

BIOLOGICAL SURVEY REPORT

Bowerman Power Renewable Natural Gas Plant Project Frank R. Bowerman Landfill Orange County, CA

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Prepared by



TETRA TECH

5383 Hollister Ave, Suite 130
Santa Barbara, CA 93111

EXECUTIVE SUMMARY

On behalf of Bowerman Power LFG, LLC (BP, Project Proponent), Tetra Tech has prepared this Biological Survey Report for the proposed Renewable Natural Gas (RNG) Plant planned at the Frank R. Bowerman Landfill (Bowerman Landfill) in Orange County, California (Project). This Report describes the literature review, survey methodology, and results of the biological survey conducted for the Project. This Project is being planned under a partnership agreement between BP and OC Waste & Recycling (OCWR) to process the landfill gas (LFG) produced by the Bowerman Landfill and deliver it to Southern California Gas Company (SoCal Gas).

A literature review, biological surveys, vegetation mapping, and habitat assessments for potential special-status species¹ were conducted in 2023. Potentially-occurring rare plants were surveyed for during their blooming period when they were identifiable, and one species was detected: intermediate mariposa lily (*Calochortus weedii* var. *intermedius*). Note that rainfall for the Irvine area in 2022-23 was measured at about 163 percent of normal (Golden Gate Weather Services 2023) which resulted in suitable conditions for blooming plant species. The biological survey area (BSA) also provides suitable nesting habitat for tree-nesting, shrub-nesting, and/or ground-nesting birds, including the Federally-listed threatened coastal California gnatcatcher (*Polioptila californica californica*). Raptor nesting habitat is also present in the form of mature trees onsite. No nests were observed during the survey. The BSA has the potential to support other special-status species such as western spadefoot (*Spea hammondi*), orange-throated whiptail (*Aspidoscelis hyperythra*), red-diamond rattlesnake (*Crotalus ruber*), and coast patch-nosed snake (*Salvadora hexalepis virgulata*).

This report provides impact avoidance, minimization, and mitigation recommendations for special-status species, including intermediate mariposa lily and potential nesting birds, as required by the Central Coastal Subregional Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP).

¹ Plant and wildlife species protected by Federal, State, and local agencies as well as conservation organizations such as the California Native Plant Society (CNPS) are collectively referred to as special-status species in this report.

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Acronyms and Abbreviations

BIOS	Biogeographic and Information Observation System
Bowerman Landfill	Frank R. Bowerman Landfill
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
ECA	Essential Connectivity Area
GIS	Geographic Information System
GPS	Global Positioning System
LFG	landfill gas
LFGTE	Landfill Gas to Energy
BP	Bowerman Power LFG, LLC
NCCP/HCP	Natural Community Conservation Plan and Habitat Conservation Plan
NLB	Natural Landscape Block
OCWR	OC Waste & Recycling
RNG	renewable natural gas
ROW	right-of-way
SoCal Gas	Southern California Gas Company
SSC	Species of Special Concern
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WL	Watch List

1.0 INTRODUCTION

Tetra Tech has prepared this Biological Survey Report for the proposed Renewable Natural Gas (RNG) Plant planned at the Frank R. Bowerman Landfill (Bowerman Landfill) in Orange County, California (Project). This Project is being planned under a partnership agreement between Bowerman Power LFG, LLC (BP) and OC Waste & Recycling (OCWR) to process the landfill gas (LFG) produced by the Bowerman Landfill and deliver it to Southern California Gas Company (SoCal Gas). The purpose of this Biological Survey Report is to:

- Document the methods and results of the field surveys,
- Summarize the existing biological resources and conditions within the biological survey area (BSA) and vicinity,
- Assess potential presence of special-status wildlife and rare plants, and
- Recommend preliminary measures for avoiding, minimizing, or mitigating impacts to special-status species.

From July 1, 2022 through June 30, 2023, rainfall for the Irvine area was measured at about 163 percent of normal. This high rainfall resulted in suitable conditions to conduct the biological surveys (Golden Gate Weather Services 2023).

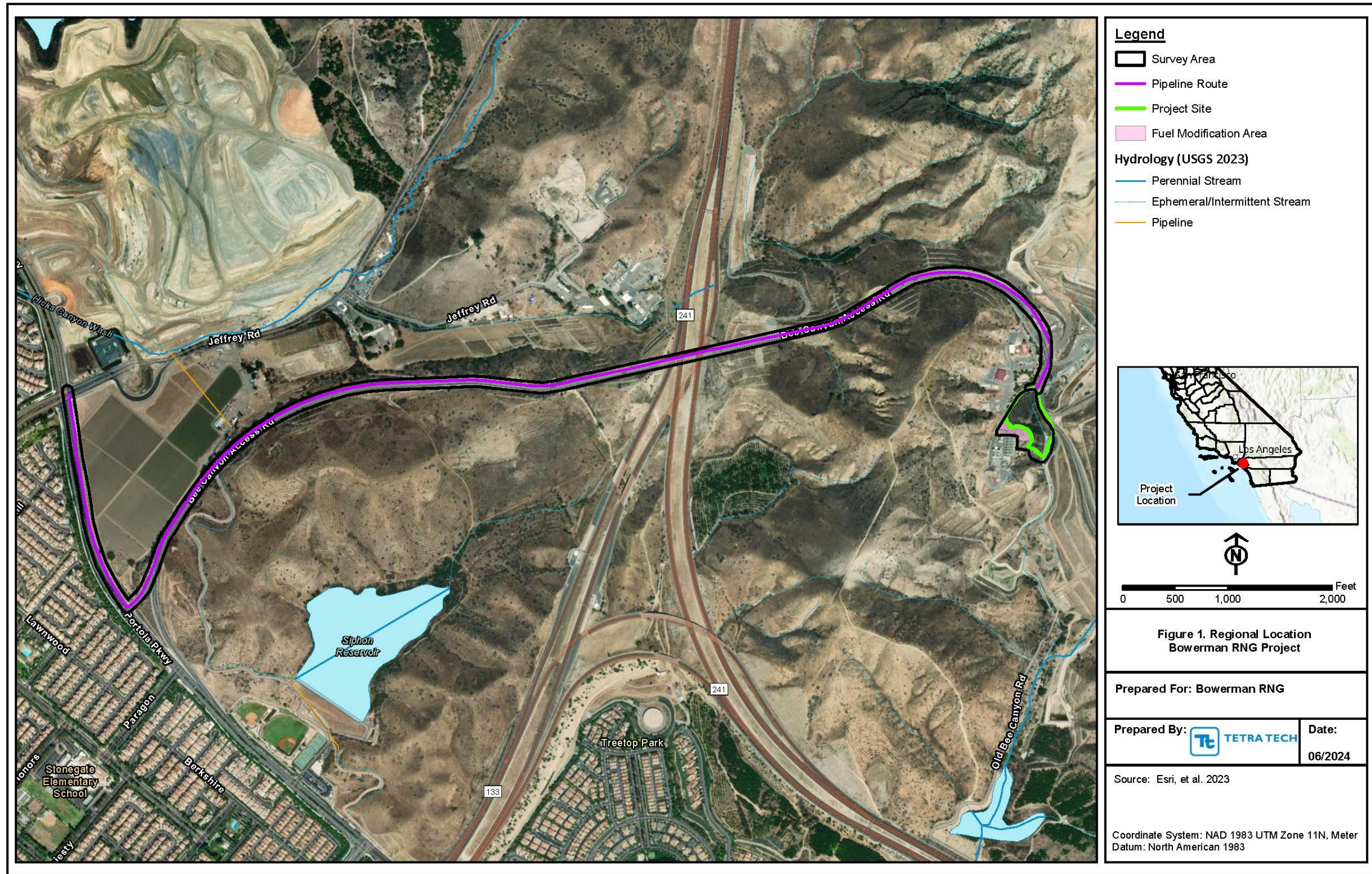
1.1 Project Location

The proposed Project is located at Bowerman Landfill in Orange County, California and consists of the proposed RNG Plant footprint (i.e., Project site), Fuel Modification Area, and a proposed pipeline route (Figure 1). The Project site is generally bound by Bee Canyon Access Road to the north and northeast, the existing Landfill Gas to Energy (LFGTE) plant and flare station to the west, and open space and roads to the south (Figure 2). The Fuel Modification Area is adjacent to the Project site and will be cleared of vegetation and revegetated post construction with approved low fuel vegetation (Figure 2). The proposed pipeline route connecting the proposed RNG Plant to the SoCal Gas interconnection goes north and west along Bee Canyon Access Road to the intersection of Jeffrey Road and Portola Parkway (Figure 1). The site is located within the U.S. Geological Survey (USGS) *El Toro* 7.5-Minute Topographic Quadrangle Map (Figure 3). Surrounding land uses consist of other areas of the Bowerman Landfill, open space, residential uses, and highways and roads.

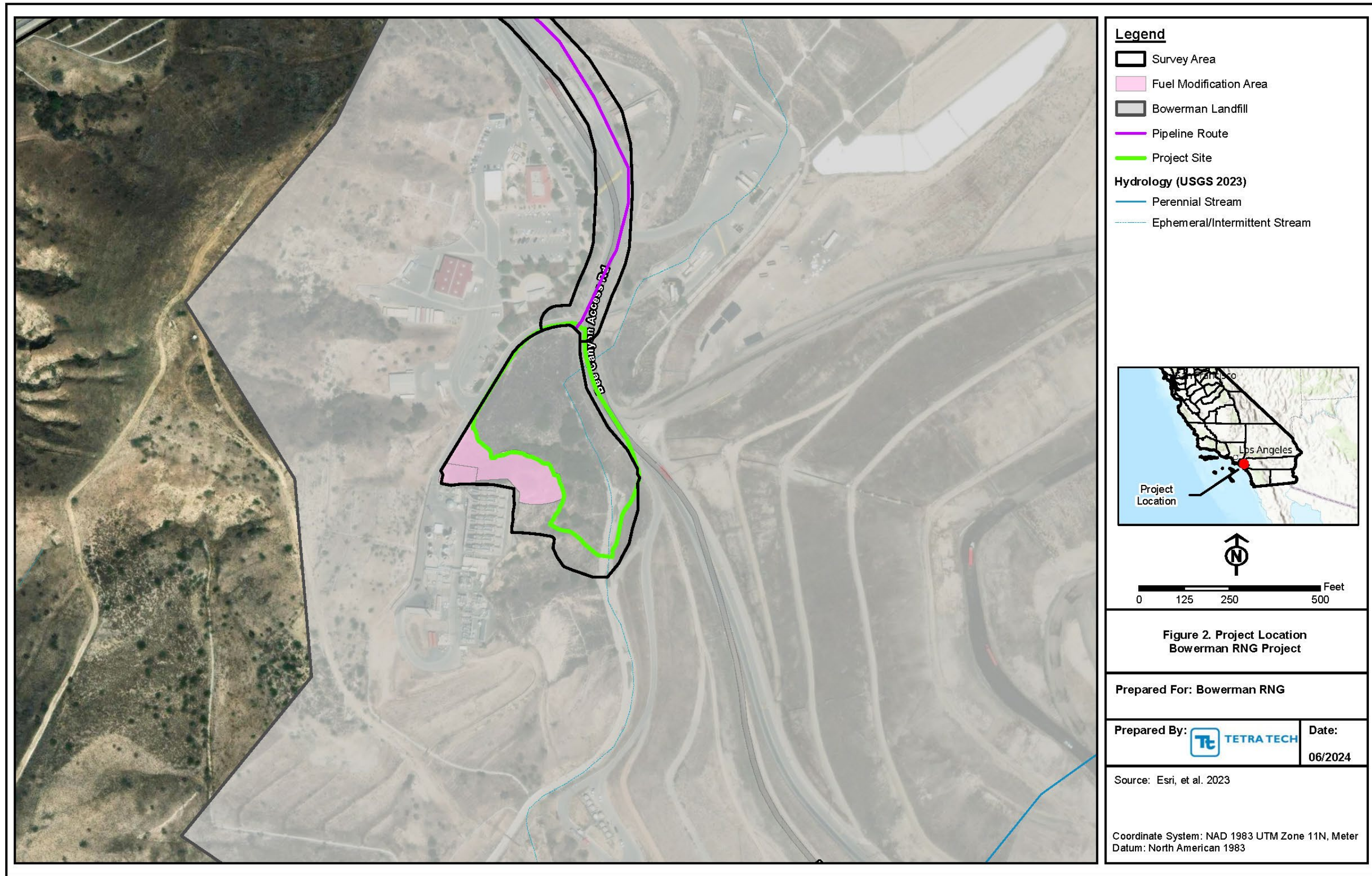
The BSA shown in Figures 1 to 5 includes the Project site, Fuel Modification Area, and proposed pipeline. The BSA around the Project site ended at the adjacent road (Bee Canyon Access Road) because the area between the Project site and BSA is developed and does not support biological resources. The Project site consists of the proposed RNG Plant footprint. A 50-foot buffer on either side of the proposed pipeline route was also surveyed.

1.2 Ecoregion

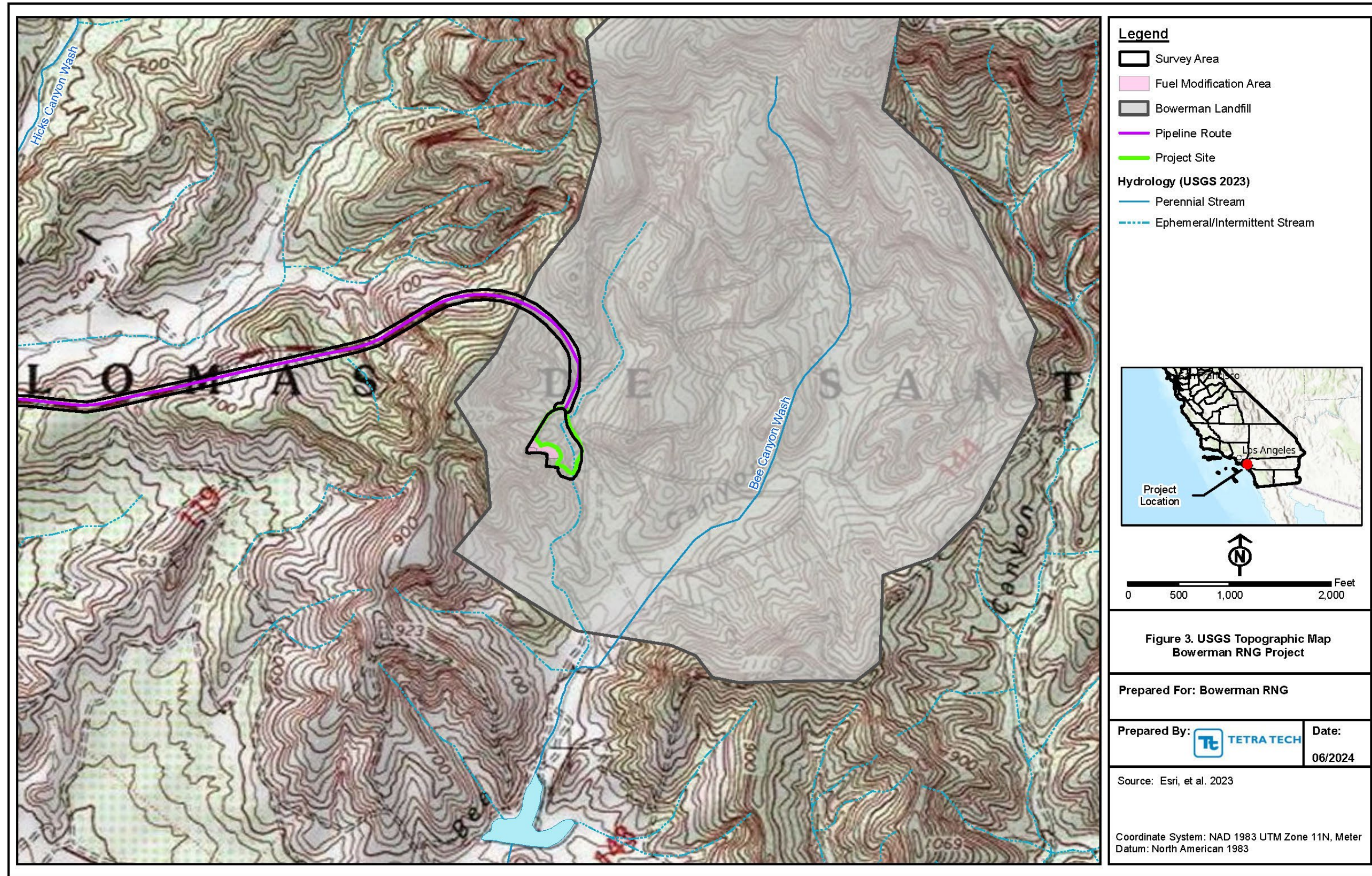
California can be divided into 11 Geomorphic Provinces. The proposed Project is located within the Peninsular Ranges Geomorphic Province, which is a series of ranges separated by northwest trending valleys, almost parallel to faults branching from the San Andreas Fault. The Peninsular Ranges extend into lower California and are bound on the east by the Colorado Desert Geomorphic Province. The Los Angeles Basin and the Southern Channel Islands (Santa Catalina, Santa Barbara, San Clemente, and San Nicolas islands), together with the surrounding continental shelf, are included in this province (California Department of Conservation, California Geological Survey 2002). In addition, the Project is located within the South Coast Subregion of the Southwestern California Region of the California Floristic Province (Jepson Flora Project [eds.] 2023).



Not for Construction



Not for Construction



Not for Construction

2.0 PROJECT DESCRIPTION

The proposed Project would develop a RNG Plant and pipeline to process and transport LFG that is produced by the Bowerman Landfill to the SoCal Gas pipeline. The RNG Plant site would be approximately 3.52 acres in size and the proposed pipeline would extend approximately 2.4 miles. The RNG Plant would be designed to process a maximum of 6,000 standard cubic feet per minute of raw LFG at the inlet. The process would remove nitrogen, oxygen, carbon dioxide, sulfur hydroxide, hydrogen sulfide, volatile organic compounds, and other minor impurities to meet the specifications of SoCal Gas. An additional approximately 0.8-acres will be cleared of vegetation, see the Fuel Modification Area in Figure 2, to comply with Orange County Fire Authority's Fuel Modification and Maintenance Program. Post construction, this area will be revegetated with approved low fuel vegetation.

3.0 LITERATURE REVIEW

This section describes the literature review performed to evaluate the biological resources that occur within the BSA.

3.1 Topography

Methods

The USGS 7.5-Minute Topographic Map *El Toro* Quadrangle as well as aerial imagery (Google Earth©) were reviewed. Topography describes the physical features of an area of land. The potential topographic features looked at include natural landforms, aquatic features, developed lands, agricultural lands, undeveloped lands, and terrain. Natural landforms are natural physical features on the surface of the land, such as mountains, hills, and canyons.

Results

The topography of the Project site consists of hilly terrain throughout. A concrete channel is located at its southern end and conveys water from ephemeral drainages. Surrounding land uses include the larger Bowerman Landfill, agricultural land, open space, highways and roads, and residential built-up land. The elevational range of the Project site is approximately 690 to 800 feet above mean sea level. The elevational range of the proposed pipeline route is approximately 330 to 810 feet above mean sea level.

3.2 Sensitive Natural Communities

Methods

The California Department of Fish and Wildlife (CDFW)'s California Natural Diversity Database (CNDDDB) (CDFW 2023a) was used to identify sensitive natural communities that exist within the BSA.

Results

No sensitive natural communities were identified (CDFW 2023a).

3.3 Special-status Plant and Wildlife Species

Methods

Plant and wildlife species protected by Federal, State, and local agencies as well as conservation organizations such as the California Native Plant Society (CNPS) are collectively referred to as special-status species in this report. Tetra Tech conducted a literature review by using CDFW's CNDDDB RareFind 5 online database and CNPS' online *Inventory of Rare and Endangered Plants of California* to identify special-status plant and wildlife species that may exist within the BSA (CDFW 2023a, CNPS 2023). Species from the CNDDDB and CNPS' online inventory that do not have habitat in the BSA, such as freshwater marsh and open water, are not carried forward in the analysis.

Results

The potential for each species to occur has been reviewed and updated based on the results of the field surveys and is discussed in the special-status species results section of this report.

3.4 Critical Habitat

Methods

The U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal was reviewed to identify designated final and proposed Critical Habitat for Federally threatened and endangered plant or wildlife species within the BSA (USFWS 2023).

Results

The literature review determined that the BSA is not located within or near designated or proposed Critical Habitat.

3.5 Wildlife Movement

Methods

The Essential Connectivity Map located on CDFW's Biogeographic and Information Observation System (BIOS) Habitat Connectivity Viewer was reviewed to determine whether the BSA is located within or near a CDFW designated Natural Landscape Block (NLB) or Essential Connectivity Area (ECA) (CDFW 2023b).

Results

Per the BIOS Habitat Connectivity Viewer, the BSA is located within a NLB but not within an ECA (CDFW 2023b). Although the larger Bowerman Landfill is adjacent to large areas of open space, including Limestone Canyon Nature Preserve and the Irvine Ranch Natural Landmarks, the BSA is located near other developed areas of the Bowerman Landfill where human presence and noise may deter wildlife from using the area. Therefore, while the BSA may provide cover and forage for local wildlife and migrating birds, it is unlikely to provide a significant wildlife movement corridor. In addition, the Project site and Fuel Modification Area consists of a relatively small footprint that would not substantially reduce habitat connectivity in the region. The ability of wildlife to move through adjacent areas would be unaffected.

4.0 FIELD SURVEY METHODS

Biological surveys, including a rare plant survey, were conducted on June 19 and 20, 2023. The surveys were conducted during daylight hours and not during abnormal or excessive cold, heat, wind, rain, or other inclement weather. An Eos Arrow 100 sub-meter Global Positioning System (GPS) unit and a paired tablet running the Geographic Information System (GIS) Field Maps application were used to collect location and attribute data during the surveys. Representative photographs that were taken during the surveys are provided in Appendix A.

The biological surveys were conducted to assess vegetation communities, plant and wildlife species observed, and presence/absence of special-status species that have the potential to occur within the BSA. The BSA includes the Project site (i.e., RNG Plant footprint), Fuel Modification Area, and the proposed pipeline (plus a 50-foot buffer on either side). The survey area around the Project site ended at the adjacent road because the area between the Project site and survey area is developed and does not support biological resources. Any wildlife species or their sign (e.g., nests, burrows, pellets, scat/guano, tracks, roosts) observed or detected during the surveys was recorded and mapped to sub-meter accuracy. Vegetation communities were mapped during the surveys based on dominant plant species present. In addition, potential bird nesting habitat was identified.

The surveys were timed to occur during June when potential rare plant species were in bloom and identifiable. Pedestrian transect surveys were conducted within potential rare plant habitat to survey for rare plants. All rare plants found (i.e., intermediate mariposa lily [*Calochortus weedii* var. *intermedius*]) were mapped to sub-meter accuracy and the number of individuals observed in each population was recorded. A list of all plant and wildlife species observed onsite was recorded (see Tables 1 and 2 in Section 5.1).

5.0 FIELD SURVEY RESULTS

5.1 List of Plants and Wildlife

Plant and wildlife species observed in the BSA are listed in Tables 1 and 2. One rare plant species, intermediate mariposa lily, was found but no special-status wildlife species were observed.

Table 1. Plant Species Observed

Scientific Name	Common Name	Native/Non-Native
<i>Acacia</i> sp.	Acacia	Non-Native
<i>Acmispon glaber</i>	Deerweed	Native
<i>Ambrosia acanthicarpa</i>	Annual bur-sage	Native
<i>Ambrosia psilostachya</i>	Western ragweed	Native
<i>Antirrhinum nuttallianum</i>	Nuttall's snapdragon	Native
<i>Artemisia californica</i>	California sagebrush	Native
<i>Avena</i> sp.	Oat	Non-Native
<i>Baccharis salicifolia</i>	Mule fat	Native
<i>Brachypodium distachyon</i>	False brome	Non-Native
<i>Bromus diandrus</i>	Ripgut grass	Non-Native
<i>Bromus madritensis</i>	Foxtail chess	Non-Native
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate mariposa lily	Native
<i>Calystegia macrostegia</i>	Island morning glory	Native
<i>Centaurea melitensis</i>	Tocalote	Non-Native
<i>Cuscuta californica</i>	California dodder	Native
<i>Cynodon dactylon</i>	Bermuda grass	Non-Native
<i>Daucus</i> sp.	Wild carrot	Native
<i>Deinandra fasciculata</i>	Clustered tarweed	Native
<i>Diplacus aurantiacus</i>	Orange Bush Monkeyflower	Native
<i>Dudleya lanceolata</i>	Lance-leaved dudleya	Native
<i>Dudleya pulverulenta</i>	Chalk dudleya	Native
<i>Encelia californica</i>	Bush sunflower	Native
<i>Encelia farinosa</i>	Brittlebush	Native
<i>Erigeron</i> sp.	Fleabane	Native
<i>Eriogonum fasciculatum</i>	California buckwheat	Native
<i>Eriophyllum confertiflorum</i>	Golden-yarrow	Native
<i>Eschscholzia californica</i>	California poppy	Native
<i>Eucalyptus</i> sp.	Eucalyptus	Non-Native
<i>Foeniculum vulgare</i>	Fennel	Native
<i>Hedypnois rhagadioloides</i>	Crete weed	Non-Native
<i>Helianthus annuus</i>	Common sunflower	Native
<i>Hesperoyucca whipplei</i>	Chaparral yucca	Native
<i>Heteromeles arbutifolia</i>	Toyon	Native

Scientific Name	Common Name	Native/Non-Native
<i>Heterotheca grandiflora</i>	Telegraph weed	Native
<i>Hirschfeldia incana</i>	Mediterranean hoary mustard	Non-Native
<i>Hordeum murinum</i>	wall barley	Non-Native
<i>Isocoma menziesii</i>	Menzies' goldenbush	Native
<i>Lactuca serriola</i>	Prickly lettuce	Non-Native
<i>Lysimachia arvensis</i>	Scarlet pimpernel	Non-Native
<i>Malacothamnus fasciculatus</i>	Chaparral mallow	Native
<i>Malacothrix saxatilis</i>	Cliff aster	Native
<i>Malosma laurina</i>	Laurel sumac	Native
<i>Malva parviflora</i>	Cheeseweed	Non-Native
<i>Marah</i> sp.	Man-root	Native
<i>Marrubium vulgare</i>	White horehound	Non-Native
<i>Melilotus albus</i>	White sweetclover	Non-Native
<i>Melilotus indicus</i>	Sourclover	Non-Native
<i>Mesembryanthemum crystallinum</i>	Crystalline iceplant	Non-Native
<i>Nicotiana glauca</i>	Tree tobacco	Non-Native
<i>Oncosiphon pilulifer</i>	Stinknet	Non-Native
<i>Opuntia littoralis</i>	Coast prickly pear	Native
<i>Pennisetum setaceum</i>	Crimson fountain grass	Non-Native
<i>Phacelia parryi</i>	Parry's phacelia	Native
<i>Pinus</i> sp.	Conifers	Native
<i>Polypogon monspeliensis</i>	Annual beard grass	Non-Native
<i>Quercus agrifolia</i>	Coast live oak	Native
<i>Rhus integrifolia</i>	Lemonade berry	Native
<i>Salsola tragus</i>	Russian thistle	Non-Native
<i>Salvia apiana</i>	White sage	Native
<i>Salvia mellifera</i>	Black sage	Native
<i>Sequoia</i> sp.	Redwoods	Native
<i>Silene laciniata</i>	Cardinal catchfly	Native
<i>Solanum douglasii</i>	Douglas' nightshade	Native
<i>Sonchus oleraceus</i>	Common sow thistle	Non-Native
<i>Verbesina encelioides</i>	Golden crownbeard	Non-Native
<i>Vicia villosa</i>	Hairy vetch	Non-Native

Species in bold text have special-status designation.

Table 2. Wildlife Species Observed

Scientific Name	Common Name	Federal/State Status
Invertebrates		
<i>Apis</i> sp.	Honeybee	None
<i>Coccinellinae</i>	Lady beetles	None
<i>Estigmene</i> sp.	Salt marsh moth	None
<i>Odonata</i>	Dragonflies	None
<i>Papilio</i> sp.	Swallowtails	None
<i>Pepsis</i> sp.	Tarantula hawk	None
<i>Pierinae</i> sp.	Whites (butterfly)	None
Reptiles		
<i>Sceloporus occidentalis</i>	Western fence lizard	None
Birds		
<i>Buteo jamaicensis</i>	Red-tailed hawk	None
<i>Calypte anna</i>	Anna’s hummingbird	None
<i>Cathartes aura</i>	Turkey vulture	None
<i>Chamaea fasciata</i>	Wrenit	None
<i>Corvus corax</i>	Common raven	None
<i>Haemorhous mexicanus</i>	House finch	None
<i>Melospiza melodia</i>	Song sparrow	None
<i>Mimus polyglottos</i>	Northern mockingbird	None
<i>Passerina amoena</i>	Lazuli bunting	None
<i>Pipilo maculatus</i>	Spotted towhee	None
<i>Psaltriparus minimus</i>	Bushtit	None
<i>Sayornis nigricans</i>	Black phoebe	None
<i>Spinus psaltria</i>	Lesser goldfinch	None
<i>Thryomanes bewickii</i>	Bewick’s wren	None
Mammals		
<i>Odocoileus hemionus</i>	Mule deer	None

5.2 Vegetation Communities

The BSA contains multiple vegetation communities, as described below. Table 3 summarizes the vegetation communities observed and their corresponding acreages within the Project site and Fuel Modification Area, BSA (not including pipeline), and proposed pipeline. Vegetation communities are shown in Figure 4.

Table 3. Vegetation Communities

Vegetation Communities	Acres within Project Site and Fuel Modification Area	Acres within BSA (not including pipeline)	Acres along Proposed Pipeline
Sagebrush scrub	2.9	3.6	6.8
Disturbed sagebrush scrub	0.0	0.0	0.2
Coast live oak	0.9	0.9	0.0

Vegetation Communities	Acres within Project Site and Fuel Modification Area	Acres within BSA (not including pipeline)	Acres along Proposed Pipeline
Eucalyptus	0.0	0.0	1.2
Ornamental trees	0.0	0.0	1.0
Disturbed	0.0	0.0	2.4
Developed	0.2	0.3	18.4
Total	4.0	4.8	30.0

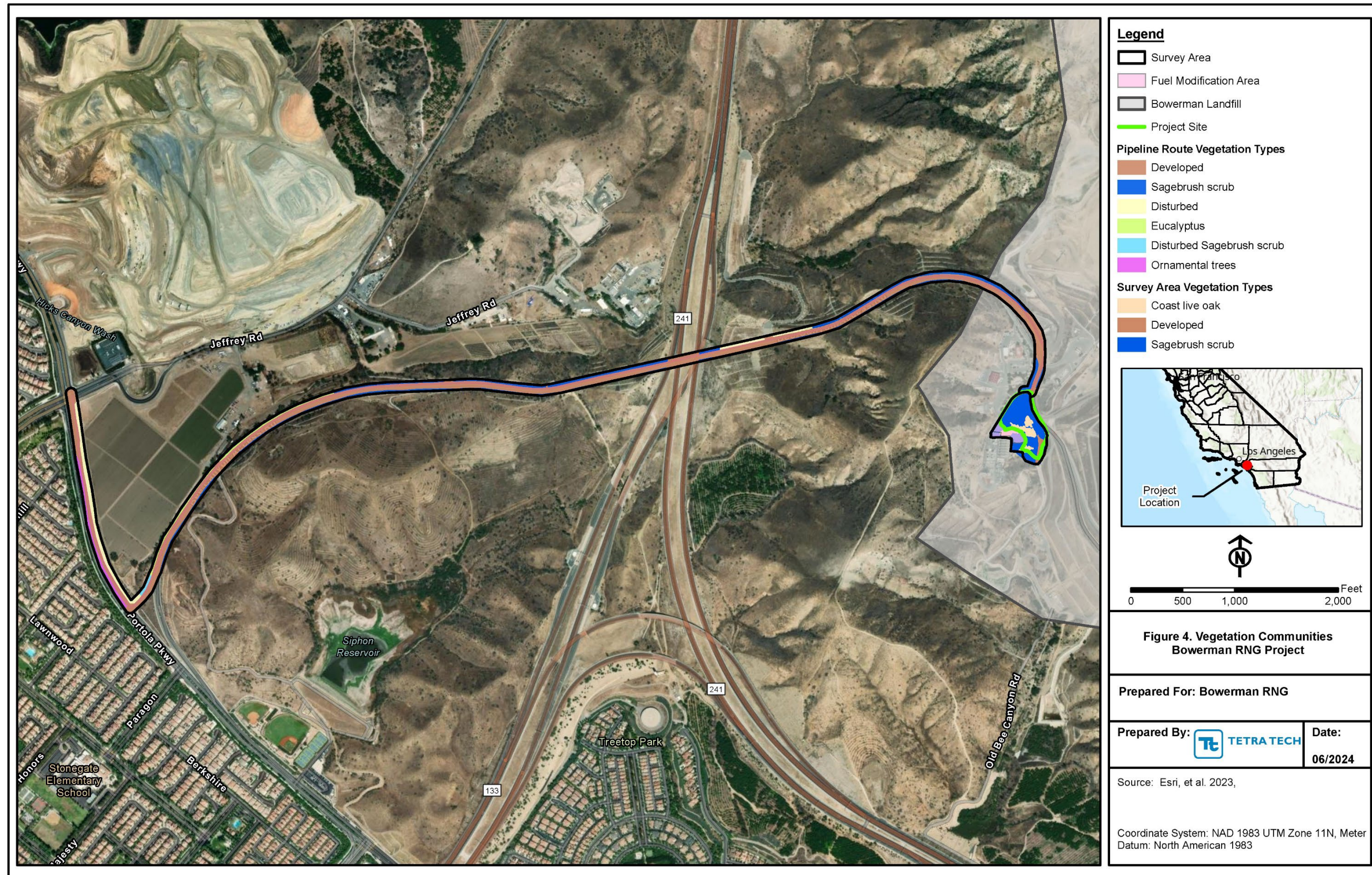
Situated on a northeast-facing slope, the Project site and Fuel Modification Area are covered primarily by inland sage scrub (hereinafter referred to as sagebrush scrub), with bands of coast live oak (*Quercus agrifolia*) habitat present. Within the bounds of the Project site is an approximately 35-foot wide, unvegetated concrete channel. Multiple concrete-lined channels of approximately one-foot width run downslope from the existing LFGTE plant or Bee Canyon Access Road into a wider concrete channel. Soils covered in natural vegetation were generally loose and gravelly. Burrows were not noticeable in areas of natural vegetation because vegetation coverage was dense.

The proposed pipeline route survey area covers Bee Canyon Access Road, Portola Parkway, and these road rights-of-way (ROW) as well as a 50-foot survey buffer on either side of the pipeline (Figure 4). However, direct impacts from pipeline construction will be limited to the existing developed roads. Within the survey buffers outside of the road ROW are some naturally occurring (sagebrush scrub), naturalized (eucalyptus grove), artificial (ornamental trees), and disturbed habitats.

Sagebrush Scrub: Sagebrush scrub covers about 73 percent of the Project site and Fuel Modification Area. This habitat type has over 100 percent vegetation coverage. The dominant shrub within the habitat is California sagebrush (*Artemisia californica*). Interspersed within the California sagebrush are native species such as California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*) and brittlebrush (*Encelia farinosa*). Native succulent species like coast prickly pear (*Opuntia littoralis*), chalk dudleya (*Dudleya pulverulenta*), and lance-leaved dudleya (*Dudleya lanceolata*) are also found interspersed in this habitat. Rock outcrops are present at the top of some of the steep slopes in the sagebrush scrub, mostly bordering the existing facility to the west. Along the edges of this habitat adjacent to the existing facility and spaced between shrubs are patches of non-native species like Mediterranean hoary mustard (*Hirschfeldia incana*) and prickly lettuce (*Lactuca serriola*). Immediately surrounding the existing facility are also non-native grass species, such as oat (*Avena* sp.). Within the sagebrush scrub that occurs along the margins of the coast live oak habitat are populations of the rare plant, intermediate mariposa lily.

The sagebrush scrub habitat adjacent to the proposed pipeline route occurs on a slope and is covered by California buckwheat and California sagebrush. One-foot wide, unvegetated concrete channels run along the roadside and through this habitat.

Disturbed sagebrush scrub occurs adjacent to the proposed pipeline route along the north side of Bee Canyon Access Road near Portola Parkway where there is a gravel pad covered in low-growing (under 1-foot tall) California buckwheat. Interspersed within the buckwheat are ruderal species such as Mediterranean hoary mustard and clustered tarweed (*Deinandra fasciculata*). This area appears to be disturbed by adjacent construction activities.



Not for Construction

Coast Live Oak: Within the Project site and Fuel Modification Area, coast live oaks dominate the tree canopy along the slope. The tree understory is comprised of non-native grasses, like ripgut grass (*Bromus diandrus*) and foxtail chess (*Bromus madritensis*), and sparse coverage of low-growing sagebrush scrub species, like California buckwheat.

Eucalyptus: A strip of eucalyptus (*Eucalyptus* sp.) grove habitat runs along the north side of Bee Canyon Access Road adjacent to the proposed pipeline route. Eucalyptus trees over 15-feet tall dominate this tree canopy. Eucalyptus trees under 8-feet tall, annual grasses, and leaf litter comprise the understory.

Ornamental Trees: Along the south side of Portola Parkway are trees planted for roadside beautification adjacent to the proposed pipeline route. Tree species include acacias (*Acacia* sp.), conifers (*Pinus* sp.), and redwood (*Sequoia* sp.) species. Within the ROW are paved sidewalks and utility boxes.

Disturbed: Hardpan pads along Bee Canyon Access Road adjacent to the proposed pipeline route are vegetated with primarily non-native ruderal species like Mediterranean hoary mustard in addition to very few colonizing shrubs of California sagebrush. Habitat disturbed by current agricultural practices also occurs on the north side of Portola Parkway adjacent to the proposed pipeline route.

Developed: Developed areas within the Project site include the concrete channel that runs from north to south at the base of the slope and along Bee Canyon Access Road. Water runoff from the existing LFGTE facility is fed into this channel through smaller concrete channels and culverts at the north end of the main channel. The main channel bed is filled with soil debris and feeds into an isolated evaporation/collection pool south of the existing facility. Disturbed areas along the proposed pipeline route encompass Bee Canyon Access Road, Portola Parkway, and any structures in and along these roads, such as fencing and gates.

5.3 Raptor and Nesting Bird Habitat

All vegetated areas of the BSA provide suitable nesting habitat for tree-nesting, shrub-nesting, and/or ground-nesting birds. Raptor nesting habitat is present in the form of mature coast live oak trees in the coast live oak habitat in the Project site and Fuel Modification Area and in the eucalyptus tree groves and ornamental trees in the buffer area along the proposed pipeline route.

One raptor species, red-tailed hawk (*Buteo jamaicensis*), was observed during the surveys, as well as other bird species that may nest onsite. However, no nests were observed during the surveys.

5.4 Special-status Wildlife Species

5.4.1 Amphibians

The western spadefoot (*Spea hammondi*) is a CDFW Species of Special Concern (SSC) and an Identified Species under the Central Coastal Subregional Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) that has been previously documented 0.3 mile south of the Project site (CDFW 2023a). The closest breeding habitat is 1.5 miles northwest of the Project site (CDFW 2023a). There are no permanent pools within the BSA that would allow for sustained breeding for this species; therefore, it is unlikely that the onsite upland habitat supports transient individuals

moving from breeding habitat to estivating habitat on a continual basis. However, it should be noted that four adults were observed in an offsite evaporation/collection pool south of the existing facility in 2017 (CDFW 2023a). Because of this and due to the presence of concrete channels, there could be a slight possibility that ephemeral pooling conditions may occur for sufficiently long enough periods during the rainy season to potentially support temporal spadefoot habitat - but regular or sustained occurrence onsite is unlikely.

5.4.2 Reptiles

Orange-throated whiptail (*Aspidoscelis hyperythra*) is a CDFW Watch List (WL) species and is a Target Species under the NCCP/HCP. This species has been previously recorded within less than 0.1 mile of the Project site (CDFW 2023a) and is known to occur in semi-arid brushy areas with loose soil and rocks, in rocky hillside and chaparral habitats. Some of these preferred habitat characteristics for this species are present within the BSA.

Red-diamond rattlesnake (*Crotalus ruber*) is a CDFW SSC and an Identified Species under the NCCP/HCP. This species has been previously recorded 2 miles northeast of the Project site (CDFW 2023a) and is known to occur in arid scrub, coastal chaparral, oak and pine woodlands, and rocky grassland. Some of these preferred habitat characteristics for this species are present within the BSA.

Coast horned lizard (*Phrynosoma blainvillii*) is a CDFW SSC that has been recorded 2 miles northeast of the Project site (CDFW 2023a). The species requires open habitat with loose soils and an abundant supply of ants or other insects. Given the dense vegetation present in the BSA, coast horned lizard is unlikely to occur.

The coast patch-nosed snake (*Salvadora hexalepis virgulata*) is a CDFW SSC that has also been recorded 2 miles northwest of the Project site (CDFW 2023a). This species requires semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Some of these preferred habitat characteristics for this species are present within the BSA.

5.4.3 Birds

The coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is a CDFW SSC and a Target Species under the NCCP/HCP. The nearest recorded occurrence in the CNDDDB is 0.6 mile west of the Project site in 1990; however, this did not include records of nesting (CDFW 2023a). Cactus wren has also been found in the vicinity of the Project site within the larger Bowerman Landfill in 1995, 2002, 2003, and 2005; the nearest record is approximately 1,250 feet away from 2003 (County of Orange Integrated Waste Management Department 2006). It is a resident of the coastal sage scrub plant community but is closely associated with three species of cacti and occurs in thickets of cholla (*Opuntia prolifera*) and coast prickly pear dominated stands of coastal sage scrub (County of Orange Integrated Waste Management Department 2006). Parts of the Bowerman Landfill provide suitable habitat for the coastal cactus wren, particularly within the southern cactus scrub plant community (County of Orange Integrated Waste Management Department 2006). Southern cactus scrub occurs in limited locations within the Bowerman Landfill, where vegetative cover is typically dense, approaching 100 percent, and coast prickly pear comprises a minimum of 20 percent relative cover with other sage scrub species (County of Orange Integrated Waste Management Department 2006). Coast prickly pear were observed onsite in low numbers during the survey but not in thickets or

stands or at or above 20 percent relative cover. No southern cactus scrub was mapped within the BSA. Therefore, the BSA is unlikely to support coastal cactus wren nesting.

Yellow-breasted chat (*Icteria virens*) is a CDFW SSC that has been recorded 1.5 miles southeast of the Project site (CDFW 2023a). During this occurrence, two pairs were observed but nesting was not observed. This species occurs in riparian habitats with a well-developed shrub layer and an open canopy. Suitable habitat requirements for this species are not present in or near the BSA.

The coastal California gnatcatcher (*Polioptila californica californica*) is a federally threatened species, a CDFW SSC, and Target Species under the NCCP/HCP. The nearest recorded occurrence is along the western boundary of the Project site and the southern boundary of the proposed pipeline route (CDFW 2023a). Additional nesting observations have been recorded at the Siphon Reservoir, which is 1.5 miles west of the Project site and 0.5 mile south of the proposed pipeline route (CDFW 2023a). Foraging habitat onsite includes California buckwheat, California sagebrush, and coast prickly pear. As such, suitable habitat requirements are found in the BSA for this species.

The least Bell's vireo (*Vireo bellii pusillus*) is a federally and state endangered species and is a Conditionally Covered Species under the NCCP/HCP. The nearest known occurrence for this species is at the Siphon Reservoir approximately 1.5 miles west of the Project site and 0.5 mile south of the proposed pipeline route (CDFW 2023a). However, this species' habitat consists of low-elevation riparian species in proximity to water or in dry river bottoms. They typically nest in willows, coyote brush, or mesquite. As such, preferred nesting habitat for this species does not exist within the BSA.

5.5 Rare Plants

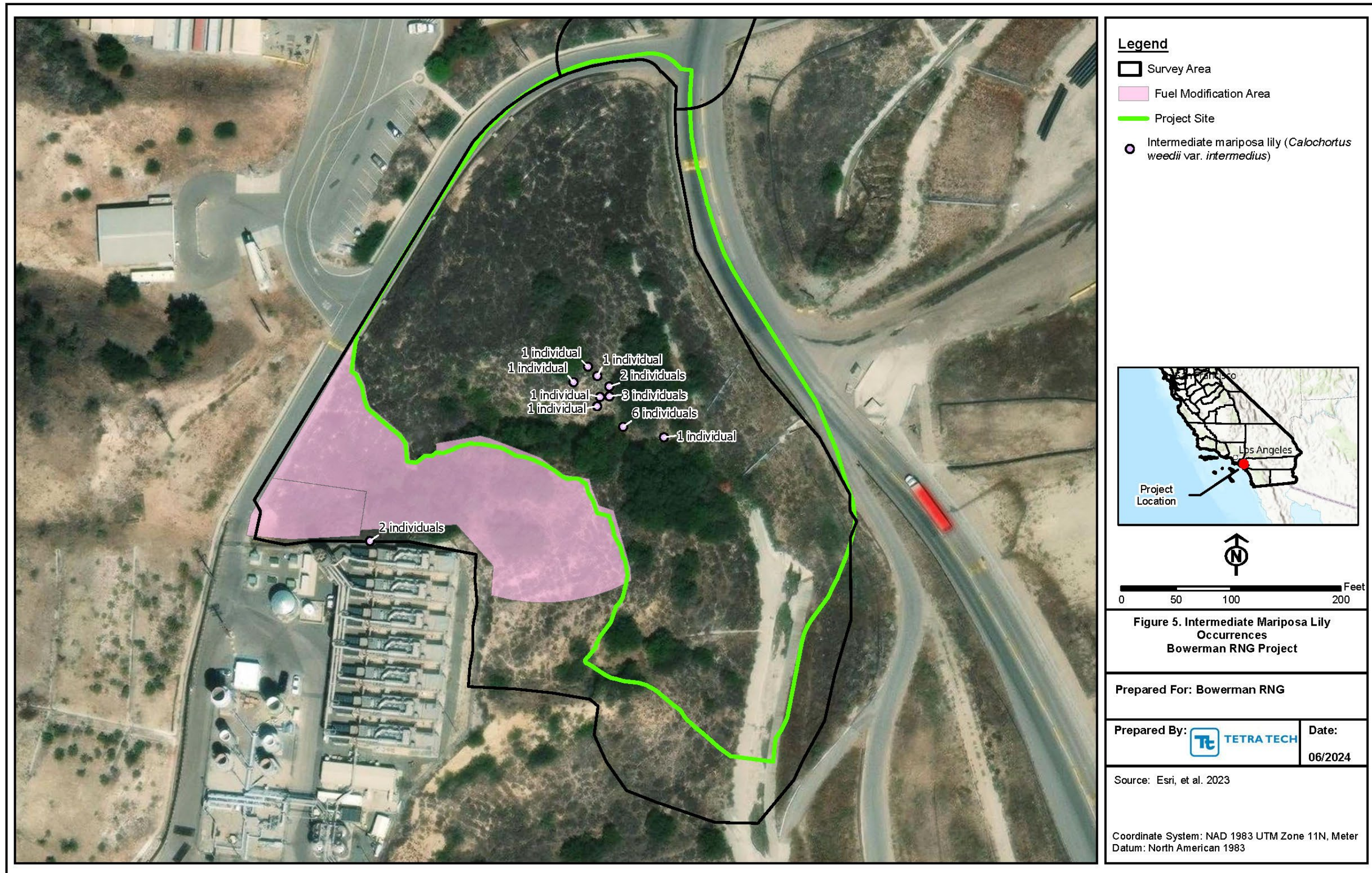
Rare plants searched for in the BSA included intermediate mariposa lily and many-stemmed dudleya (*Dudleya multicaulis*). Robinson's pepper-grass (*Lepidium virginicum var. robinsonii*) and intermediate monardella (*Monardella hypoleuca ssp. intermedia*) also had potential to occur. Intermediate mariposa lily, a CNPS California Rare Plant Rank (CRPR) 1B.2 species and Conditionally Covered Species under the NCCP/HCP, was the only rare plant observed during the surveys. Populations with a total of 17 individuals occurred within the center of the proposed RNG Plant site. A population with 2 individuals was found outside the Project site and Fuel Modification Area but within the BSA near the existing LFGTE plant and flare station (Figure 5). Table 4 provides additional details on the intermediate mariposa lily populations observed.

Table 4. Rare Plant Survey Results

Intermediate Mariposa Lily Points	Number of Individuals
1	1
2	1
3	1
4	6
5	1
6	2
7	3
8	1

Intermediate Mariposa Lily Points	Number of Individuals
9	1
10*	2
TOTAL	19

*This population is located outside of the Project site and Fuel Modification Area.



Not for Construction

5.6 Summary of Special-status Species

Based on the results of the field surveys, the potential to occur for each special-status plant and wildlife species has been reviewed and updated, as described in Table 5. Species are not included in the table that have no habitat in the BSA, such as species that only use tidal, coastal dune, or montane woodland habitats.

Table 5. Special-Status Species with Potential to Occur

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary	Probability To Occur Within the Project Site and Fuel Modification Area	Probability To Occur Within the Pipeline Buffer
Plants						
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate mariposa-lily	None	CRPR 1B.2	During the June 2023 survey, 19 individuals of this plant were observed; 17 individuals are located within the Project site and 2 individuals are outside of the Project site. None were found within the Fuel Modification Area. There are 16 recorded observations of this species within 2 miles of the BSA, with five recorded observations being immediately outside of the Project site (CDFW 2023a). This plant is found on dry, rocky slopes at less than 680 meters elevation. Its blooming period is June to July.	Observed in sagebrush scrub habitat.	Medium in undisturbed sagebrush scrub. Unlikely to occur elsewhere.
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	None	CRPR 1B.2	Although individuals of lanceleaf liveforever were found in the BSA, no many-stemmed dudleya individuals were observed. The closest known occurrence of many-stemmed dudleya is located approximately 2 miles from the Project site in a nature reserve within Limestone Canyon Regional Park (CDFW 2023a). This plant is found in clay soils on coastal plains and sandstone outcrops at less than 600 meters elevation. Its blooming period is from May to June.	Although there is medium potential for this species to occur in sagebrush scrub, it was not observed during the field surveys.	Medium in undisturbed sagebrush scrub. Unlikely to occur elsewhere.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	None	CRPR 4.3	Previously recorded observations have been documented 2 miles north of the Project site along a riverbank (CDFW 2023a). This species' habitat consists of dry, disturbed areas, cliffs, and scrub. This plant is found at elevations less than 2,800 meters. Its blooming period is from March to June.	Although there is medium potential for this species to occur in sagebrush scrub and oak habitat, it was not observed during the field surveys.	Medium in sagebrush scrub. Unlikely to occur elsewhere.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary	Probability To Occur Within the Project Site and Fuel Modification Area	Probability To Occur Within the Pipeline Buffer
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	Intermediate monardella	None	CRPR 1B.3	One large population is documented in the Limestone Canyon Regional Park 2 miles northeast of the Project site (CDFW 2023a). This species' habitat consists of chaparral, oak woodland, and dry slopes. This plant is found at an elevation of 200 to 1,250 meters. Its blooming period is from June to September.	Medium in area of oak habitat.	Unlikely to occur due to lack of habitat.
Amphibians						
<i>Spea hammondi</i>	Western spadefoot	None	SSC	The nearest recorded observation for western spadefoot is 0.3 mile south of the Project site. In 2017, four adults were observed in evaporation/collection pool south of the existing facility (CDFW 2023a). The nearest recorded breeding habitat is 1.5 miles northwest of the Project site (CDFW 2023a). The Project site is 0.75 mile from the nearest natural pool of water. This species requires pooling water that lasts four to eleven weeks for breeding. This species' habitat consists of open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, coastal sage scrub, chaparral, sandy washes, and foothills. There were no permanent pools observed in the BSA during surveys which would allow for sustained breeding habitat.	Since there is no sustained breeding habitat onsite due to the absence of permanent pools, the onsite uplands are not expected to provide potential sustained estivation habitat.	Unlikely to occur in all habitats.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary	Probability To Occur Within the Project Site and Fuel Modification Area	Probability To Occur Within the Pipeline Buffer
Reptiles						
<i>Aspidoscelis hyperythra</i>	Orange-throated whiptail	None	WL	There is one recorded observation of several adults less than 0.1 mile from the Project site from 2005 (CDFW 2023a). Additional observations have been recorded at Siphon reservoir, approximately 0.5 mile south of the proposed pipeline route from 1990 (CDFW 2023a). This species' habitat consists of semi-arid brushy areas with loose soil and rocks, in rocky hillsides, and coastal chaparral and scrub habitats. There are records of this species near the BSA.	High in area of sagebrush scrub and oak habitat.	High in undisturbed sagebrush scrub. Unlikely to occur elsewhere.
<i>Crotalus ruber</i>	Red-diamond rattlesnake	None	SSC	The nearest recorded observation for red-diamond rattlesnake is 2 miles northeast of the Project site. One individual was captured during a pitfall trap study in Limestone Canyon Regional Park in 1999. The extension of the landfill since its initial construction in 1990 has further fragmented the previously available natural habitat for this species surrounding the BSA. Reptiles are relatively fossorial species which spend periods of the year underground until suitable temperatures rebound and prey are accessible. These conditions can lead to low population counts and recorded observations. This species' habitat consists of arid scrub, coastal chaparral, oak and pine woodlands, and rocky grassland.	Medium in area of sagebrush scrub and oak habitat.	Medium in undisturbed sagebrush scrub. Unlikely to occur elsewhere.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary	Probability To Occur Within the Project Site and Fuel Modification Area	Probability To Occur Within the Pipeline Buffer
<i>Phrynosoma blainvillii</i>	Coast horned lizard	None	SSC	The nearest recorded observation of coast horned lizard is 2 miles northeast of the Project site. A total of 43 individuals were captured during a pitfall trap study in Limestone Canyon Regional Park in 1999 (CDFW 2023a). This species requires open habitat with loose soils for burial and an abundant supply of ants or other insects. The conditions onsite consist of dense vegetation coverage which is incompatible with the habitat needs of coast horned lizard.	Low in all habitats.	Low in all habitats.
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	None	SSC	The nearest recorded observation for coast patch-nosed snake is 2 miles northeast of the Project site. Two individuals were captured during a pitfall trap study in Limestone Canyon Regional Park in 1999. The extension of the landfill since its initial construction in 1990 has further fragmented the previously available natural habitat for this species surrounding the BSA. Reptiles are relatively fossorial species which spend periods of the year underground until suitable temperatures rebound and prey are accessible. These conditions can lead to low population counts and recorded observations.	Medium in area of sagebrush scrub and oak habitat.	Medium in undisturbed sagebrush scrub. Unlikely to occur elsewhere.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary	Probability To Occur Within the Project Site and Fuel Modification Area	Probability To Occur Within the Pipeline Buffer
Birds						
<i>Campylorhynchus brunneicapillus sandiegensis</i>	Coastal cactus wren	None	SSC	The nearest recorded observation for this species in the CNDDDB is 0.6 mile west of the Project site in 1990; this locality did not include records of nesting (CDFW 2023a). Cactus wren has also been found in the vicinity of the Project site within the larger Bowerman Landfill in 1995, 2002, 2003, and 2005; the nearest record is approximately 1,250 feet away from 2003 (County of Orange Integrated Waste Management Department 2006). It is a resident of the coastal sage scrub plant community but is closely associated with three species of cacti and occurs in thickets of cholla and coast prickly pear dominated stands of coastal sage scrub (County of Orange Integrated Waste Management Department 2006). Coast prickly pear were observed onsite in low numbers during the survey but not in thickets or stands or at or above 20 percent relative cover which could provide nesting habitat for this species.	Suitable nesting habitat for this species is not present.	Suitable nesting habitat for this species is not present.
<i>Icteria virens</i>	Yellow-breasted chat	None	SSC	The nearest recorded observation for this species is 1.5 miles southeast from the Project site; two pairs were observed in a nearby park, but no nests observed (CDFW 2023a). This species prefers riparian habitats with a well-developed shrub layer and an open canopy. Nesting habitat is typically limited to the margin of streams, creeks, sloughs, and rivers.	Suitable habitat requirements for this species are not present.	Suitable habitat requirements for this species are not present.

Scientific Name	Common Name	Federal Status	State Status/ Other Status	Summary	Probability To Occur Within the Project Site and Fuel Modification Area	Probability To Occur Within the Pipeline Buffer
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	Threatened	SSC	The nearest recorded observation for this species is along the western boundary of the Project site and southern boundary of the proposed pipeline route (CDFW 2023a). Additional observations of nesting have been recorded at the Siphon Reservoir, which is 1.5 miles west of the Project site and 0.5 miles south of the proposed pipeline route where successful nesting has been documented up to 2015 (CDFW 2023a). Foraging habitat for this species consists of California buckwheat, California sagebrush, and cacti. General habitat preferences consist of coastal sage scrub habitat in arid washes, on mesas, and on slopes of coastal hills.	Medium in area of sagebrush scrub.	Medium in undisturbed sagebrush scrub. Unlikely to occur elsewhere.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	Endangered	Endangered	The Siphon Reservoir provides habitat for least Bell's vireo individuals found within the vicinity of the Project site; one successful nest was documented at this location in 2001 (CDFW 2023a). This species prefers low-elevation riparian habitat in proximity to water or in dry river bottoms. They nest along the margins of bushes or on twigs, usually in willows (<i>Salix</i> sp.), coyote brush (<i>Baccharis</i> sp.), or mesquite (<i>Prosopis</i> sp.).	Suitable habitat requirements for this species are not present.	Suitable habitat requirements for this species are not present.

Federally-listed endangered: an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

Federally-listed threatened: an animal or plant in danger of becoming endangered within the foreseeable future throughout all or a significant portion of its range.

State-listed threatened: "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts (Fish and Game Code § 2067).

SSC = CDFW Species of Special Concern: "Species of Special Concern" means a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following criteria:

- Is extirpated from California or, in the case of birds, is extirpated in its primary season or breeding role;
- Is federally listed, but not state listed, as threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; and/or
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

WL = CDFW Watch List: animal taxa that were previously designated as SSC but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Tracked by CDFW: species tracked by CDFW but that do not have a designated federal or state status.

CRPR = California Rare Plant Rank:

1B = Plants rare, threatened, or endangered in California and elsewhere.

2B = Plants rare, threatened, or endangered in California but more common elsewhere.

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

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

6.0 CONCLUSION AND RECOMMENDATIONS

The recommendations within this report are preliminary and will be refined during the California Environmental Quality Act (CEQA) process as more details about the Project design and schedule are determined. The Project falls under the Central Coastal Subregional NCCP/HCP as the Bowerman Landfill is in the Central Subregion area of the NCCP Reserve. Projects within the NCCP must comply with its requirements, including Construction Minimization Measures, pre-construction surveys, and associated mitigation plans if covered species are detected. The NCCP/HCP provides Incidental Take coverage related to permitted uses within the Reserve system.

One rare plant species, intermediate mariposa lily (CRPR 1B.2), was found on the Project site during the surveys. CRPR 1B.2 applies to species that are rare, threatened, or endangered in California and elsewhere, and are fairly threatened in California. It is recommended that Project impacts avoid the onsite populations of this species to the maximum extent feasible. While intermediate mariposa lily is not federally or state listed, impacts to this species must be evaluated in the CEQA document due to its designation as a CRPR 1B.2 rare plant species and as a Conditionally Covered Species under the NCCP/HCP. Per requirements in the NCCP/HCP, if less than 20 individuals of intermediate mariposa lily are observed in the impact area, no mitigation would be required. If more than 20 individuals are observed, mitigation will be required. During the 2023 surveys, 19 individuals were observed in the BSA (17 individuals within the proposed Project site, and 2 individuals outside of the proposed Project site but near the Fuel Modification Area). No individuals were found in the Fuel Modification Area. The following preliminary mitigation measures are recommended for this species:

- To address potential Project impacts to intermediate mariposa lily, an in-lieu fee shall be paid via minor amendment to the NCCP/HCP, as approved by USFWS and CDFW. The in-lieu fee will contribute to a management and monitoring program for rare plants in the Nature Reserve of Orange County.
- Silt fencing or flagging shall be installed under the guidance of a biological monitor along the limits of coastal sage scrub areas that are immediately outside of the grading/impact limits. The silt fencing/flagging shall be used to minimize impacts to sensitive natural resources including special-status plant species and native plant communities outside and immediately adjacent to the grading limits. Construction activities and personnel will be restricted within these adjacent coastal sage scrub areas and a biological monitor will be present during the silt fence/flagging installation and removal.

The Project as currently designed will impact 2.9 acres of sagebrush scrub in the Project site and Fuel Modification Area, potential habitat for coastal California gnatcatcher, coastal cactus wren, and orange-throated whiptail. Such impacts shall be mitigated through OCWR's participation and contribution in the Central Coastal NCCP/HCP. Specifically, the coastal California gnatcatcher, coastal cactus wren, and orange-throated whiptail are Target Species for which the NCCP/HCP has allocated a total of 206 acres of authorized coastal sage scrub take to occur within the Bowerman Landfill boundary after amendments to the EIR and NCCP/HCP. There is 38.74 acres of remaining take for future landfill development phases, including Phase IX and X. The area of impact for this proposed Project is located entirely within Phase X of the Landfill Development, which is projected to impact

25.41 acres of coastal sage scrub habitat. Therefore, the 2.9 acres of proposed impacts to coastal sage scrub from this Project shall be mitigated by debiting OCWR's available take credit.

In addition, the following Construction Minimization Measures required by the NCCP/HCP shall be followed:

- Impacts to coastal sage scrub habitat shall occur outside the breeding and nesting season of the coastal California gnatcatcher (February 15 through July 15) to the extent practicable.
- A pre-construction survey shall be conducted within the Project site and Fuel Modification Area to determine the presence/absence of coastal California gnatcatcher and coastal cactus wren prior to clearing or grading activities. The survey shall include a 100-foot buffer around the grading limits. Any coastal California gnatcatcher or coastal cactus wren observations shall be recorded and marked on the construction/grading plans.
- All coastal sage scrub habitat outside of the Project impact area shall be fenced or marked with materials prior to the commencement of grading. No construction access, parking, or storage of equipment or materials shall be allowed within these areas.
- A qualified biologist shall conduct and document a pre-construction meeting to educate construction staff (including supervisors, equipment operators, and other site employees) on the conservation measures required for the Project.
- A qualified biologist shall monitor the clearing of coastal sage scrub and oak woodland. USFWS/CDFW shall be notified at least 7 calendar days (preferably 14 calendar days) prior to disturbing habitat occupied by Target/Identified Species, if observed. The qualified biologist shall ensure that clearing activities and earth-moving equipment do not harm coastal California gnatcatchers or coastal cactus wren. The biologist shall also ensure that these activities do not harm other species that may occur, including western spadefoot, orange-throated whiptail, red-diamond rattlesnake, and coast patch-nosed snake.
- The access road shall be sprayed with water on occasion to reduce dust accumulation on the leaves of coastal sage scrub species, as overseen by the biological monitor.

Development activities that are addressed by the NCCP/HCP are considered fully mitigated under the NCCP Act and state and federal Endangered Species Acts for impacts to habitat occupied by listed species, NCCP Target Species, and other NCCP "Identified Species" and to "covered habitats" that these species are dependent upon or associated with. Species that have potential to occur in the BSA that qualify as NCCP Target Species or Identified Species include coastal California gnatcatcher, coastal cactus wren, orange-throated whiptail, red-diamond rattlesnake, western spadefoot, and other nesting birds and common wildlife species. Adhering to the requirements of the NCCP policies and procedures ensures no further mitigation is necessary.

Raptors and other birds have the potential to nest in the BSA and surrounding areas. For example, mature trees that could support nesting passerines and raptors were found in the areas mapped as coast live oak in the Project site and Fuel Modification Area and eucalyptus along the proposed

pipeline route (Figure 4). All vegetated areas of the BSA have the potential to support nesting birds. To protect raptors and other nesting birds, the following measures are recommended:



- Avoid ground-disturbing and vegetation removal activities during the nesting bird season (February 15 to September 15). If these activities must occur during the nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist on and within 300 feet of the Project construction area. The survey shall be conducted no more than 10 days prior to initiation of ground-disturbance, vegetation clearing, or construction activities and shall be repeated between Project delays of greater than 10 days during the nesting season.
- If an active nest is found, an appropriate no-disturbance buffer for the species shall be visibly established in the field by a qualified biologist (e.g., flagging, staking, caution tape). No ground-disturbing or vegetation removal activities shall occur within the buffer until the nesting season has ended or the nest is vacated and juveniles have fledged, as determined by the qualified biologist. At the discretion of a qualified biologist, limited encroachment into the buffer may occur for non-listed bird species but no disturbance of active nests or nesting activities is allowed per the Migratory Bird Treaty Act.



Recommendations regarding jurisdictional areas are described in the jurisdictional delineation report (Tetra Tech 2024).



7.0 REFERENCES

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APPENDIX A: PHOTOGRAPHS

Photograph 1	
Location: Project site	
Notes: Coast live oak habitat.	
Photograph 2	
Location: Project site	
Notes: Sagebrush scrub habitat.	

Photograph 3	 A photograph showing a concrete channel at the toe of a slope. The channel is filled with dark, silty water and debris. The slope is covered in sparse vegetation and appears to be a landfill or construction site. The sky is clear and blue.
Location: Project site	
Notes: The concrete channel at the toe of the slope.	
Photograph 4	 A photograph showing a proposed pipeline route. The route is a paved road that runs through a landscape with hills and vegetation. There are some structures and a fence in the background. The sky is blue with some clouds.
Location: Proposed Pipeline Route	
Notes: Bee Canyon Access Road and structures associated with the landfill.	

Photograph 5	
Location: Proposed Pipeline Route	
Notes: Vegetated pad within a disturbed area.	
Photograph 6	
Location: Proposed Pipeline Route	
Notes: Sagebrush scrub habitat along Bee Canyon Access Road.	

Photograph 7	
Location: Proposed Pipeline Route	
Notes: Eucalyptus grove habitat alongside Bee Canyon Access Road.	
Photograph 9	
Location: Project site	
Notes: An intermediate mariposa lily found on the Project site.	

Photograph 10	
Location: Project site	
Notes: Representative photo of the intermediate mariposa lily habitat on the Project site.	