be constructed within a creek or creekside setback area.
- Grading or filling, planting of exotic/non-native or non-riparian plant species, or removal of native vegetation shall not occur within a creek or creekside setback area.
- Creek stabilization measures may be required if development or land use changes increase impervious surfaces or sedimentation that result in stream channel erosion.



As stated above, San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek (jurisdictional water features described above) were located within the BSA in Units A, B, and C.

Conservation Plans

The project parcel does not occur within any Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan areas. The proposed project would not conflict with the provisions of any such plans.

Impact Analysis and Recommended Mitigation Measures

This section discusses the potential impacts to biological resources that may occur from implementation of the proposed project and recommends mitigation measures to reduce those impacts.

Special-Status Species

No special-status plant or wildlife species were observed or detected during the field survey. As discussed previously, no special-status plant species have potential to occur within the BSA. Special-status plant species have specialized habitat requirements, including plant community types, soils, and other components. The project alignment generally lack these requirements. In addition, none of the species analyzed were documented in the BSA during the November 13, 2018 survey. Based on the lack of suitable habitat within the BSA, no special-status plants are expected to occur within the BSA. Therefore, potential impacts to special-status plant species would be less than significant.

Four special-status wildlife species were determined to have a low potential to occur in the BSA based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the survey area.

Southern California steelhead has a potential to occur in the BSA. Suitable habitat for the species is located within San Antonio Creek. But, the proposed project has been designed to avoid direct impacts to the creek. As previously discussed, the project proposes to replace an existing CMWD line that is suspended below the Grand Avenue Bridge crossing and above the creek. The proposed project components also include potentially replacing wells, tank, and pump station sites that are located approximately 110 feet east and 120 feet west of San Antonio Creek and occur within existing CMWD maintained facilities. The species is confined to aquatic habitat, the proposed construction would not occur below the top of the creek bank and no equipment is proposed within the creek. Further, mitigation measure BIO-1 below is suggested to avoid construction adjacent to San Antonio Creek during the rainy season (December through April). This measure would avoid construction work adjacent to San Antonio Creek when water has the potential to rise to the top of bank. Therefore, the project would not directly impact southern California steelhead. Indirect impacts to steelhead could result from construction equipment mobilization and operation of heavy equipment near the river area in the form water quality degradation (i.e. sediment transport, leaking equipment operated above the creek, track-off on roadways from heavy equipment use that mobilizes into creeks and drainages during rain events), if the species is present. Implementation of mitigation measures BIO-1 and BIO-8 through BIO-16 below will ensure the water quality of San Antonio Creek is not affected, thereby reducing indirect effects to steelhead to less than significant.

San Bernardino ringneck snake has a low potential to occur in the BSA. Elements of suitable habitat are present for the species adjacent to San Antonio Creek in Unit A and adjacent to the daylighted portions of Fox Canyon Barranca and Stewart Canyon Creek within Unit C. The species was observed in 2015



along Stewart Creek on the east side of South Ventura Street in oak and sycamore duff within a residential area (CNDDB 2018). Although habitat for this species occurs throughout the BSA, the project footprint occurs within previously developed infrastructure. This infrastructure includes a paved road system, concrete and gravel substrates (i.e. the foundation below the pump stations, tanks, and wells), and highly disturbed herbaceous layer (i.e. mowed grasses). Little cover for the species was observed throughout this infrastructure. The species is not likely to frequent sites without cover in the form of vegetation or burrows. Little vegetation or burrows were observed within the project footprint. Potential impacts to San Bernardino ringneck snake, if present, could occur during construction equipment transport and operation of heavy equipment near potential habitat. Effects of these activities on these species would be minimized by surveying for and relocating individuals out of harm's way prior to and during activities. Mitigation measures BIO-2 and BIO-3 require pre-construction surveys in suitable habitats for the species and environmental education to aid workers in recognizing special-status biological resources that may occur in the project area. The effects to San Bernardino ringneck snake would be less than significant with mitigation incorporated.

The coast patch-nosed snake has a low potential to occur in elements of brushy or shrubby vegetation observed within the BSA adjacent to San Antonio Creek in Unit A, within the BSA within Unit B disturbed oak woodland habitat, and adjacent to Fox Canyon Barranca and Stewart Canyon Creek within Unit C. The species was observed in 2016 at the north end of Matilija Lake on the side of the Forest Route Road, approximately 0.25 mile southwest of SR-33 (CNDDB 2018). This sighting was approximately 3.7 miles northwest of the BSA. Although habitat for this species occurs throughout the BSA, the project footprint occurs primarily within previously developed infrastructure. This infrastructure includes a paved road system, concrete and gravel (i.e. footprints below the pump stations, tanks, and wells), and highly disturbed herbaceous layer (i.e. mowed grasses). Little cover for the species was observed throughout this infrastructure. The species is not likely to frequent sites without cover in the form of vegetation or burrows. Little vegetation or burrows were observed within the project footprint. Potential impacts to coast patch-nosed snake, if present, could occur during construction equipment transport and operation of heavy equipment near potential habitat. Effects of these activities on these species would be minimized by surveying for and relocating individuals out of harm's way prior to and during activities. Further, mitigation measures BIO-2 and BIO-3 require pre-construction surveys in suitable habitats for the species and environmental education to aid workers in recognizing special-status biological resources that may occur in the project area. The effects to coast patch-nosed snake would be less than significant with mitigation incorporated.

The hoary bat has a low potential to occur in the BSA. Suitable roosting and foraging habitat for the species occurs within the BSA adjacent to San Antonio Creek in Unit A, within the developed and disturbed woodland in the BSA in Unit B, and adjacent to the BSA near Fox Canyon Barranca and Stewart Canyon Creek in Unit C. Impacts could occur if construction occurs adjacent to maternity roosts during the breeding season, because unlike adult bats, juvenile bats are unable to escape impacts. As a winter migrant the hoary bat does not commonly form maternity roosts in California. The proposed project does not include removal or trimming of trees or vegetation, therefore, the project has been designed to avoid impacts to the species' roosting habitat. In addition, the hoary bat requires a permanent water source. San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek are ephemeral water sources that would not support the species. It is unlikely construction would impact foraging bats because construction hours would most likely occur outside of this species' nocturnal feeding period. Foraging bats are expected to evade the construction areas with the onset of disturbance. Therefore, direct and indirect impacts to special-status bats would be less than significant.



The BSA contains habitat that can support nesting birds, including raptors protected under the CFGC and the MBTA. The adjacent native trees, ornamental vegetation and orchards along the project footprint provide suitable nesting habitat for avian species. Specifically, the tall eucalyptus trees adjacent to the existing infrastructure in Unit A contain suitable habitat for raptor species. Also, Grand Avenue Bridge and culverts below East Ojai Avenue and Aliso Street that channel flows from Fox Canyon Barranca and Stewart Canyon Creek, respectively, may provide habitat for mud and cavity-nesting birds such as tree swallows (*Tachycineta bicolor*) and black phoebe (*Sayornis nigricans*). The project could adversely affect raptors and other nesting birds if construction occurs while they are present within or adjacent to the project footprint, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and CFGC Section 3503. BIO-6 and BIO-7 are recommended for compliance with the MBTA and CFGC 3503.

- BIO-1 Avoid Work above San Antonio Creek during the Rainy Season. Project activities associated with pipeline replacement above San Antonio Creek shall not occur during the rainy season (December 1 to April 1), to avoid work when higher flows and steelhead could be present. If activities at this location must occur during the rainy season, a pre-activity survey shall be conducted by a qualified fisheries biologist to determine if flow conditions are suitable for steelhead passage. If flow conditions are not suitable, pipeline replacement can proceed and the activity should be monitored by a qualified biologist, as needed, to confirm that flow conditions do not change during the project activity. If flow conditions are suitable for steelhead passage, pipeline replacement shall be postponed until a qualified biologist determines that the conditions are no longer suitable for the species.
- Worker Environmental Awareness Program. Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status biological resources that may occur in the project area. This training will include information about southern California steelhead, San Bernardino ringneck snake, coast patch-nosed snake, and hoary bat, as well as other special-status species potentially occurring in the project area.

The specifics of this program shall include identification of special-status species and habitats, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species.

Pre-Construction Wildlife Surveys. Within one week prior to the commencement of project activities, a qualified wildlife biologist shall conduct pre-construction surveys in portions of the access and construction area, particularly those that contain natural vegetation. The surveys will be conducted within the project footprint locations specified below. A 50-foot buffer around the project footprint will be surveyed with inaccessible areas (i.e. private lands) surveyed with binoculars, as practicable.



A qualified biologist will conduct a survey within the following locations of the project footprint: Heidelberger Tank, 100 feet east and west San Antonio Creek at Grand Avenue, adjacent to the daylighted portions of Fox Canyon Barranca and Stewart Canyon Creek, and within the disturbed oak woodland habitat in Unit B (if trenching is to occur in this area). The biologist will document existing conditions and search for special-status species (i.e. San Bernardino ringneck snake and coast patch-nosed snake). If San Bernardino ringneck snake and coast patch-nosed snake are found, individual animals shall be relocated to similar habitat away from construction activities, at least 200 feet from any area of project construction.

- **BIO-4 Night Construction Avoidance.** Night-time construction should be avoided adjacent to San Antonio Creek, daylighted portions of Fox Canyon Barranca, and daylighted portions of Stewart Canyon Creek as feasible, to avoid impacts to special-status wildlife in and near these drainages.
- **BIO-5 Night Lighting.** If construction must occur at night (between dusk and dawn), all lighting will be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.
- **BIO-6 Nesting Bird Season Avoidance.** To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC 3503, activities related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season for migratory birds (February 1 through August 31), if practicable.
- **BIO-7** Nesting Birds. If construction must begin during the breeding season, then a preconstruction nesting bird survey shall be conducted no more than seven days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird preconstruction survey shall be conducted on foot inside the project footprint, including a 100foot buffer (300-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

Sensitive Communities

A southern California steelhead stream, San Antonio Creek, is present within the BSA, but not within the project footprint. As stated above, the proposed construction was designed to avoid direct impacts to San Antonio Creek, and proposed work will replace existing infrastructure in-kind. Implementation of mitigation measures BIO1 and BIO-8 through BIO-16 will ensure construction materials do not indirectly



impact the creek. Therefore, the project would have a less than significant impact to the southern California steelhead stream with implementation of these measures.

Jurisdictional Waters and Wetlands

The proposed project would not have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. As stated above, several water features that are subject to the jurisdiction of the USACE, and RWQCB, and CDFW were observed within the BSA. San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek are located outside of the project footprint, but within the BSA. Construction activities will occur outside top of bank and no human traffic or equipment is proposed in any of the jurisdictional features. The proposed project is designed to avoid impacts to these water features.

Indirect impacts from construction materials (e.g. stockpiled materials, construction equipment, and trash) that may be stored onsite could adversely affect water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) within the water features if runoff were to occur during storm events. Therefore, BIO-8 through BIO-16 outlined below should be implemented within 50 feet of San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek, to avoid potential indirect impacts to water quality within these jurisdictional waters. The implementation of these mitigation measures would reduce potential impacts to potential jurisdictional waters to potentially significant unless mitigation is incorporated.

- **BIO-8 Disturbance Area.** Areas of temporary disturbance shall be minimized to the extent practicable.
- **Staging Equipment.** Staging and laydown areas shall be unvegetated areas and previously disturbed sites only.
- **Pollutant Management.** All vehicles and equipment shall be in good working condition and free of leaks. The contractor shall prevent oil, petroleum products, or any other pollutant from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks.
- BIO-11 Material Storage. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage. Material storage shall be at least 100 feet from San Antonio Creek, and daylighted portions of Fox Canyon Barranca, and Stewart Canyon Creek. Any material/spoils from project activities shall be located and stored 100 feet from potential jurisdictional areas (San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek). Construction materials and spoils shall be protected from stormwater run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- **BIO-12** Tracking Loose Material. Implement Best Management Practices (BMPs) to prevent the off-site tracking of loose construction and landscape materials such as street sweeping, vacuuming, and rumble plates, as appropriate.
- **Pollution Prevention.** Prevent the discharge of silt or pollutants off of the site when working adjacent to potentially jurisdictional waters. Install BMPs (i.e. silt barriers, sand bags, straw bales) as appropriate.



- BIO-14 Site Materials and Refuse Management. All food related trash shall be disposed of in closed containers and removed from the project area each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project footprint.
- **Re-fueling and Maintenance.** All re-fueling, cleaning, and maintenance of equipment will occur at least 100-feet from potentially jurisdictional waters (Fox Canyon Barranca, Stewart Canyon Creek).
- **BIO-16** Responding to Spilled materials. Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned, and any contaminated materials properly disposed. For all spills, the project foreman or other designated liaison will notify CMWD immediately.

Wildlife Movement

The northern extent of the BSA is located within a known wildlife corridor that provides connectivity for wildlife north of the City of Ojai. San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek could act as movement corridors for wildlife species. As stated above, fully developed properties are present adjacent to the BSA for Fox Canyon Barranca and Stewart Canyon Creek and common wildlife adapted to urban and suburban areas (e.g., raccoon and striped skunk) could use the concrete-lined ephemeral drainages for local movement. Wildlife species could also use the riverine habitat of San Antonio Creek for local movement. The proposed project would not modify any of these features, nor substantially increase the level of disturbance beyond that which is present under ambient conditions.

Overall, the proposed project is not expected to hinder wildlife movement in the region, considering none of the project components are designed in such a way as to create a barrier to wildlife movement. The project footprint is located within previously developed infrastructure and no new infrastructure footprint is proposed beyond the new tank, new well, and new pump stations. The new infrastructure would be similar in design compared to the existing infrastructure and would not create a barrier to wildlife movement. Therefore, the project would have a less than significant impact to wildlife movement.

Local Policies and Ordinances

In the City and County jurisdictions (Figure 4), a number of protected trees were observed within the BSA including California sycamore, coast live oak, valley oak, and potential historical or heritage trees (Attachment D, Representative Site Photographs). Impacts to protected trees may include construction equipment compacting soil around the trees and disturbance of the canopy and the root zone. Trenching may occur in the root zone of potentially protected trees throughout the BSA, but the proposed project is replacing infrastructure currently in place. The majority of the project alignment is located within developed public right-of-way. The Ojai Municipal Code states that a permit is required when encroachment to a protected tree dripline is unavoidable. Applications for a permit to impact protected trees must be accompanied by a certified arborist report. The report should list each of the protected trees located within the work area, show the protected tree's location on a development plan, and recommend a program for protecting the trees prior to, during, and after construction.



Removal, alteration, or encroachment into a tree protection zone (dripline) of a tree regulated by the County of Ventura requires a ministerial permit to be obtained from the County. Minor pruning does not require a permit and includes pruning dead limbs or roots, pruning living limbs or roots that are 20 percent less than the trunk's girth, and pruning living limbs or roots that are less than 20 percent of the tree's overall canopy or root system. The removal, encroachment, or alteration of five protected trees (only three of which can be oaks or sycamores; none of which can be heritage or historical trees) may occur through a ministerial permit process. A ministerial permit requires the following:

- Ministerial tree permit application;
- Site sketch (no construction involved) or Site Plan (if involves new/expanding development);
- \$100 (non-refundable) application fee for one tree, \$315 for more than one tree;
- Color photos of tree(s); and
- Arborist Verification of Tree Protection Measures (Tree Form M5), if applicable.

Removal, encroachment, or alteration of more than the ministerial permit process may trigger a discretionary tree permit which requires the following:

- \$750 application deposit (if not part of another discretionary permit request) and
- An Arborist Report (Tree Doc D-AR).

The following mitigation measure would reduce the impact to potentially protected trees to a less than significant level.

- BIO-17 Arborist Study. Prior to obtaining a permit from either jurisdiction, an Arborist Study should be conducted within portions of the project footprint that occur within 20 feet of the canopy drip line of protected trees. The study should plot the location of protected trees within this zone, identify each protected tree, and determine the jurisdiction of any trees to be impacted. An Arborist Report should be prepared by a Certified Arborist in compliance with both the City of Ojai and County of Ventura ordinance guidelines. Specifically, the Arborist Report should include, at minimum, the following:
 - An inventory of all trees that contain a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating
 - Representative photographs of each regulated tree that may be encroached upon
 - Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes
 - A project-specific Tree Protection Plan (TPP) shall be prepared which would at a minimum include site plans, protective tree fencing, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited/permitted within the tree protective zone, encroachment boundaries, and potential transplanting or replacement tree plantings

The Arborist Report should be submitted to the appropriate department of the City of Ojai or County of Ventura for approval prior to the start of any tree-disturbing construction activities, as necessary.

The Ventura County General Plan (Biological Resources Policy 1.5.2-3 and 1.5.2-4) and Ojai Municipal Code (10-2.1004) also contain policies in place to protect potentially jurisdictional waters from



development. No new development is proposed. Within the City and County jurisdiction (Figure 4), infrastructure would be replaced adjacent to jurisdictional water features observed within the BSA including San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek. No work within the channel is proposed and all infrastructure to be constructed is replacing infrastructure currently in place. Further, implementation of BIO-1 and BIO 8 through BIO-16 would avoid and minimize potential indirect impacts to these water features. Therefore, the proposed project would not conflict with local policies or ordinances protecting potentially jurisdictional waters and impacts would be less than significant.

The Ventura County General Plan contains a policy in place to protect wildlife migration corridors. Within the County jurisdiction (Figure 4), three tanks observed within the BSA (Heidelberger Tank and Running Ridge Tanks) are located within the ECA. These tanks (within the project footprint) are located at the boundary of the ECA and developed portions of Ojai. The ECA surrounds the majority of the infrastructure within Ojai and directly to the north of the City and is approximately ten miles wide. Each tank is approximately 50 feet in diameter or less. The tanks do not represent a barrier to wildlife movement because the ECA is sufficiently wide to allow for wildlife movement around and past the tanks. Further, implementation of BIO-14 would minimize the attraction of wildlife to the project footprint. Therefore, the proposed project would not would not conflict with local policies or ordinances protecting habitat connectivity and impacts would be less than significant.

The County has a policy in place to protect locally important species as significant biological resources to be protected from incompatible land uses and development. The list of locally important species was reviewed and no species were observed within the BSA. The proposed project will replace existing infrastructure. Therefore, the proposed project would not conflict with local policies or ordinances protecting locally important species and impacts would be less than significant.

Generally, the project would be consistent with local policies or ordinances protecting biological resources. Nevertheless, due to potential impacts to protected trees in the City and County jurisdictions, this impact would be potentially significant unless mitigation is incorporated.

Conservation Plans

The project parcel does not occur within any Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan areas. The proposed project would not conflict with the provisions of any such plans. Therefore, the proposed project would have no impact to HCP, NCCP, or other approved local, regional, or state habitat conservation plans.

Conclusions

Potential impacts to special-status wildlife, nesting birds, potentially jurisdictional waters and wetlands, and conflicts with local policies and ordinances would be less than significant with implementation of the avoidance and minimization measures recommended above. Potential impacts to wildlife movement would be less than significant. Additionally, the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plans.



Thank you for selecting Rincon Consultants to provide you with this BRA. Please call if you have questions, or if we can be of further assistance.

Sincerely,

Rincon Consultants, Inc.

Lindsay Lien

Lindsay Griffin

Senior Biologist/Project Manager

Steven J. Hongola

Principal / Senior Ecologist

Attachments:

Appendix A. Figures

Appendix B. Species Observed

Appendix C. Special-Status Species Table
Appendix D Representative Site Photographs

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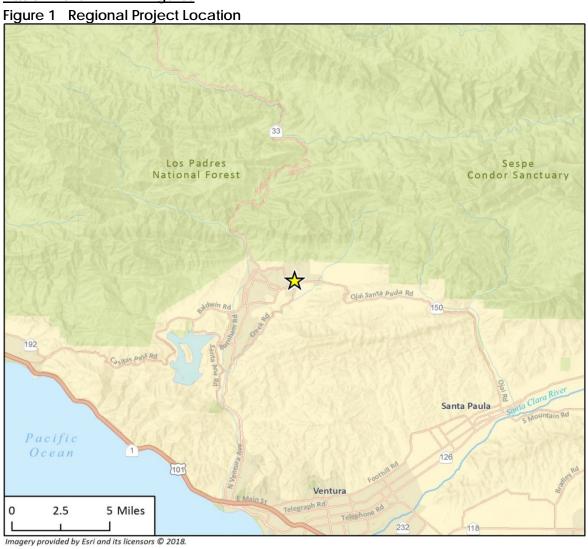
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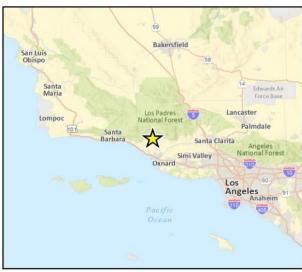
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Attachment A Figures



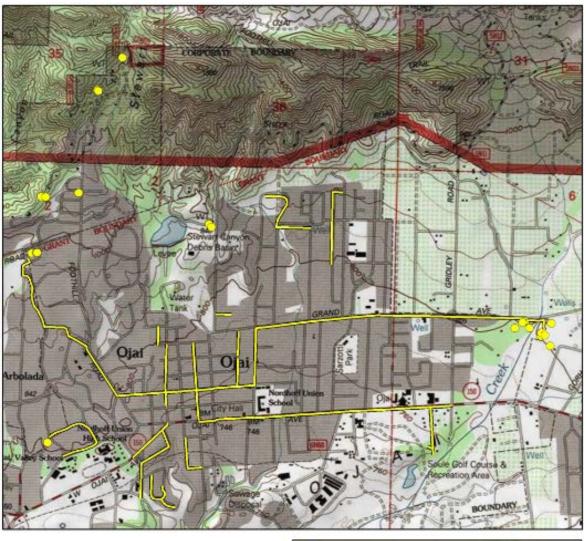




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Figure 2 Project Location A



Imagery provided by National Geographic Society, ESRI and its itemsors © 2018. Matilija & Ojai Quadrangles. TO4N R22W S06,07 & TO4N R23W S01,02,11,12 & T05N R23W S35. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

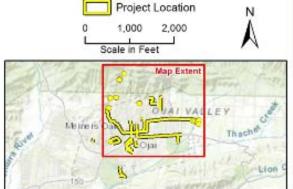
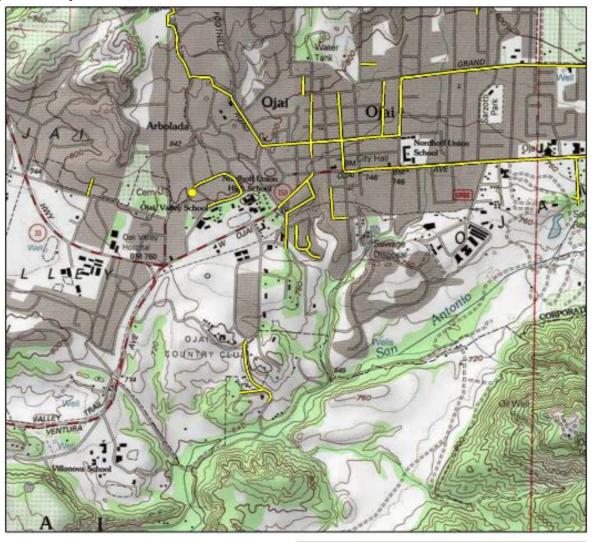






Figure 3 Project Location B

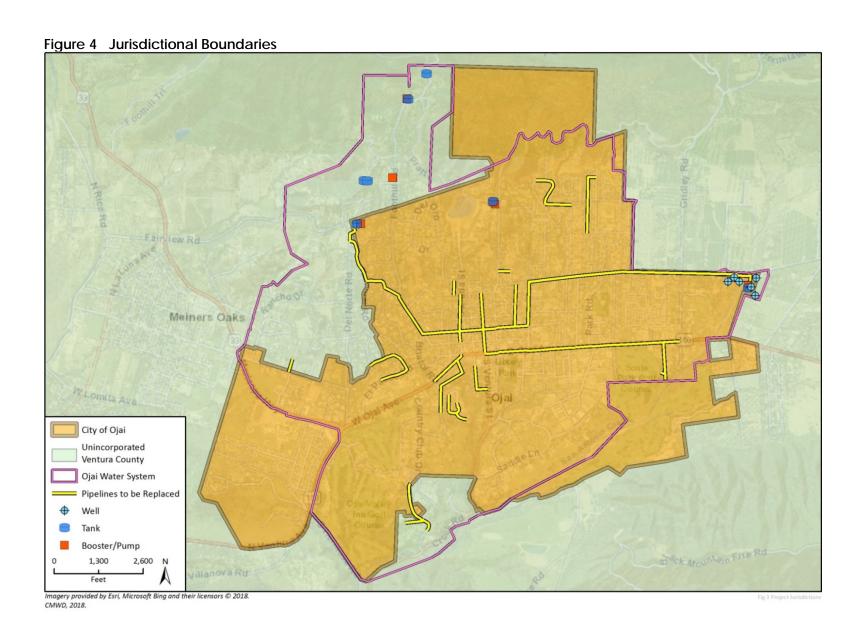


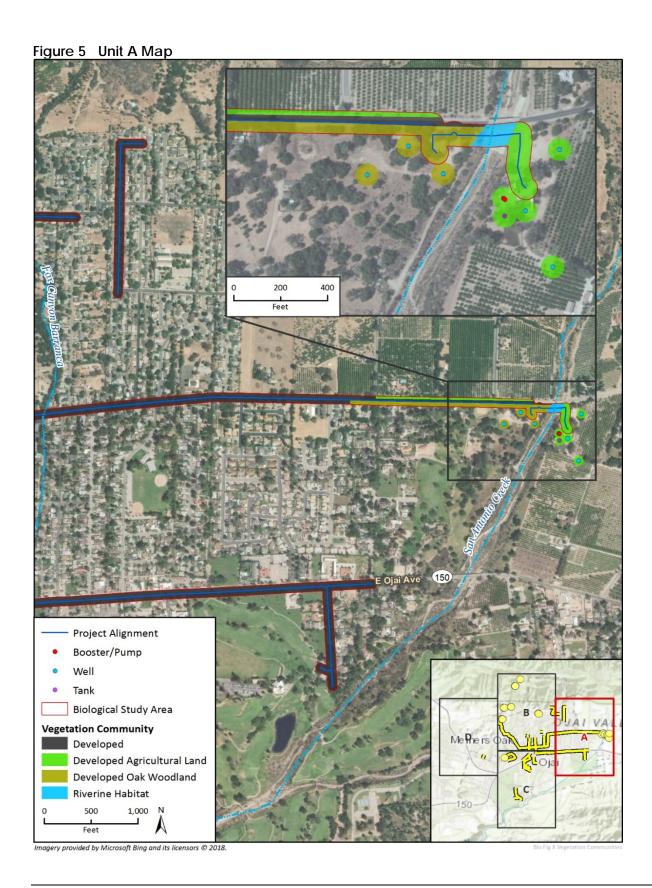
Imagery provided by National Geographic Society, Esri and its licensors © 2018. Metallia & Ojai Quedrangles. T04N R22W S06,07 & T04N R23W S01,02.11,12. The topographic representation depicted in this map may not podray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the onginal topographic map was assembled.



Map Extent

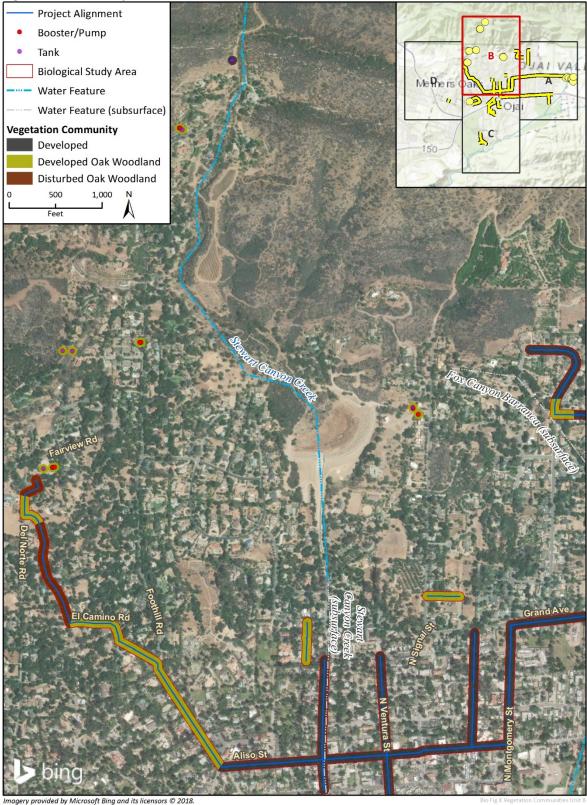






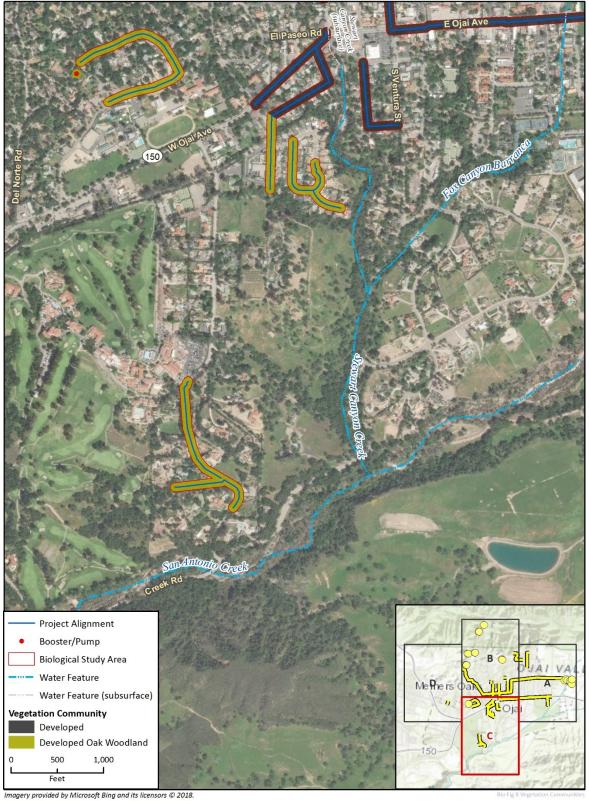






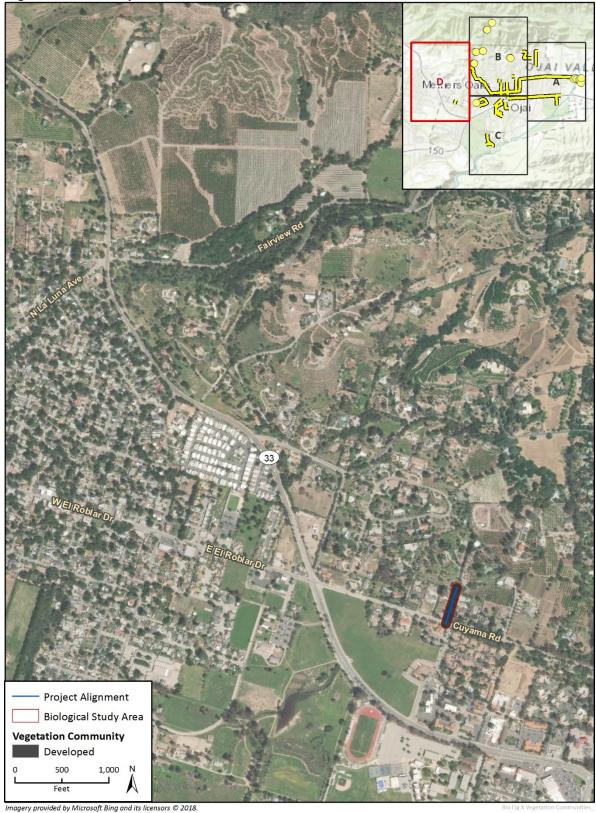




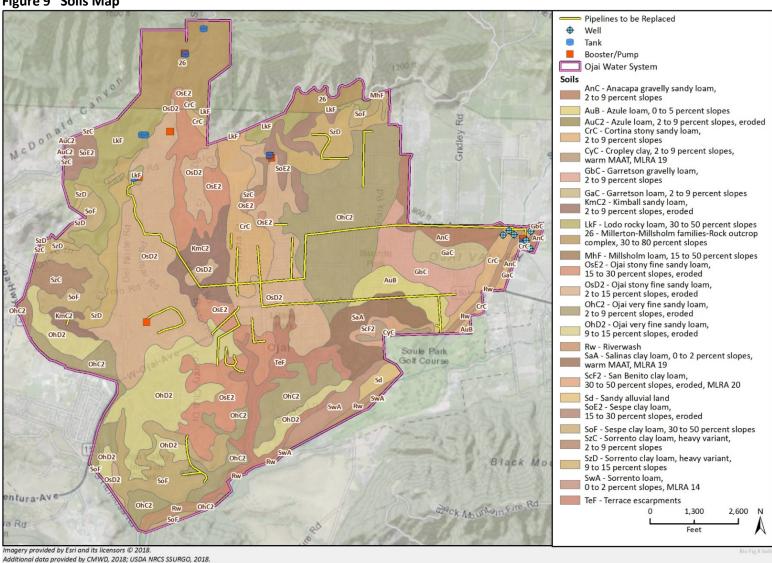












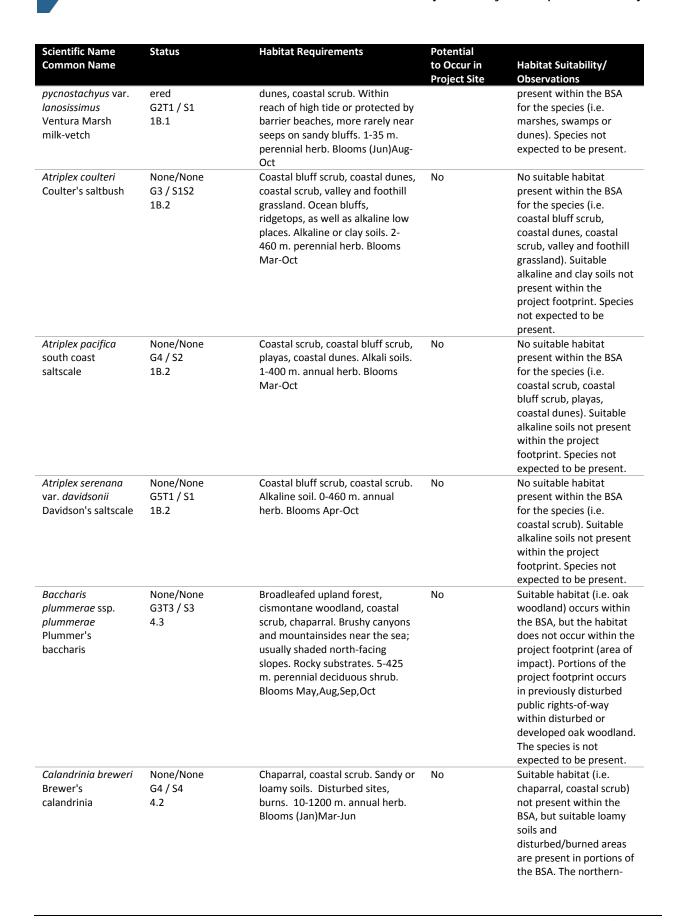


Attachment B; Table 1: Species Observed During November 13, 2018 Survey

Scientific name	Common Name	Status
Acer palmatum	Japanese maple	non-native
Agave sp.	agave	non-native
Alnus rhombifolia	white alder	native
Anagallis arvensis	scarlet pimpernel	non-native
Arundo donax	giant reed	non-native
Brassica nigra	black mustard	non-native
Artemisia californica	coastal sage brush	native
Avena fatua	wild oats	non-native
Baccharis pilularis	coyote brush	native
Brassica nigra	black mustard	non-native
Brickellia sp.	brickellia	native
Bromus madritensis	red brome	non-native
Conium maculatum	poison hemlock	non-native
Cytisus multiflorus	Spanish broom	non-native
Elaeagnus angustofolia	Russian olive	non-native
Eriogonum fasciculatum	California buckwheat	native
Eucalyptus sp.	eucalyptus	non-native
Heteromeles arbutifolia	toyon	native
Juglans californica	California black walnut	native
Lavandula stoechas	French lavender	non-native
Malosma laurina	Laurel sumac	native
Marrubium vulgare	white horehound	non-native
Nerium oleander	oleander	non-native
Nicotiana glauca	tree tobacco	non-native
Platanus racemosa	California sycamore	native
Quercus agrifolia	coast live oak	native
Quercus lobate	valley oak	native
Ricinus communis	castor bean	non-native
Salix sp.	willow	native
Salsola australis	Russian thistle	non-native
Salvia mellifera	black sage	native
Schinus mole	Peruvian pepper tree	non-native
Stipa miliacea	smilo grass	non-native

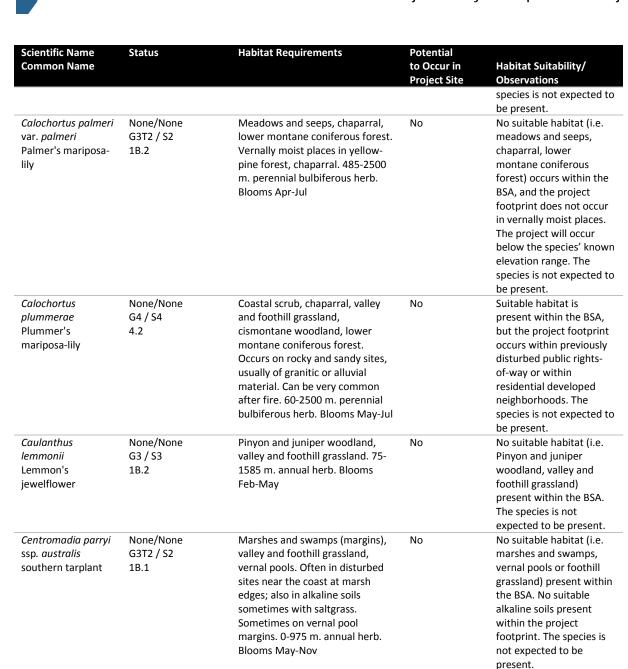


Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
Abronia maritima red sand-verbena	None/None G4 / S3? 4.2	Coastal dunes. Dune plant. 0-100 m. perennial herb. Blooms Feb- Nov	No	No suitable habitat present within the BSA for the species (i.e. coastal dunes). The project occurs outside of the species' known elevation range.
Acanthoscyphus parishii var. parishii Parish's oxytheca	None/None G4?T3T4 / S3S4 4.2	Chaparral, lower montane coniferous forest. Sandy or gravelly places.1220-2600 m. annual herb. Blooms Jun-Sep	No	No suitable soils present within the BSA for the species. The project occurs outside of the species' known elevation range.
Allium howellii var. clokeyi Mt. Pinos onion	None/None G4T2 / S2 1B.3	Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges). 1385-1800 m. perennial bulbiferous herb. Blooms Apr-Jun	No	No suitable habitat present within the BSA for the species. The project occurs outside of the species' known elevation range.
Amsinckia douglasiana Douglas' fiddleneck	None/None G4 / S4 4.2	Valley and foothill grassland, oak woodland. Monterey shale; dry habitats. 0-1950 m. annual herb. Blooms Mar-May	No	Suitable habitat (i.e. oak woodland) occurs within the BSA, but the habitat does not occur within the project footprint (area of impact). Portions of the project footprint occurs in previously disturbed public rights-of-way within disturbed oak woodland. The species is not expected to be present.
Aphanisma blitoides aphanisma	None/None G3G4 / S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. 3-305 m. annual herb. Blooms Feb-Jun	No	No suitable habitat present within the BSA for the species (i.e. coastal dunes or coastal scrub). Suitable clay and sandy soils do not occur within the project footprint. The species is not expected to occur within the project footprint.
Astragalus didymocarpus var. milesianus Miles' milk-vetch	None/None G5T2 / S2 1B.2	Coastal scrub. Clay soils. 50-385 m. annual herb. Blooms Mar-Jun	No	No suitable habitat present within the BSA for the species (i.e. coastal scrub). Suitable clay soils do not occur within the project footprint. The species is not expected to occur within the project footprint.
Astragalus	Endangered/Endang	Marshes and swamps, coastal	No	No suitable habitat





Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in	Habitat Suitability/
			Project Site	Observations most tank is located in disturbed chaparral habitat that was burned in the Thomas Fire in December 2017. The proposed project will replace the existing tank in-kind. Therefore, no new impacts will occur to surrounding habitat because the tank is located within a previously disturbed area.
Calochortus catalinae Catalina mariposa- lily	None/None G3G4 / S3S4 4.2	Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 15-700 m. perennial bulbiferous herb. Blooms (Feb)Mar-Jun	No	Suitable habitat (i.e. oak woodland) occurs within the BSA, but the habitat does not occur within the project footprint (area of impact). Portions of the project footprint occurs in previously disturbed public rights-of-way within disturbed oak woodland. The species is not expected to be present.
Calochortus clavatus var. clavatus club-haired mariposa-lily	None/None G4T3 / S3 4.3	Chapparal, cismontane woodland, valley and foothill grassland, coastal scrub. Generally on serpentine clay, rocky soils. 75-1300 m. perennial bulbiferous herb. Blooms (Mar)May-Jun	No	Suitable habitat (i.e. oak woodland) occurs within the BSA, but the habitat does not occur within the project footprint (area of impact). Portions of the project footprint occurs in previously disturbed public rights-of-way within disturbed oak woodland. In addition, suitable serpentine clay soils or rocky soils do not occur within the BSA. The species is not expected to be present.
Calochortus fimbriatus late-flowered mariposa-lily	None/None G3 / S3 1B.3	Chaparral, cismontane woodland, riparian woodland. Dry, open coastal woodland, chaparral; on serpentine. 270-1435 m. perennial bulbiferous herb. Blooms Jun-Aug	No	Suitable habitat (i.e. oak woodland) occurs within the BSA, but the habitat does not occur within the project footprint (area of impact). Portions of the project footprint occurs in previously disturbed public rights-of-way within disturbed oak woodland. In addition, suitable serpentine soils or rocky soils do not occur within the BSA. The



Coastal bluff scrub, coastal dunes.

Sandy sites. 3-80 m. annual herb.

Marshes and swamps, coastal

zones of salt marsh habitat. 0-10

m. annual herb (hemiparasitic).

dunes. Limited to the higher

Blooms May-Oct(Nov)

Blooms Jan-Aug

No

No

Chaenactis

orcuttiana

Chloropyron

maritimum

beak

maritimum ssp.

salt marsh bird's-

glabriuscula var.

Orcutt's pincushion

None/None

G5T1T2 / S1

Endangered/Endang

1B.1

ered

1B.2

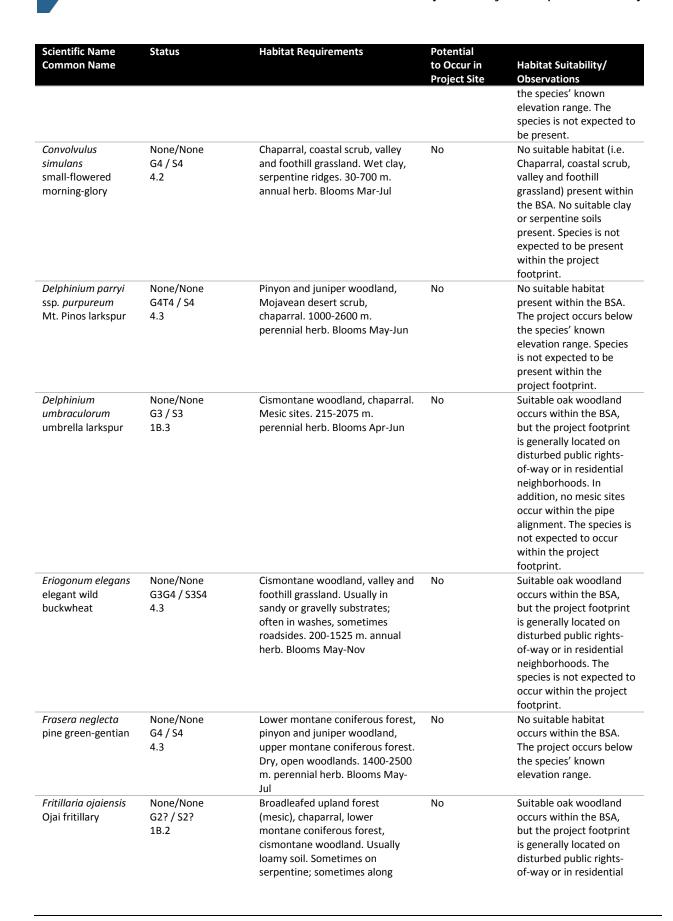
G4?T1/S1

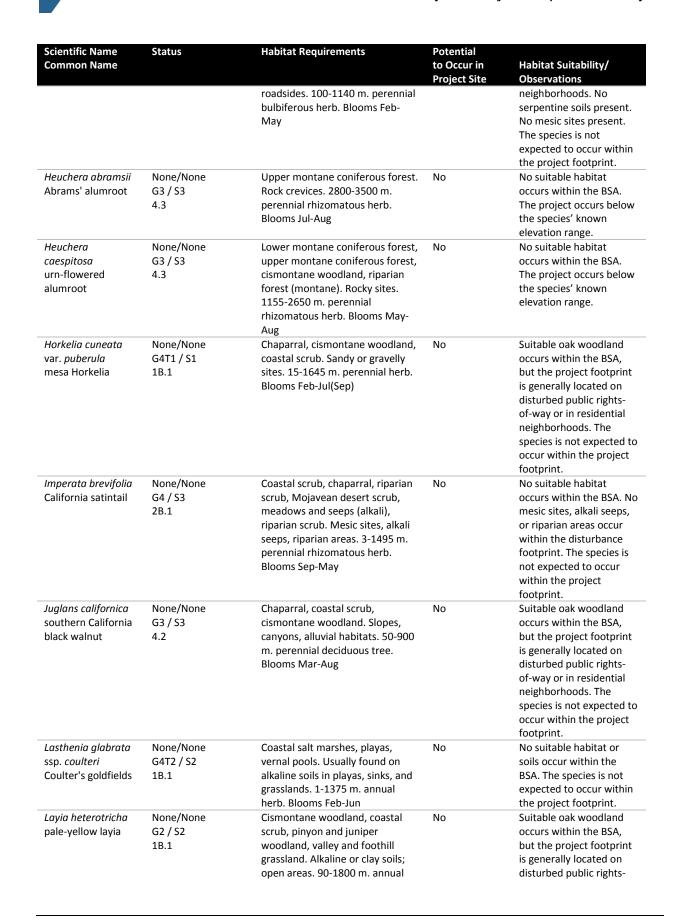
No suitable habitat (i.e.

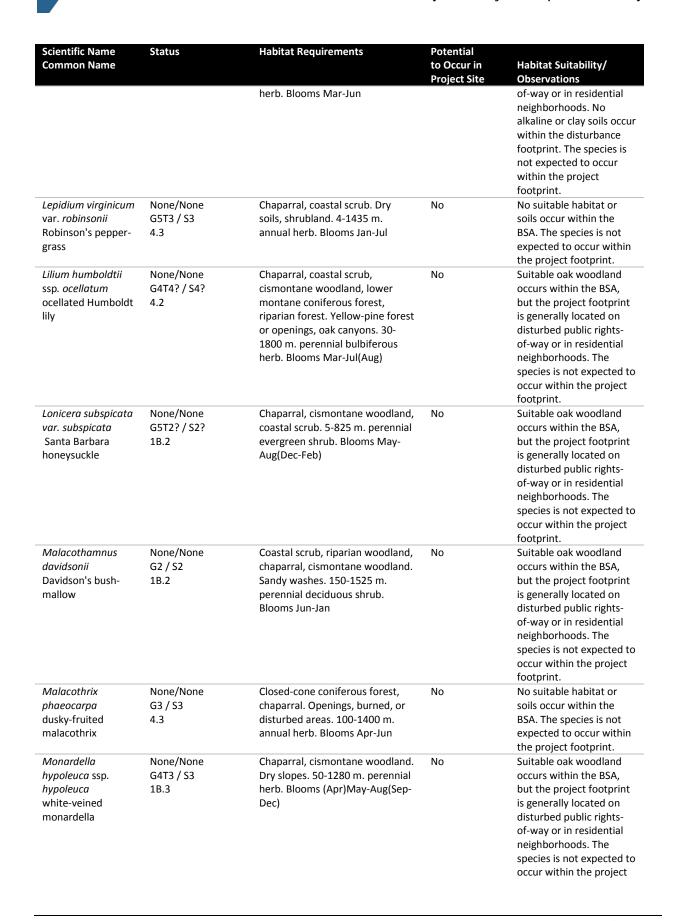
coastal dunes or sandy

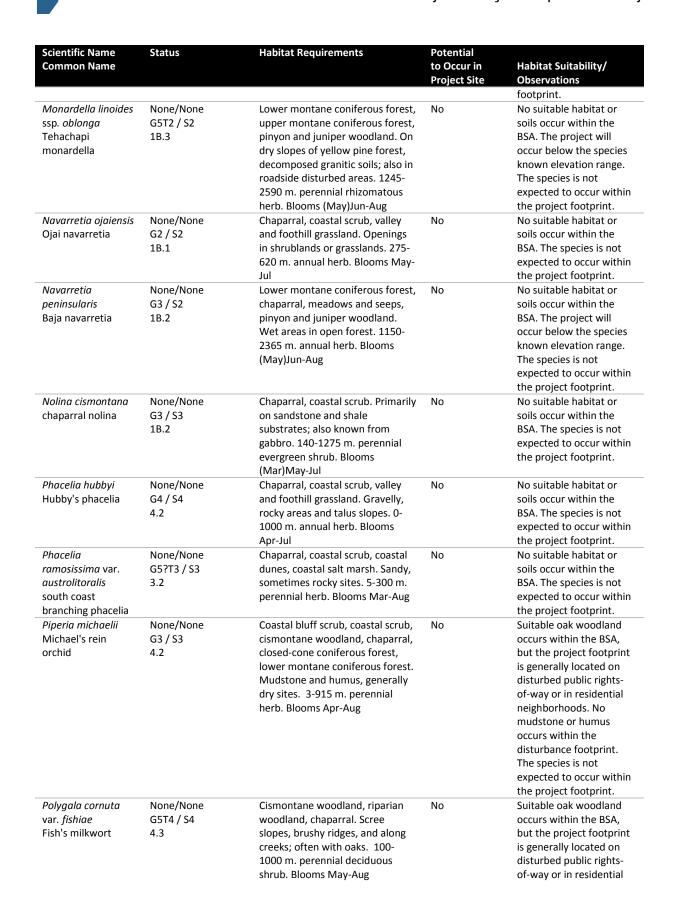
sites) present within the BSA. The project will occur above the species known elevation range. The species is not

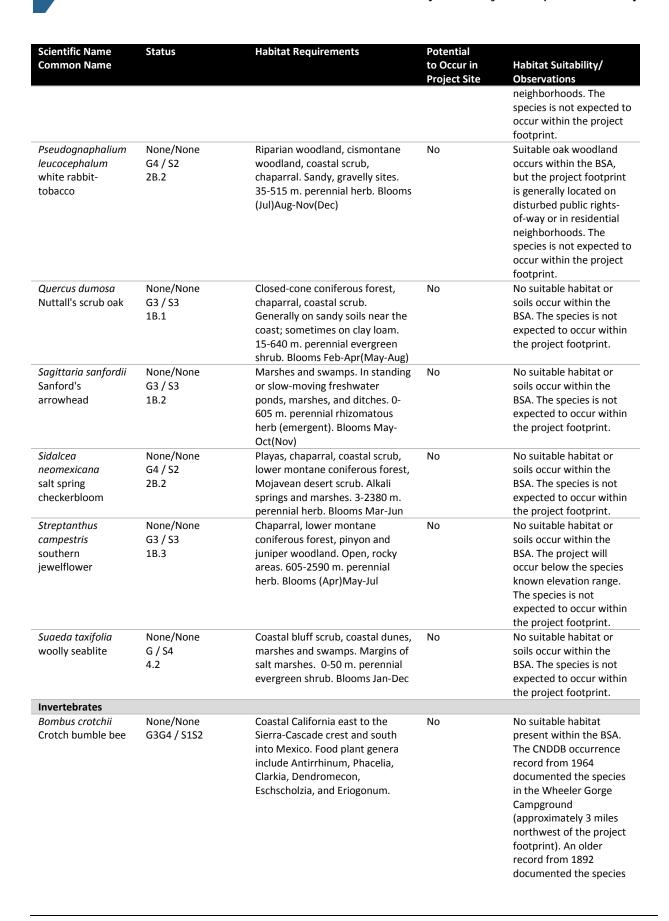
coastal bluff scrub,

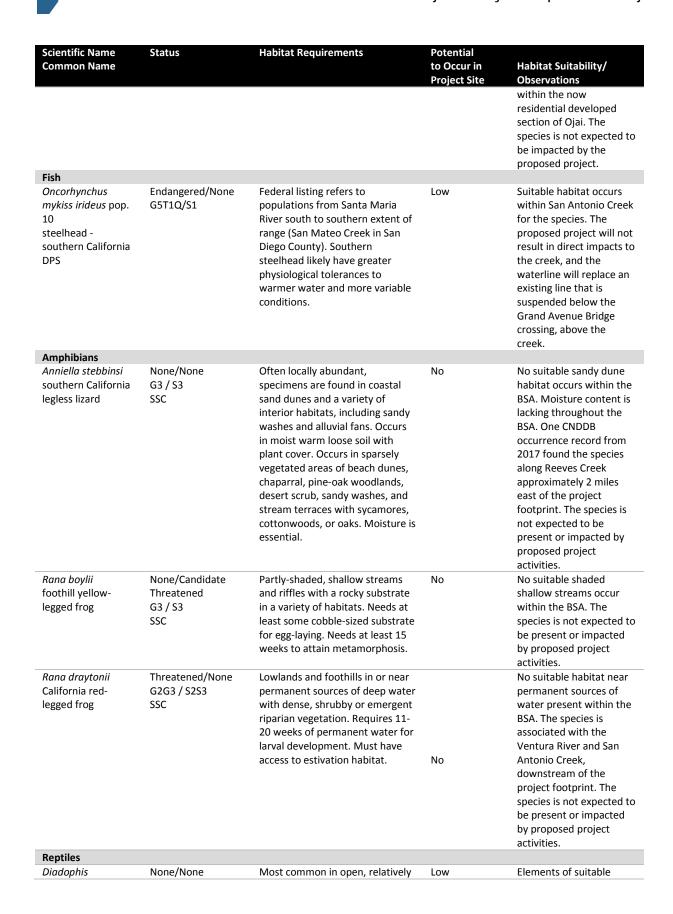


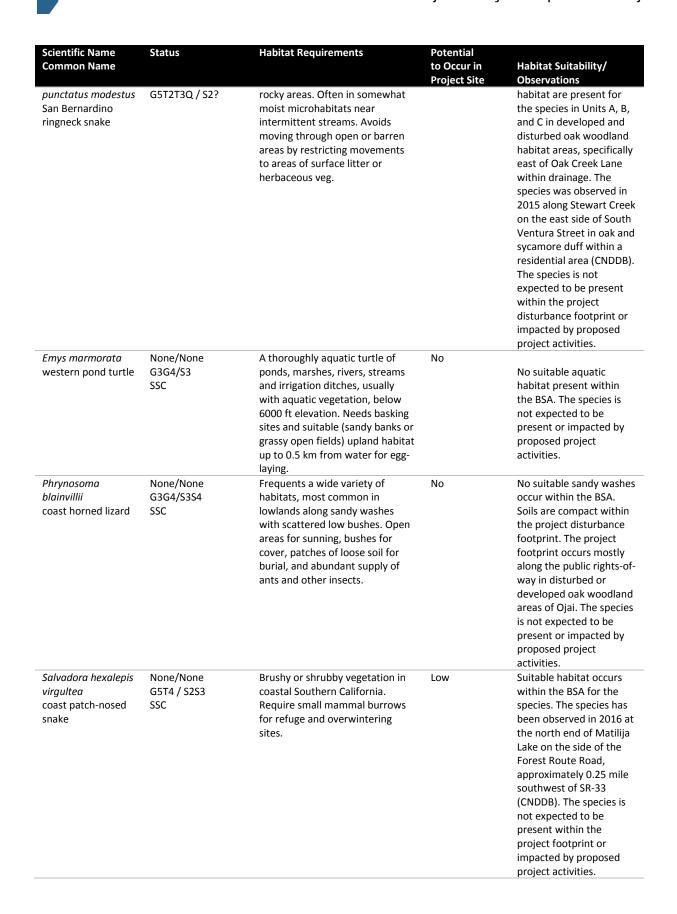


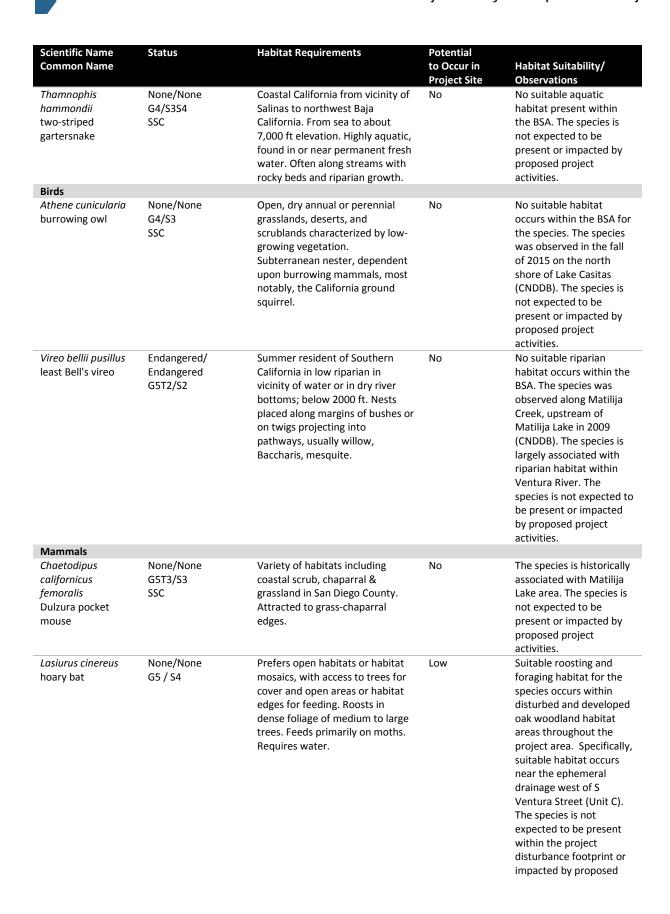














Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations		
				project activities.		
Sensitive Natural Communities						
Southern California steelhead Stream	None/None GNR/SNR	-	Present	Southern California steelhead Stream within San Antonio Creek.		
Southern Coast Live Oak Riparian Forest	None/None G4 / S4	-	Absent	Coast live oak trees are not present within the study area.		
Southern Sycamore Alder Riparian Woodland	None/None G4 / S4	-	Absent	Vegetation community present within San Antonio Creek.		

¹ Notes:

FE = Federal Endangered FT = Federal Threatened SE = State Endangered FP = CDFW Fully Protected

FP = CDFW Fully Protected SSC = California Species of Special Concern

CRPR (CNPS California Rare Plant Rank)

1B = Rare, Threatened, or Endangered in California and elsewhere

2B = Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension

.1 = Seriously threatened in California (> 80% of occurrences threatened/high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% occurrences threatened/ Moderate degree and immediacy of threat)

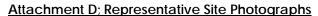
CDFW Rare

G1 or S1 = Critically Imperiled Globally or Subnationally (state)

G2 or S2 = Imperiled Globally or Subnationally (state)

G3 or S3 = Vulnerable to extirpation or extinction Globally or Subnationally (state)

G4/5 or S4/5 = Apparently secure, common and abundant





Photograph 1. View of existing pipeline alignment within BSA, facing northeast (Unit A). Photograph shows suspended pipe above San Antonio Creek adjacent to Grand Avenue Bridge. November 13, 2018.



Photograph 2. View of existing wells, tanks, and pumps infrastructure within BSA, east of San Antonio Creek, facing south (Unit A). Note eucalyptus trees within BSA. November 13, 2018.



Photograph 3. View of existing pipeline alignment within BSA, facing west (Unit A). Note remnant valley oak trees above the project footprint. November 13, 2018.



Photograph 4. View of existing Fairview Pump station within BSA, facing south (Unit B). November 13, 2018.



Photograph 5. View North Sunset Place of existing pipeline alignment within BSA, facing north (Unit B). Note ornamental vegetation surrounding the project footprint. November 13, 2018.



Photograph 6. View existing Arbolada tank within BSA, facing northeast (Unit B). Note ornamental vegetation surrounding the project footprint. November 13, 2018.