Biological Technical Report

Flint Canyon Wash Trail Restoration Project

City of La Cañada Flintridge, Los Angeles County, California



Prepared for:

PACE | Advanced Water Engineering 17520 Newhope Street, Suite 200 Fountain Valley, California 92708 on behalf of City of La Cañada Flintridge

February 2021



CONTENTS

1.0	INTRO	DDUCTIO	N	1
	1.1	Projec	t Location	1
	1.2	Projec	t Description	1
2.0	REGU	LATORY	REQUIREMENTS	4
	2.1	Federa	al Regulations	4
		2.1.1	Federal Endangered Species Act	4
		2.1.2	Migratory Bird Treaty Act	4
		2.1.3	Federal Clean Water Act	4
	2.2	State a	and Local Regulations	5
		2.2.1	California Endangered Species Act	5
		2.2.2	Fully Protected Species	5
		2.2.3	Native Plant Protection Act	6
		2.2.4	California Fish and Game Code	6
		2.2.5	Porter Cologne Water Quality Control Act	6
		2.2.6	Waters of the State	7
		2.2.7	City of La Cañada Flintridge Tree Ordinance	7
		2.2.8	City of Pasadena Tree Ordinance	7
		2.2.9	CEQA Significance Criteria	8
3.0	METH	IODS		9
	3.1	Literat	ure Search	9
	3.2	Biolog	ical Resource Assessment Field Survey	10
4.0	RESUI	LTS		11
	4.1	Biolog	ical Resource Assessment Field Surveys	11
	4.2	Site Cl	naracteristics and Land Use	11
	4.3	Vegeta	ation Communities/Habitats	11
		4.3.1	Coast Live Oak Woodland – (Quercus agrifolia Woodland Alliance)	14
		4.3.2	Goodding's Willow – Red Willow Riparian Woodland and Forest (Salix good - Salix laevigata Woodland & Forest Alliance)	_
		4.3.3	California Sagebrush Scrub (Artemisia californica Shrubland Alliance)	15
		4.3.4	California Sagebrush – California Buckwheat Scrub (Artemisia californica – Eriogonum fasciculatum Shrubland Alliance)	15
		4.3.5	Eucalyptus – Tree of Heaven – Black Locust Groves – (Eucalyptus spp Ailan altissima - Robinia pseudoacacia Woodland Semi-Natural Alliance)	
		4.3.6	Disturbed	16
		4.3.7	Landscaped	16

i

		4.3.8	Developed	16		
		4.3.9	Developed/Landscaped	16		
	4.4	Wildlife	·	17		
	4.5	Special-Status Species				
		4.5.1	Special-Status Plants	17		
		4.5.2	Special-Status Wildlife	24		
		4.5.3	Critical Habitat	28		
		4.5.4	Raptors and Migratory Birds	28		
	4.6	Wildlife	Movement Corridors and Linkages	30		
		4.6.1	Aquatic Resources Delineation	30		
		4.6.2	Local Policies and Ordinances	31		
	4.7	Approv	red Local, Regional, or State Conservation Plans	31		
5.0	IMPAC [*]	T ANALY	'SIS	31		
	5.1	Vegeta	tion Communities/Habitats	31		
	5.2	Impact	s to Sensitive Plant and Wildlife Species	32		
		5.2.1	Listed and Special-Status Plant Species	32		
		5.2.2	Listed, Fully Protected, Candidate, and Special-Status Wildlife Species	32		
		5.2.3	Critical Habitat	33		
		5.2.4	Raptors and Migratory Birds	33		
	5.3	Impacts	s to Wildlife Movement Corridors and Linkages	33		
	5.4	Impacts	s to Aquatic Resources	34		
	5.5	Impacts	s to Local Policies and Ordinances	34		
	5.6	Impact	s to Approved Local, Regional, or State Conservation Plans	34		
6.0	MITIGA	TION M	EASURES	34		
7.0	LITERA	TURE CIT	TED	38		
<u>LIST OI</u>	F TABLE	<u>s</u>				
Table 1	. Survey	Weathe	r Conditions	11		
Table 2	. Vegeta	tion Cor	nmunities and Land Covers within Project Area	12		
Table 3	. Vegeta	tion Cor	nmunities and Land Covers within Project Impact Area	14		

LIST OF FIGURES

Figure 1. Project Vicinity	2
Figure 2. Project Area	
Figure 3. Vegetation Communities and Land Cover Type	13
Figure 4. Natural Resources Impacts	19
Figure 5. Critical Habitat and Significant Ecological Areas	29

LIST OF APPENDICES

Appendix A - Representative Site Photographs

Appendix B - Plant Compendium

Appendix C - Wildlife Compendium

Appendix D - Potential for Occurrence of Special-Status Plant Species

Appendix E - Potential for Occurrence of Special-Status Wildlife Species

1.0 INTRODUCTION

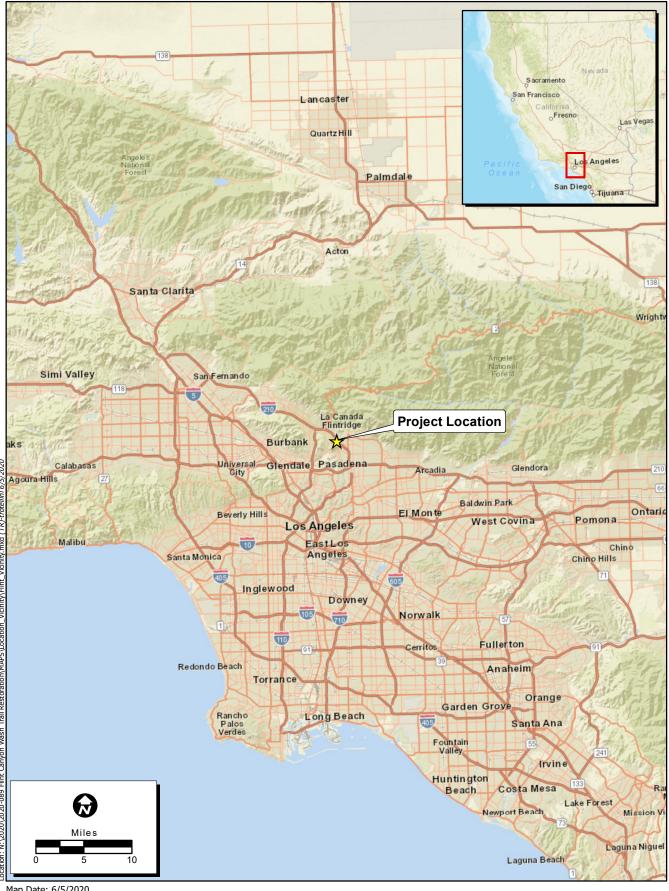
This report presents the findings of a biological resources assessment conducted by ECORP Consulting, Inc. for improvements by the City of La Cañada Flintridge (City) of a 1000-foot section of the Flint Canyon Wash Trail (project) located in Los Angeles County, California. The biological resources assessment was conducted as a preliminary step in the California Environmental Quality Act (CEQA) planning process to determine sensitive biological resources that may be affected by the project.

1.1 Project Location

The project is located in the cities of La Cañada Flintridge and Pasadena in Los Angeles County, California (Figure 1). The portion of the trail to be improved is located between Hahamongna Watershed Park (formerly Oak Grove Park) located in the City of Pasadena to the southeast and Berkshire Place to the northwest. The project is within the U.S. Geological Survey (USGS) 7.5-minute Pasadena topographic quadrangle, San Bernardino Base Meridian, in Section 7 Township 1 North, Range 12 West (Figure 2). Elevations within the proposed project impact area range from approximately 1,019-1,108 feet (ft) (310-338 meters) above mean sea level (msl).

1.2 Project Description

The proposed project includes improvements to a 1000-foot section (project area) of the 2.4-mile-long Flint Canyon Wash Trail (trail) to prevent stream flows from eroding and undercutting the slope below the trail. The project area encompasses approximately 20.27 acres. The trail has been eroded on its downslope due to severe rainstorms and runoff from the Flint Canyon Wash. In 2009 the City completed extensive repairs with grant funds to the eroded areas on the upslope of the trail. Although the upslope was repaired, the downslope has continued to erode. The proposed project will be funded by a Proposition 68 Santa Monica Mountains Conservancy Grant.



Map Date: 6/5/2020 Sources:



Figure 1. Project Vicinity



Map Date: 8/18/2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



2.0 REGULATORY REQUIREMENTS

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and wildlife that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (FGC).

2.1.3 Federal Clean Water Act

Tiering off of the Rivers and Harbors Act of 1899, which primarily pertains to discharge of fill into navigable waters, the federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." The U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into Waters of the U.S. under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into Waters of the U.S., including, but not limited to the following: placement of fill necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 CFR § 328.2(f)]. In addition, Section 401 of the CWA (33 U.S. Code 1341) requires any applicant for a federal license or permit to conduct any activity that may

result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Substantial impacts to wetlands, more than 0.5 acre of impact, may require an individual permit. Projects that only minimally affect wetlands, less than 0.5 acre of impact, may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the local Regional Water Quality Control Board (RWQCB) under the authority of the State Water Resources Control Board (SWRCB). For this project, the Colorado River RWQCB has jurisdiction.

Recently a new ruling called the Navigable Waters Protection Rule came into effect June 22, 2020. Under this ruling, the definition of the term "Waters of the United States" encompasses:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

This latest Rule also excludes several waters and other features not mentioned in the above definition, including "ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools."

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code (FGC) prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the FGC as "hunt, pursue, catch, capture, or kill," CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time.

Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the FGC.

2.2.4 California Fish and Game Code

Streambed Alteration Agreement

Section 1602 of the CFGC requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

Non-Game Native Birds

CDFW enforces the protection of non-game native birds in Sections 3503, 3503.5, and 3800 of the FGC. Section 3513 of the FGC prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California non-game native birds' nests and also make it unlawful to take these birds. All raptor species are protected from "take" pursuant to FGC Section 3503.5 and are also protected at the federal level by the Migratory Bird Treaty Act of 1918.

2.2.5 Porter Cologne Water Quality Control Act

The SWRCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Control Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Control Act, the SWRCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" (Water Code 13260[a]). A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Quality Control Board, administered by each of nine California Regional Water Quality Control Boards (RWQCBs). This area is under the jurisdiction of the Los Angeles RWQCB.

2.2.6 Waters of the State

Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code 13050[e]). The SWRCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by the USACE due to a lack of connectivity with a navigable water body. The SWRCB may require issuance of Waste Discharge Requirements for these activities.

On April 2, 2019, the SWRCB adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (referred to as the Procedures) for inclusion in the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Resolution No. 2019-0015). The new Procedures include the following:

- Definition of wetlands and aquatic resources that are Waters of the State;
- Description of application requirements for individual orders (not general orders) for water quality certification, or waste discharge requirements;
- Description of information required in compensatory mitigation plans; and
- Definition of exemptions to application procedures.

The Office of Administrative Law approved the procedures on August 28, 2019, and the rule went into effect May 28, 2020.

2.2.7 City of La Cañada Flintridge Tree Ordinance

The City of La Cañada Flintridge Municipal Code, Section 4.24, applies to the removal of City trees in the public right-of-way. Section 4.24.020 of the City of La Cañada Flintridge Municipal Code defines a City tree as any tree present in the public right-of-way and defines the public right-of-way as any city-owned or controlled property used for public travel and/or as a buffer between road use and private property (La Cañada Flintridge 2020). Pursuant to the City of La Cañada Flintridge Tree Ordinance, if project impacts require the removal of City trees, the project should adhere to Sections 4.24.060 and 4.24.100 of the City's Municipal Code and consultation with a City approved arborist may be required.

2.2.8 City of Pasadena Tree Ordinance

Because a portion of the eastern extent of the project area is located within the City of Pasadena, this portion of the project should adhere to the City of Pasadena's Tree Ordinance. The City of Pasadena Municipal Code, Section 8.52, serves to protect native, specimen, landmark, public, and mature trees. Section 8.52.020 defines a native tree as any tree with a trunk more than 8 inches in diameter at a height of 4 ½ feet above natural grade that is one of the following species: coast live oak (*Quercus agrifolia*), Engelmann oak (*Quercus engelmannii*), canyon oak (*Quercus chrysolepis*), western sycamore (*Platanus racemosa*), Southern California black walnut (*Juglans californica*), scrub oak (*Quercus berberidifolia*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), black cottonwood (*Populus trichocarpa*), arroyo willow (*Salix lasiolepis*), and California buckeye (*Aesculus californica*); a public tree as any tree located in a place or area under ownership or control of the City of Pasadena; and a mature tree as an otherwise non-protected tree with a

diameter-at-breast-height (DBH) of 19 inches or greater (City of Pasadena 2020). Pursuant to the City of Pasadena Tree Ordinance, if project activities have the potential to injure or require the removal of any protected tree, as defined in Section 8.52.020, the project should adhere to the ordinance's tree protection guidelines, unless the project is found to be exempt under Section 8.52.080.

2.2.9 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Search

Prior to conducting the field portion of the assessment, a literature search was performed using CDFW's *California Natural Diversity Data Base* (CNDDB; CDFW 2020a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2020) to determine the special-status species that have been documented in the Sunland, Condor Peak, Chilao Flat, Burbank, Pasadena, Mount Wilson, Hollywood, Los Angeles, and El Monte 7.5-minute topographic quadrangles. Additional information was gathered from the following sources:

- CDFW CNDDB Special Animals List (CDFW 2019);
- CNDDB Special Vascular Plants, Bryophytes and Lichens List (CDFW 2020b);
- The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012);
- The Manual of California Vegetation, 2nd Edition (Sawyer, et al. 2009); and
- Various online websites (e.g., Calflora 2020, Consortium of California Herbaria [CCH] 2020).

Using this information and observations in the field, a list of special-status plant and wildlife species that may have the potential to occur within the project area was generated. For the purposes of this assessment, special-status species are defined as plants or wildlife that:

- Have been designated as either rare, threatened, or endangered by CDFW or the USFWS, and are protected under either the CESA or FESA;
- Are candidate species being considered or proposed for listing under these same acts;
- Are fully protected by the California Fish and Game Code, Sections 3511, 4700, 5050, or 5515;
 and/or
- Are of expressed concern to resource and regulatory agencies, or local jurisdictions.

Sensitive species reported for the region in the literature search or for which suitable habitat occurs on the project area were assessed for potential to occur within the area based on the following guidelines:

Present: Species was observed within the project area during a site visit or focused survey.

Habitat (including soils and elevation factors) for the species occurs within the project area and a known occurrence has recently been recorded (within the last 20 years) within five miles of the project area.

Moderate: Habitat (including soils and elevation factors) for the species occurs within the project area and a documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the project area; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in

the project area.

High:

Low:

Limited or marginal habitat for the species occurs within the project area and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the project area; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

Presumed

Absent: Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the project area.

(Note: Location information on some sensitive species may be of questionable accuracy or unavailable; therefore, for survey purposes, environmental factors associated with species occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence.)

Plant nomenclature follows that of The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012). Wildlife nomenclature follows Checklist of North American Birds and the sixtieth supplement (AOU 1998 and 2019), Society for the Study of Reptiles and Amphibians (SSAR 2017), and the Revised Checklist of North American Mammals North of Mexico (Bradley et al. 2014).

3.2 Biological Resource Assessment Field Survey

The survey consisted of walking the entire trail within the project area and driving to assess a 500-foot buffer around the project limits to identify vegetation communities and wildlife habitats present. Areas where physical access was not possible were scanned using binoculars so that 100 percent visual coverage of the trail was achieved. The field survey included the following:

- Recording plant and wildlife species observed on the project area and in immediately adjacent areas;
- Characterizing plant communities present on the project area;
- Searching for wildlife sign (detections of burrows, scat, tracks, vocalizations, etc.);
- Taking photographs at the project area; and
- Recording weather data including time, temperature, cloud cover, and wind speed at the beginning and end of the survey.

Plant species not recognized were collected and identified using botanical references (Baldwin et al. 2012). Vegetation types were classified according to California Native Plant Society nomenclature (Sawyer et al. 2009).

4.0 RESULTS

4.1 Biological Resource Assessment Field Surveys

The general biological resource assessment was conducted on June 9, 2020 by ECORP biologists Carley Lancaster and Christine Tischer. Results of the field surveys, including site characteristics, plant communities, plants, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) are summarized below. A more detailed mapping of the native riparian tree species and nonnative invasive species present, was conducted during the restoration plan field assessment. Weather conditions during the biological resource assessments are summarized in Table 1.

Table 1. Survey Weather Conditions										
Type of Survey	Date	Surveyor*	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
			start	end	start	end	start	end	start	end
General Biological Resource Assessment	6/9/20	CL, CT	0640	0930	57	67	0	0	0-2	0-3
Restoration Plan Field Assessment	7/23/20	CL, CT	0800	1500	66	77	0	0	1-3	1-3

^{*} CL=Carley Lancaster, CT=Christine Tischer

4.2 Site Characteristics and Land Use

The project area is primarily surrounded by residential use to the north, west, and south, and Interstate 210 (I-210), the Arroyo Seco, Hahamongna Watershed Park, and other recreational use and open space to the east. The project area consists mostly of undeveloped land along the 1000-foot section of the 2.4-mile-long trail that is used for various recreational activities. The project area is composed of both native and disturbed habitats within Flint Canyon Wash (wash), which flows from the northwest corner to the southeast corner of the project area and empties in to the Hahamongna Watershed Park and Devil's Gate Reservoir. The southeastern portion of the project and its buffer overlap with the Devil's Gate Reservoir Restoration Project, which is in its second year (of four years total) of active construction (LADPW 2020). Riparian vegetation, including native trees, shrubs, and herbaceous vegetation, were present along the wash; however, most of the riparian areas were noted as having some level of disturbance and nonnative and invasive vegetation were also present in varying degrees. Coast live oak trees were present along the trail and near the wash. Nonnative and invasive weeds were present throughout the site, including in the native habitats, and they were especially prevalent in and along the disturbed and developed areas. Representative site photographs are included in Appendix A.

4.3 Vegetation Communities/Habitats

The project area supports native habitats and is mostly undeveloped, but it has been subjected to disturbances from recreational use and surrounding urbanization. Plants observed within the project area consisted mainly of species typically found in coastal sage scrub, oak woodland, and riparian habitats. In addition, nonnative species, including wild oat (*Avena fatua*), black mustard (*Brassica nigra*), brome grasses (*Bromus* sp.), Italian thistle (*Carduus pycnocephalus*), red-stemmed filaree (*Erodium cicutarium*),

eucalyptus (*Eucalyptus* sp.), and Mexican fan palm (*Washingtonia robusta*) were abundant throughout the project area. Native plant species observed within the coastal sage scrub communities included deer weed (*Acmispon glaber*), chamise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), and black sage (*Salvia mellifera*). Native plant species observed within the oak woodland communities included coast live oak, western sycamore, blue elderberry (*Sambucus nigra* ssp. *cerulea*), and poison oak (*Toxicodendron diversilobum*). Native plant species observed within the riparian communities included black willow (*Salix gooddingii*), western sycamore, and coast live oak. A complete list of plant species observed within the project area is included in Appendix B.

Four native vegetation communities and one nonnative vegetation community were identified within the project area. Eucalyptus – tree of heaven – black locust groves (*Eucalyptus spp. - Ailanthus altissima - Robinia pseudoacacia* Woodland Semi-Natural Alliance) was the only nonnative vegetation community identified during the survey effort; however, portions of some of the native vegetation communities were mapped as disturbed due to the abundance of nonnative species present. One of the native vegetation communities identified during the survey, Goodding's willow – red willow riparian woodland and forest (*Salix gooddingii - Salix laevigata* Woodland & Forest Alliance) is considered a special-status community. Four land cover types, including disturbed, landscaped, developed, and developed/landscaped, were mapped within the project area. Table 2 lists the associated acreage for vegetation communities and land cover types that occur within the project area and Table 3 lists the acreages of each vegetation community within the project impact area. Classification of the vegetation communities generally follows the Manual of California Vegetation (Sawyer et al. 2009). The vegetation communities within the project area and 500-foot buffer are described in detail below and the distribution of the vegetation communities is shown on Figure 3.

Table 2. Vegetation Communities and Land Covers within Project Area				
Vegetation Community/Land Cover	Acreage			
Coast Live Oak Woodland (Quercus agrifolia Woodland Alliance)	6.03			
Goodding's Willow – Red Willow Riparian Woodland and Forest (Salix gooddingii - Salix laevigata Woodland & Forest Alliance)*	0.22			
Goodding's Willow – Red Willow Riparian Woodland and Forest (Salix gooddingii - Salix laevigata Woodland & Forest Alliance)* - Disturbed	2.35			
California Sagebrush Scrub (Artemisia californica Shrubland Alliance)	0.49			
California Sagebrush – California Buckwheat Scrub (<i>Artemisia californica – Eriogonum fasciculatum</i> Shrubland Alliance)	0.08			
California Sagebrush – California Buckwheat Scrub (<i>Artemisia californica – Eriogonum fasciculatum</i> Shrubland Alliance) – Disturbed	0.16			
Eucalyptus-Tree of Heaven-Black Locust Groves (<i>Eucalyptus</i> spp. – <i>Ailanthus altissima</i> – <i>Robinia pseudoacacia</i> Woodland Semi-Natural Alliance)**	2.15			
Disturbed	2.10			
Landscaped	0.15			
Developed	5.24			
Developed/Landscaped	1.30			
TOTAL	20.27			

*State Sensitive Vegetation Community. **Nonnative Vegetation Community

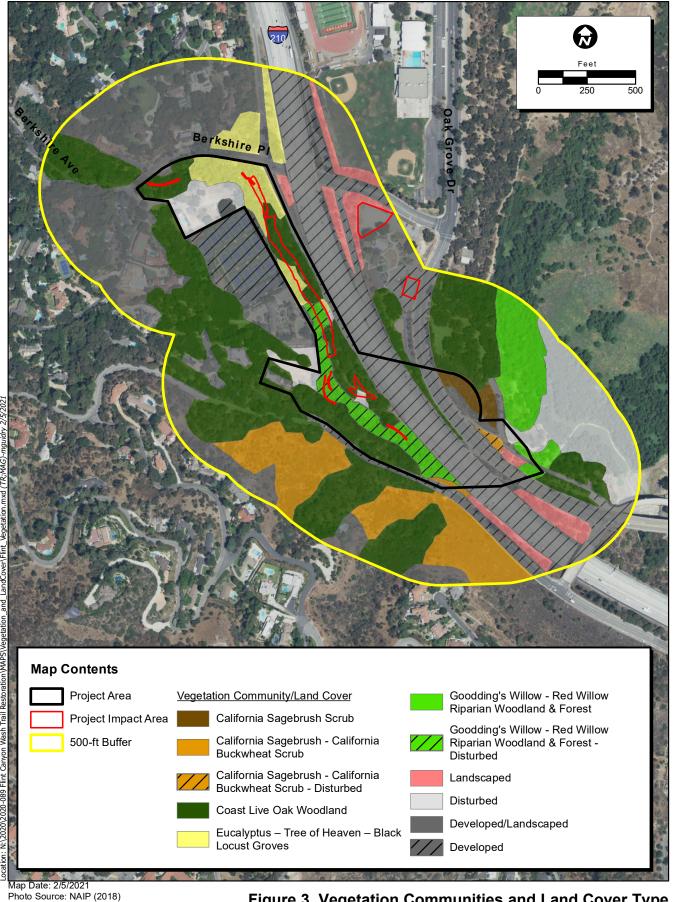


Figure 3. Vegetation Communities and Land Cover Type



Table 3. Vegetation Communities and Land Covers within Project Impact Area				
Vegetation Community/Land Cover	Acreage			
Coast Live Oak Woodland (Quercus agrifolia Woodland Alliance)	0.73			
Goodding's Willow – Red Willow Riparian Woodland and Forest (Salix gooddingii - Salix laevigata Woodland & Forest Alliance)* - Disturbed	0.21			
Eucalyptus-Tree of Heaven-Black Locust Groves (<i>Eucalyptus</i> spp. – <i>Ailanthus altissima</i> – <i>Robinia pseudoacacia</i> Woodland Semi-Natural Alliance)**	0.22			
Disturbed	0.04			
Developed	0.15			
Developed/Landscaped	0.45			
TOTAL	1.80			

^{*}State Sensitive Vegetation Community, **Nonnative Vegetation Community

4.3.1 Coast Live Oak Woodland – (Quercus agrifolia Woodland Alliance)

Quercus agrifolia Woodland Alliance, which is commonly referred to as coast live oak woodland, is a vegetation type characterized by an open to continuous canopy with a sparse to intermittent shrub layer and a sparse to grassy herbaceous layer where coast live oak is dominant or co-dominant in the tree canopy. Coast live oak woodland is not considered a state-sensitive vegetation community and has a State Rarity Rank of S4 indicating that it is a relatively secure statewide (Sawyer et al. 2009). This community was present throughout the project area and project impact area. Within the project area, this community was observed mainly along the trail and stream below the trail. This community was noted as showing a relatively high level of disturbance from nonnative and invasive weed invasion. The coast live oak woodland consisted mainly of coast live oak, western sycamore, blue elderberry, and poison oak with an herbaceous layer of nonnative grasses and other nonnative annual species including wild oat, black mustard, brome grasses, and Italian thistle. Approximately 6.03 acres of coast live oak woodland habitat occurs within the project area and approximately 0.73 acre of coast live oak woodland habitat occurs within the project impact area.

4.3.2 Goodding's Willow – Red Willow Riparian Woodland and Forest (Salix gooddingii - Salix laevigata Woodland & Forest Alliance)

Goodding's willow – red willow riparian woodland and forest is a vegetation type characterized by an open to continuous canopy with a variable herbaceous layer where black willow and/or red willow (*Salix laevigata*) is dominant or co-dominant in the tree or shrub canopy. Goodding's willow – red willow riparian woodland and forest is considered a state-sensitive vegetation community and has a State Rarity Rank of S3 (Sawyer et al. 2009). This community was present along the stream that runs below the trail within the project area and the project impact area. Parts of this community were noted as showing a moderate to high level of disturbance, especially within the project area west of I-210. Portions of this community were mapped as disturbed due to the presence of nonnative and invasive plant species in varying degrees. In addition, understory composition in this community was found to be patchy and consisted mostly of herbaceous and grassy nonnative species including wild oat, black mustard, brome grasses, and giant reed (*Arundo donax*) and nonnative tree saplings including eucalyptus, Mexican fan

palm, and Shamel ash (*Fraxinus uhdei*); however, a small number of patches of native poison oak, caterpillar phacelia (*Phacelia cicutaria*), and California blackberry (*Rubus ursinus*) were observed to be present in the understory. The Goodding's willow – red willow riparian woodland and forest consisted mainly of sparse black willow, coast live oak, western sycamore, eucalyptus, Mexican fan palm, and ash (*Fraxinus* sp.). Approximately 0.22 acres of Goodding's willow – red willow riparian woodland and forest habitat is present within the project area. Approximately 2.35 acres of disturbed Goodding's willow – red willow riparian woodland and forest habitat is present within the project area and approximately 0.21 acre is present within the project impact area.

4.3.3 California Sagebrush Scrub (Artemisia californica Shrubland Alliance)

California sagebrush scrub is a vegetation type characterized by an intermittent to continuous canopy with a variable herbaceous layer where California sagebrush is dominant or co-dominant in the shrub canopy. California sagebrush scrub is not considered a state-sensitive vegetation community and has a State Rarity Rank of S5 (Sawyer et al. 2009). This community was present in one small patch towards the southeastern extent of the project area; however, it was not observed to be present within the project impact area. This community was noted as being relatively undisturbed; however, it was in a small patch surrounded by disturbance and development. The California sagebrush scrub consisted mainly of California sagebrush, deerweed, California buckwheat, and ladies tobacco (*Pseudognaphalium californicum*). Approximately 0.49 acre of California sagebrush scrub habitat is present within the project area.

4.3.4 California Sagebrush – California Buckwheat Scrub (Artemisia californica – Eriogonum fasciculatum Shrubland Alliance)

California sagebrush – California buckwheat scrub is a vegetation type characterized by an intermittent to continuous canopy with a seasonal herbaceous layer where California sagebrush and California buckwheat are co-dominant in the shrub canopy. California sagebrush – California buckwheat scrub is not considered a state-sensitive vegetation community and has a State Rarity Rank of S4 (Sawyer et al. 2009). This community was present in two small patches towards the southern extent of the project area; however, it was not observed to be present within the project impact area. Parts of this community were noted as showing low to moderate disturbance from nonnative and invasive weeds and human disturbance, especially within the small patch mapped east of Oak Grove Drive. The California sagebrush – California buckwheat scrub consisted mainly California sagebrush, California buckwheat, white sage, black sage, and chamise. In addition, some portions of this community located near residential areas had hairy rock rose (Cistus incanus) dominant in the herbaceous layer, likely due to this nonnative species escaping landscaped areas. Approximately 0.08 acre of California sagebrush – California buckwheat scrub habitat is present within the project area. Approximately 0.16 acre of disturbed California sagebrush – California buckwheat scrub habitat is present within the project area.

4.3.5 Eucalyptus – Tree of Heaven – Black Locust Groves – (Eucalyptus spp. - Ailanthus altissima - Robinia pseudoacacia Woodland Semi-Natural Alliance)

Eucalyptus spp. – Ailanthus altissima – Robinia pseudoacacia Woodland Semi-Natural Alliance, also referred to as eucalyptus – tree of heaven – black locust groves, is a nonnative vegetation type characterized by an open to continuous tree canopy, a sparse to intermittent shrub layer, and a sparse to

2020-089

intermittent herbaceous layer where eucalyptus (*Eucalyptus* sp.), tree of heaven (*Ailanthus altissima*), or black locust (*Robinia pseudoacacia*) is dominant in the tree canopy. Eucalyptus – tree of heaven – black locust groves is not considered a state-sensitive vegetation community and does not have a rarity ranking. This community was present along the wash in the northern half of the project area. The eucalyptus – tree of heaven – black locust groves consisted mainly of eucalyptus, Canary Island pine (*Pinus canariensis*), Mexican fan palm, ash, tree of heaven (*Ailanthus altissima*), and black locust (*Robinia pseudoacacia*); however, sparse native trees, including western sycamore, coast live oak, and black willow, were present in parts of this community at lower cover. Approximately 2.15 acre of eucalyptus – tree of heaven – black locust groves habitat occurs within the project area and approximately 0.22 acre occurs within the project impact area.

4.3.6 Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. Areas mapped as disturbed were largely devoid of native vegetation due to human disturbance and were dominated by open areas or nonnative weedy and ruderal vegetation. Areas of bare dirt and areas covered with nonnative annual plants that appeared to have been previously graded were also mapped as disturbed. Disturbed areas were present in patches throughout the project area. Plants present in this land cover type included nonnative weedy species such as wild oat, black mustard, cheat grass (*Bromus tectorum*), red brome (*Bromus madritensis* ssp. *rubens*), Italian thistle, and red-stemmed filaree. Approximately 2.10 acres of disturbed areas are present within the project area and approximately 0.04 acre is present within the project impact area.

4.3.7 Landscaped

Landscaped is not a vegetation classification, but rather a land cover type. Areas mapped as landscaped were largely devoid of native vegetation due to human disturbance and were dominated by ornamental and naturalized species. Landscaped areas were present in patches throughout the project area. Plants present in this land cover type included nonnative species such as eucalyptus, Canary Island pine, oleander (*Nerium oleander*) and other various ornamental species. Approximately 0.15 acre of landscaped areas are present within the project area.

4.3.8 Developed

Developed is not a vegetation classification, but rather a land cover type. Areas mapped as developed were largely devoid of any vegetation due to human development. Several facilities and paved areas, including I-210 and Oak Grove Drive, were mapped as developed. Approximately 5.24 acres of developed land are present within the project area and approximately 0.15 acre of developed land was mapped within the project impact area.

4.3.9 Developed/Landscaped

Developed/landscaped is not a vegetation classification, but rather a land cover type. Areas mapped as developed/landscaped had some level of development or paved areas but also had landscaped areas present. Several paved areas with landscaping vegetation present, including surrounding residential areas and school facilities, were mapped as developed/landscaped. It should be noted that many of the surrounding residential areas had landscapes with both ornamental vegetation and native trees including

coast live oak and western sycamore. Approximately 1.30 acre of developed/landscaped areas are present within the project area and approximately 0.45 acre is present within the project impact area.

4.4 Wildlife

The project area provides habitat for wildlife species common to riparian woodland and urban edges. Birds were the most abundant species observed during the surveys. A total of four insect, one amphibian, one reptile, 25 bird, and nine mammal species were observed or detected. Foraging and potential nesting habitat for a variety of bird species occurs throughout the various vegetation communities. The tall trees, large snags, and artificial structures (bridges) provide potential nesting sites for raptors and owls as well as potential roosting habitat for multiple bat species. Bat sign (guano and vocalizations) was noted under the Oak Grove and I-210 overpasses in addition to active northern rough-winged swallow (*Stelgidopteryx serripennis*) nests.

Baja California treefrog (*Pseudacris hypochondriaca*) tadpoles were noted within Flint Wash and damselflies and dragonflies that also rely on shallow freshwater habitat for reproduction were also observed. Several ground dwelling species were observed or detected on either side of the trail, including western fence lizard (*Sceloporus occidentalis*), California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), and woodrat (*Neotoma* sp.). A few recreationalists were utilizing the trail during the survey. Anthropogenic disturbances, including remnant foundations and columns along the trail, slabs of concrete and broken columns in the bottom of the wash, and sign of domestic horse (*Equus caballus*), domestic dog (*Canis lupus familiaris*), and fancy rat (*Rattus norvegicus domestica*) were noted. A complete list of wildlife species observed or detected during the field survey is included in Appendix C.

4.5 Special-Status Species

The CNDDB and CNPSEI searches were conducted on June 5, 2020. The literature review resulted in 49 special-status plant and 38 special-status wildlife species that have historically been recorded in the vicinity of the project or that are highly associated with habitat that occurs on or immediately adjacent to the project area. Special-status plants were evaluated for their potential to occur within the project limits where impacts could occur. Special-status wildlife species were evaluated for their potential to occur within the project impact area, plus a broader area, which includes the project area and a 500-foot buffer, where direct or indirect impacts could occur.

4.5.1 Special-Status Plants

The results of the literature review documented 49 special-status plant species (six federally and/or state listed) as occurring in the vicinity of the project area. A list was generated from the results of the literature search and the habitats within the project impact area were evaluated to determine if they were suitable to support any of the special-status plant species on the list. Based on the literature review and the results of the biological resources assessment, one special-status species was found to be present within the project impact area, six special-status plant species were found to have high potential to occur within the project impact area, twelve were determined to have a moderate potential to occur within the project impact area, four were determined to have a low potential to occur within the project area, and the remaining twenty-six species were presumed to be absent. Species were presumed to be absent due to a

lack of suitable elevation or habitat within the project impact area. One special-status species, southern California black walnut (*Juglans californica*), was observed in two locations along the streambed towards the northern extent of the project area and one occurs on the western edge of the project impact area. One additional special-status species, Coulter's matilija poppy (*Romneya coulteri*), was observed within the 500-foot buffer. Species from the list that were determined to be present or have a high or moderate potential to occur within the project area are discussed in detail below. The biological resources assessment was conducted during the appropriate blooming period for all but one of the species in the high to moderate potential categories and the descriptions note whether or not the species were observed. A complete list of the 49 special-status plant species, with details regarding blooming periods, habitat requirements, and potential for occurrence designations, is included in Appendix D.

Plant Species Present

Southern California black walnut

Southern California black walnut is a CNPS rank 4.2 (CNPS 2020). It occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian woodland habitats. It is typically found at elevation ranging from 164 to 2,953 feet (50 to 900 meters) and blooms March through August. The literature review returned multiple records and this species was observed during the biological resources assessment in two locations along the streambed towards the northern extent of the project area with one occurrence within the project impact area. The center point of the two Southern California black walnut trees (exclusive of canopy) are displayed on Figure 4.

Plant Species with a High Potential to Occur

Western spleenwort

Western spleenwort (*Asplenium vespertinum*) is a CNPS rank 4.2 (CNPS 2020). It is a perennial fern that occurs in chaparral, southern oak woodland, and coastal sage scrub habitats. It is typically found at elevations ranging from 591 to 3,281 feet (180 to 1,000 meters) and blooms February through June. The literature review returned multiple records, including within five miles of the project area. The project area supports suitable oak woodland and coastal sage scrub habitat. The presence of suitable habitat and recent documented records of this species within five miles of the project area has resulted in this species having a high potential to occur; however, it should be noted that this is a perennial species and that it was not observed during the biological resources assessment.

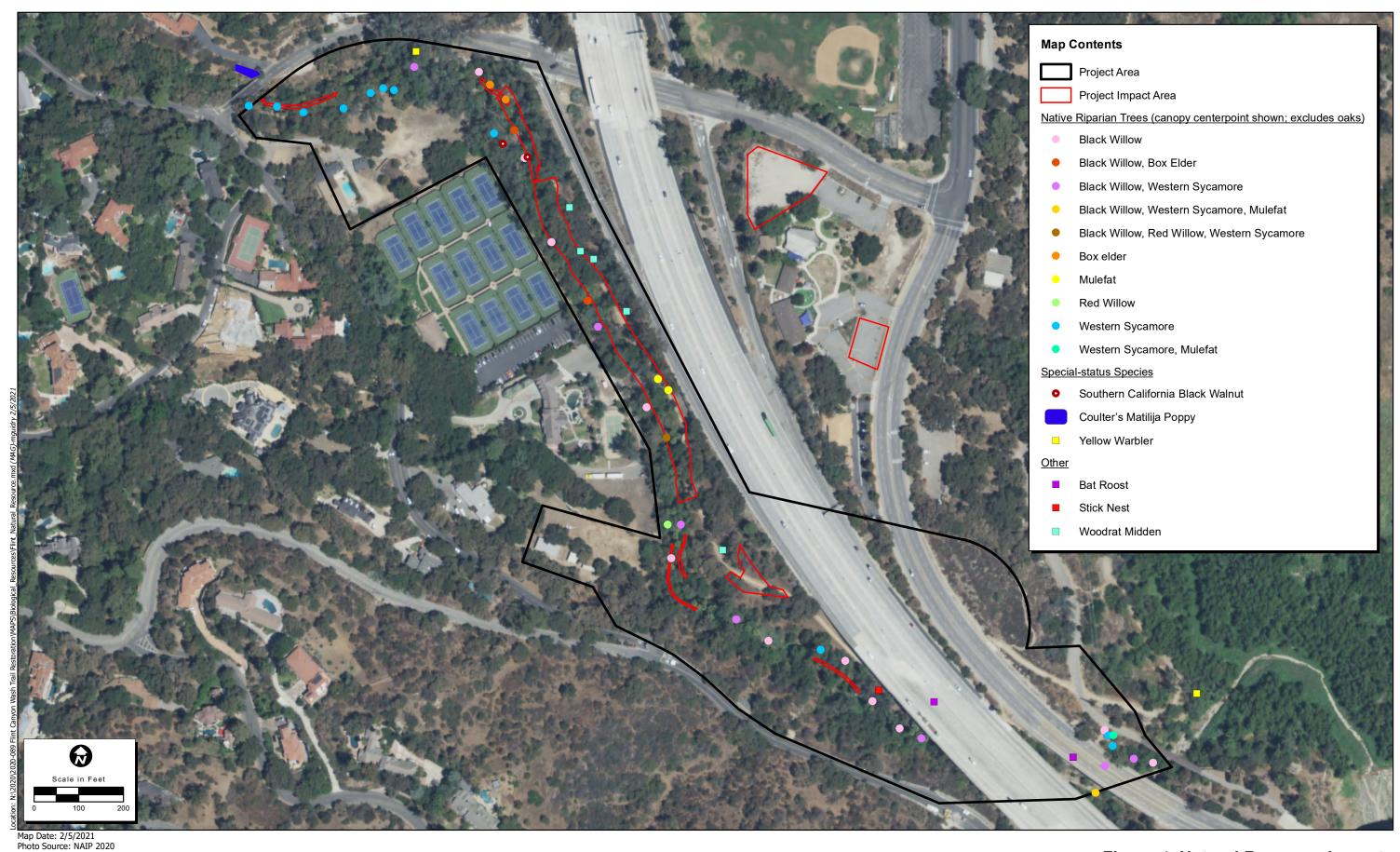




Figure 4. Natural Resource Impacts

Plummer's mariposa lily

Plummer's mariposa lily (*Calochortus plummerae*) is a CNPS rank 4.2 (CNPS 2020). It is a perennial herb (bulb) that occurs in chaparral, cismontane woodland, foothill woodland, coastal sage scrub, lower montane coniferous forest, and valley and foothill grassland habitat, typically in granitic, rocky soils. It is typically found at elevations ranging from 328 to 5,577 feet (100 to 1,700 meters) and blooms May through July. The literature review returned multiple records, including within five miles of the project area. The project area supports suitable oak woodland and coastal sage scrub habitat. The presence of suitable habitat and recent documented records of this species within five miles of the project area has resulted in this species having a high potential to occur; however, it should be noted that this was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

Humboldt lily

Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*) is a CNPS rank 4.2 (CNPS 2020). It is a perennial herb (bulb) that occurs in chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, and riparian woodland habitats. It is typically found at elevations ranging from 98 to 5,906 feet (30 to 1,800 meters) and blooms March through July, and occasionally in to early August. The literature review returned multiple records, including within five miles of the project area. The project area supports suitable coastal sage scrub and riparian habitat. The presence of suitable habitat and recent documented records of this species within five miles of the project area has resulted in this species having a high potential to occur; however, it should be noted that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

Engelmann oak

Engelmann oak is a CNPS rank 4.2 (CNPS 2020). It is a perennial tree that occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland habitats. It is typically found at elevations ranging from 164 to 4,265 feet (50 to 1,300 meters) and blooms March through June. The literature review returned multiple records, including within five miles of the project area. The project area supports suitable riparian woodland habitat. The presence of suitable habitat and recent documented records of this species within five miles of the project area has resulted in this species having a high potential to occur; however, it should be noted that this is a perennial tree species and that it was not observed during the biological resources assessment.

Coulter's matilija poppy

Coulter's matilija poppy is a CNPS rank 4.2 (CNPS 2020). It is a perennial herb (rhizomatous) that occurs in chaparral and coastal sage scrub habitats, typically in dry washes and canyons. It is typically found at elevations ranging from 0 to 3,937 feet (0 to 1,200 meters) and blooms March through July. The literature review returned multiple records, including within five miles of the project area. The project area supports suitable coastal sage scrub habitat. The presence of suitable habitat and recent documented records of this species within five miles of the project area has resulted in this species having a high potential to occur. It should be noted that this species was observed within the 500-foot buffer for the project area, approximately 50-feet outside the northwestern extent of the project area, during the biological resources assessment; however, the observed individuals for this species appeared to have been planted rather than

occurring naturally. While this species was not observed within the project area during the biological resources assessment, the observation of this species within the 500-foot buffer for the project area, reinforces the determination of this species having a high potential for occurrence within the project area.

Sonoran maiden fern

Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*) is a CNPS rank 2B.2 (CNPS 2020). It is a perennial fern that occurs in riparian habitat, meadows, and seeps typically along streams. It is typically found at elevations ranging from 164 to 2,001 feet (50 to 610 meters) and blooms January through September. The literature review returned multiple records, including within five miles of the project area. The project area supports suitable riparian habitat. The presence of suitable habitat and recent documented records of this species within five miles of the project area has resulted in this species having a high potential to occur; however, it should be noted that this is a perennial species and that it was not observed during the biological resources assessment.

Plant Species with a Moderate Potential to Occur

Nevin's barberry

Nevin's barberry (*Berberis nevinii*) is a CNPS rank 1B.1, is state listed as endangered, and is federally listed as endangered (CNPS 2020). It is a perennial shrub that occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian scrub habitats, typically on sandy or gravelly soil. It is typically found at elevations ranging from 230 to 2,707 feet (70 to 825 meters) and blooms March through June and occasionally begins to bloom in late February. The literature review returned multiple historical records; however no recent records were returned within five miles of the project area. The project area supports suitable coastal sage scrub and riparian scrub habitat. The presence of suitable habitat, but only historical documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this species is a perennial shrub and that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

Catalina mariposa lily

Catalina mariposa lily (*Calochortus catalinae*) is a CNPS rank 4.2 (CNPS 2020). It is a perennial herb (bulb) occurs in chaparral, cismontane woodland, coastal sage scrub, and valley and foothill grassland habitats. It is typically found at elevations ranging from 49 to 2,297 feet (15 to 700 meters) and blooms March through June and occasionally begins to bloom in late February. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable coastal sage scrub habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

Smooth tarplant

Smooth tarplant (*Centromadia pungens* ssp. *laevis*) is a CNPS rank 1B.2, is state listed as endangered, and is federally listed as endangered (CNPS 2020). It is an annual herb that occurs in chenopod scrub, meadows and seeps, playas, riparian woodlands, and valley and foothill grassland habitats. This species is

2020-089

often found on disturbed sites. It is typically found at elevations ranging from 0 to 2,100 feet (0 to 640 meters) and blooms April through September. The literature review returned multiple historical records within five miles of the project area; however, no recent records were returned within five miles of the project area supports suitable riparian woodland habitat. The presence of suitable habitat, but no recent documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

Parry's spineflower

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) is a CNPS rank 1B.1 (CNPS 2020). It is an annual herb that occurs in chaparral, cismontane woodland, coastal sage scrub, and valley and foothill grassland habitats, typically in openings. This species is often found in sandy or rocky soils. It is typically found at elevations ranging from 902 to 4,003 feet (275 to 1,220 meters) and blooms April through June. The literature review returned multiple historical records within five miles of the project area; however, no recent records were returned within five miles of the project area. The project area supports suitable coastal sage scrub habitat. The presence of suitable habitat, but no recent documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

California sawgrass

California sawgrass (*Cladium californicum*) is a CNPS rank 2B.2 (CNPS 2020). It is a perennial grass like herb that occurs in freshwater wetlands, alkali sink, and wetland-riparian habitats. It is typically found at elevations ranging from 197 to 5,249 feet (60 to 1,600 meters) and blooms June through September. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable riparian habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this is a perennial species and that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

Mesa horkelia

Mesa horkelia (*Horkelia cuneata* var. *puberula*) is a CNPS rank 1B.1 (CNPS 2020). It is a perennial herb that occurs in maritime chaparral, cismontane woodland, and coastal sage scrub habitats, typically in sandy or gravelly soils. It is typically found at elevations ranging from 230 to 2,854 feet (70 to 870 meters) and blooms February through September. The literature review returned multiple historical records; however no recent records were returned within five miles of the project area. The project area supports suitable coastal sage scrub habitat. The presence of suitable habitat, but no recent documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this is a perennial species and that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

California satintail

California satintail (*Imperata brevifolia*) is a CNPS rank 2B.1 (CNPS 2020). It is a perennial grass that occurs in mesic areas of chaparral, coastal sage scrub, Mojavean desert scrub, riparian scrub, and meadows and seeps (usually alkaline) habitats. It is typically found at elevations ranging from 0 to 3,986 feet (0 to 1,215 meters) and blooms September through May. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable coastal sage scrub and riparian habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this is a perennial species and that this species was not observed during the biological resources assessment.

Davidson's bush mallow

Davidson's bush mallow (*Malacothamnus davidsonii*) is a CNPS rank 1B.2 (CNPS 2020). It is a perennial shrub that occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian woodland habitats. It is typically found at elevations ranging from 607 to 3,740 feet (185 to 1,140 meters) and blooms June through January. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable coastal sage scrub and riparian woodland habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this is a perennial species and that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

White rabbit-tobacco

White rabbit-tobacco (*Pseudognaphalium leucocephalum*) is a CNPS rank 2B.2 (CNPS 2020). It is a perennial herb that is found in a variety of habitats including coastal sage scrub and chaparral. It is typically found in sandy to gravelly soils ranging in elevations from 0 to 6,890 feet (0 to 2,100 meters) and blooms July through December. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable coastal sage scrub habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this is a perennial species and that this species was not observed during the biological resources assessment.

Parish's gooseberry

Parish's gooseberry (*Ribes divaricatum* var. *parishii*) is a CNPS rank 1A (CNPS 2020). It is a perennial shrub that occurs in a variety of habitats including coastal sage scrub and riparian. It is typically found in areas with elevations ranging from 197 to 1017 feet (60 to 310 meter) and blooms February through April. The literature review identified one historical CNDDB record within five miles of the project area. The project area supports suitable coastal sage scrub and riparian habitat. The presence of suitable habitat, but only historical documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this is a perennial shrub species and that this species was not observed during the biological resources assessment.

San Bernardino aster

San Bernardino aster (*Symphyotrichum defoliatum*) is a CNPS rank 1B.2 (CNPS 2020). It is a perennial herb (rhizomatous) that occurs in cismontane woodland, coastal sage scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland, and disturbed areas. It is typically found at elevations ranging from 0 to 6,726 feet (0 to 2,050 meters) and blooms July through November. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable coastal sage scrub habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur.

Greata's aster

Greata's aster (*Symphyotrichum greatae*) is a CNPS rank 2B.2 (CNPS 2020). It is a perennial herb (rhizomatous) that occurs in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland habitats. It is typically found at elevation ranging from 984 to 6,595 feet (300 to 2,010 meters) and blooms June through October. The literature review returned multiple records; however none within five miles of the project area. The project area supports suitable riparian woodland habitat. The presence of suitable habitat, but no documented records of this species within five miles of the project area, has resulted in this species having a moderate potential to occur; however, it should be noted that this species was not observed during the biological resources assessment which was conducted during the appropriate bloom period for this species.

4.5.2 Special-Status Wildlife

The results of the literature search documented 38 special-status wildlife species (11 federally- and/or state-listed, fully protected, or candidate species) as being found in the vicinity of the project. A list was generated from the results of the literature search and the habitats within the project area were evaluated for their potential to support any of the special-status wildlife species on the list. A complete list of the 38 special-status wildlife species, with details regarding habitat requirements and potential for occurrence designations, is included in Appendix E.

The list of special-status wildlife includes species that are federally- and state-listed or proposed listed, and thus protected under FESA and/or CESA, as well as species that are not formally listed but are considered Fully Protected (FP), Species of Special Concern (SSC), Watch List (WL), or Birds of Conservation Concern (BCC). Of the 38 species identified in the literature search, one was determined to be present within the project area, four were identified as having a high potential to occur, nine were identified as having a moderate potential to occur, 15 species were identified as having a low potential to occur, and the remaining nine species identified in the literature review are presumed absent from the site. Figure 4 shows the location of the special-status wildlife species detected during the reconnaissance survey. Special-status species observed and species from the list that have a high or moderate potential to occur within the project area are discussed in detail below.

Special-status Wildlife Species Present within the Project area

Yellow warbler

The yellow warbler (*Setophaga petechia*) is a small songbird that is a CDFW SSC and a USFWS BCC (CDFW 2019). Yellow warblers, which are a migratory species that only occur in the area during the breeding season, typically nest in riparian vegetation, such as willows, and forage for insects on trees and other vegetation (Zeiner et al 1990). This species was detected in the riparian habitat in the northwestern portion of the project area and just east of the project area within the Flint Canyon outlet to Devil's Gate Reservoir. Yellow warblers have also been observed nesting during multiple years of surveys in the Devil's Gate Reservoir Restoration Project footprint, which is located just north of the I-210 freeway. Suitable foraging and nesting habitat are present along the entirety of the riparian corridor that the trail follows, inclusive of associated oak woodlands.

Wildlife Species with a High Potential to Occur

Coast Range newt

The Coast Range newt (*Taricha torosa*) is a CDFW SSC (CDFW 2019). This amphibian species occurs in upland areas, including grasslands, forests, and woodlands. Breeding of this species occurs in ponds, reservoirs, and along streams. This species of newt also burrows in soil or wood debris. Suitable woodland and streamside habitat occur within the project area. One recent CNDDB record occurs approximately 1.3 miles northeast of the site within the Arroyo Seco. Based on the presence of suitable habitat and a recent known occurrence within five miles of the site, this species was determined to have a high potential to occur.

Southern California legless lizard

The Southern California legless lizard (*Anniella stebbinsi*) is a CDFW SSC (CDFW 2019). This small reptile species commonly occurs in moist, warm, and loose soil in in sparsely vegetated habitats with plant cover or leaf litter. Stream terraces with sycamores and oaks also provide suitable habitat. Flint Wash provides suitable oak woodland and riparian woodland and forest habitat. Twelve recent CNDDB records occur within five miles of the site, the closest was reported in 2018 approximately 0.2 mile northeast of the site in Hahamongna Watershed Park. Based on the presence of suitable habitat and a recent known occurrence within five miles of the site, this species was determined to have a high potential to occur.

Two-striped garter snake

The two-striped garter snake (*Thamnophis hammondii*) is a California SSC (CDFW 2019) reptile that is found in chaparral, brushland, oak woodland, and coniferous forest habitats near water (Nafis 2019). Flint Wash provides suitable aquatic and oak woodland habitat. This species has been documented at the Devil's Gate Reservoir Restoration Project (ECORP 2018). Based on the presence of suitable habitat and a recent known occurrence within five miles of the site, this species was determined to have a high potential to occur.

Mountain lion

The mountain lion (*Puma concolor*) is a candidate for state listing (CGFC 2020). The petition to list is specific to the evolutionarily significant unit (ESU) of mountain lions in southern and central coastal

California. Mountain lions require large areas of relatively undisturbed habitats with adequate connectivity to allow for dispersal and gene flow. They have large home ranges that include heterogenous habitats. In the United States, these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats. The vegetation in Flint Wash likely provides some protective cover for large mammals as they pass through the area and a water source is also present. However, the restricted width of the wash, the fact that it is completely surrounded by I-210 and residential neighborhoods, and the presence of humans regularly using the trail would likely deter mountain lions from denning in the project area. A mountain lion was recently observed on several occasions by ECORP staff within 0.3 mile of the site within the Hahamongna Watershed Park while providing biological services for the Devil's Gate Reservoir Restoration Project in 2020. Due to the presence of unsuitable conditions for denning in the project area, this species would not be expected to use Flint Wash for anything other than passing through the area to hunt or to access different parts of its territory. Due to recent occurrences within five miles of the project, this species was determined to have a high potential to occur.

Wildlife Species with a Moderate Potential to Occur

California glossy snake

The California glossy snake (*Arizona elegans occidentalis*) is a California SSC (CDFW 2019). This reptile species commonly occurs in areas with patchy brush and rocks with open areas and loose soil for burrowing and is typically found in desert habitats but also arid scrub, rocky washes, grasslands, low elevation coastal scrub, and chaparral and other habitats with patchy brush (Zeiner et al. 1990). Flint Wash provides a limited amount of coastal sage scrub habitat and rocky wash habitat. No CNDDB records occur within five miles of the site. Due to the presence of suitable habitat and lack of a known recent occurrence within five miles of the project, this species was determined to have a moderate potential to occur.

Coastal whiptail

The coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a California SSC (CDFW 2019) reptile that is found in woodland, riparian, and arid open areas with sparse vegetation (Nafis 2019). A limited amount of suitable dry riparian habitat occurs at the southeast outlet of Flint Wash into Hahamongna Watershed Park. This species has been documented at the Devil's Gate Reservoir Restoration Project (ECORP 2018). Due to the known recent occurrence within five miles of the project and limited suitable habitat, this species was determined to have a moderate potential to occur.

American peregrine falcon

The American peregrine falcon (*Falco peregrinus anatum*) is a CDFW Fully Protected species and USFWS BCC. This species is found in open habitat from coastlines to mountains. It is known to nest on rocky cliffs or crags, and sometimes on man-made structures, and occasionally nests in tree or snag cavities or old raptor nests. Although the project occurs in a heavily wooded area, this species has adapted to urbanized areas and limited nesting habitat is present on ledges under the Oak Grove and I-210 bridges. One recent CNDDB record from 2005 occurs at an undisclosed "completely urban area" within five miles of the site. Due to the presence of limited nesting habitat and a known recent occurrence within five miles of the project, this species was determined to have a moderate potential to occur.

Least Bell's vireo

Least Bell's vireo (Vireo bellii pusillus) is a state- and federally-listed endangered species. This species is a breeding season resident of Southern California that is associated with low riparian areas in the vicinity of water or in dry river bottoms below 610 meters (2,000 feet). It is known to occur in riparian woodlands and willow-cottonwood forests particularly with streamside thickets and dense understory. This species of bird usually nests in willows, mulefat, and mesquite (Prosopis sp.). Flint Wash provides patchy and very low quality nesting habitat throughout the riparian corridor due to a high concentration of oak and nonnative tree species and a lack of a suitable understory. Only a handful of mulefat plants, which are the understory plant species typically present in occupied least Bell's vireo habitat, were noted within the project area. Two recent (2013 and 2015) and four historic CNDDB records occur within five miles of the site (CNDDB 2019). Multiple focused surveys have been conducted since 2013 west of the project (inclusive of the Flint Canyon outlet) as part of the Devil's Gate Reservoir Restoration Project with irregular detections of migratory vireos between 2013 and 2016 and negative results in 2017 and 2018 (ECORP 2018a and 2018b). However, after removal of nonnative invasive species and ongoing habitat restoration activities, ECORP documented an active nest within the Devil's Gate Mitigation Area in June 2020, approximately 0.3 mile northeast of the project. Due to the presence of limited nesting habitat and known recent occurrences within five miles of the project, this species was determined to have a moderate potential to occur. However, this species is not expected to nest on site due to the low quality of the willow riparian habitat for the reasons stated above.

Yellow-breasted chat

The yellow-breasted chat (*Icteria virens*) is a CDFW SSC. This species inhabits riparian thickets, upland thickets, and dry overgrown pastures. It prefers to nest in dense scrub along streams or at the edges of ponds or swamps. The disturbed riparian habitat and adjacent upland provide limited and marginal quality habitat and is unlikely to provide suitable thickets for nesting. However, this species has recently been documented within five miles of the site at the Devil's Gate Reservoir Restoration Project (ECORP 2018a), therefore, it was determined to have a moderate potential to occur.

Pallid bat

Pallid bat (*Antrozous pallidus*) is a CDFW SSC. This species of bat roosts in rock crevices, caves, mines, buildings, bridges, and in trees. It generally occurs in mountainous areas, lowland desert scrub, arid grasslands near water, rocky outcrops, and open woodlands. Suitable roosting habitat is present under the concrete bridges and bats were detected (guano, vocalizations) in crevices under the bridges during the survey. One historic CNDDB record for museum specimens collected in the "Pasadena" area in 1910 occurs within five miles of the site. Due to the presence of suitable habitat and lack of a known recent occurrence within five miles of the project, this species was determined to have a moderate potential to occur.

Townsend's big-eared bat

Townsend's big-eared bat (*Corynorhinus townsendii*) is a CDFW SSC. This species is known to occur in mountain forests including coniferous and mixed meso-phytic, and deserts. It forages in a wide variety of habitats including forested and edge habitats, and riparian areas where it requires spacious areas with broad and open surfaces for roosting. This species mainly roosts in abandoned mines or caves with little

to no disturbance but may also use abandoned buildings, bridges, or other crevices. Suitable roosting habitat is present under the concrete bridges and bats were detected (guano, vocalizations) in crevices under the bridges during the survey. No CNDDB records occur within five miles of the site. Due to the presence of suitable habitat and lack of a known recent occurrence within five miles of the project, this species was determined to have a moderate potential to occur.

Western yellow bat

Western yellow bat (*Lasiurus xanthinus*) is a CDFW SSC. This species of bat typically roosts in in trees, especially in fan palms with dead fronds. It is found in riparian woodlands in arid regions, oak or pinyon-juniper woodlands, and human developed areas. Suitable oak and riparian woodland habitat and fan palms for roosting occur throughout the survey area. One CNDDB record occurs within five miles of the site, a specimen collected 4.2 miles southwest of the site in 1984. Due to the presence of suitable habitat and lack of a known recent occurrence within five miles of the project, this species was determined to have a moderate potential to occur.

Big free-tailed bat

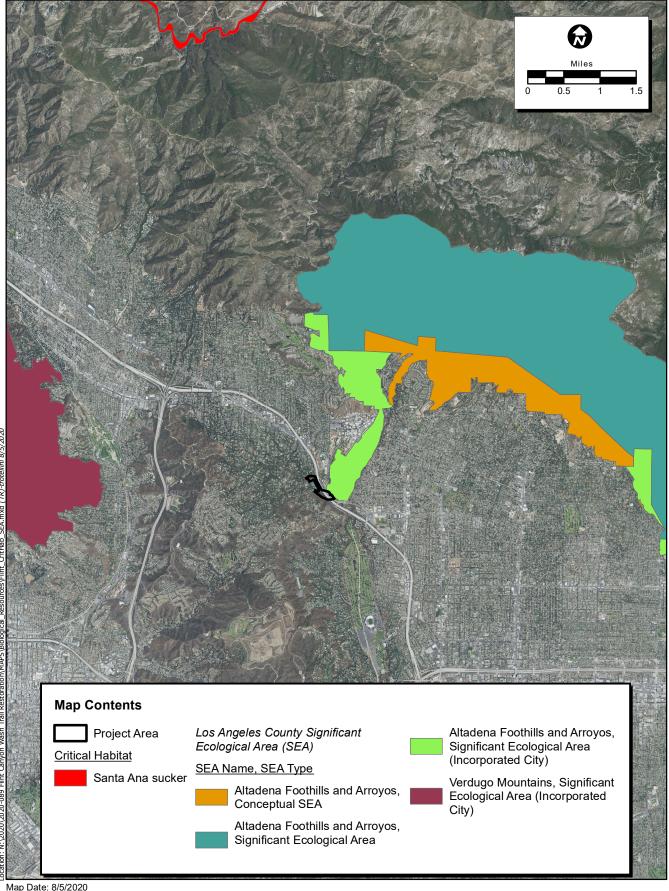
Big free-tailed bat (*Nyctinomops macrotis*) is a CDFW SSC. This species of bat typically roosts in cliff crevices, and less often in buildings, caves, and tree cavities. It occurs in rocky areas of rugged and hilly country including woodlands, evergreen forests, river floodplain-arroyo habitats, and desert scrub. The site is in rugged and hilly, wooded terrain adjacent to arroyo habitat and provides potential roosting habitat within the various woodlands. No CNDDB records occur within five miles of the site, therefore, this species was determined to have a moderate potential to occur.

4.5.3 Critical Habitat

The site is not located within designated critical habitat for any federally-listed species. The closest USFWS-designated critical habitat is for Santa Ana sucker (*Catostomus santaanae*), which is located approximately 6.5 miles northeast of the project at Big Tujunga Wash (Figure 5).

4.5.4 Raptors and Migratory Birds

All raptor species are protected from "take" pursuant to California FGC Section 3503.5. Raptors and migratory birds are protected by the MBTA (USFWS 1918). The variety of large native and nonnative trees on the site provide potential nesting habitat for several raptors including Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), and red-tailed hawk (*Buteo jamaicensis*). Potential nesting sites for migratory birds are also present throughout the site in the trees, shrubs, and under the bridges. Several nests were observed during 2020 survey, particularly under the Oak Grove Boulevard and I-210 overpasses. A large stick nest, likely used by a great horned owl (*Bubo virginianus*), was noted in a large tree on the south side of I-210. ECORP has also documented a great horned owl nest that was active during the 2020 nesting season on the north face of the Devil's Gate Dam, east of the project area at the 500-foot survey buffer limit. The nesting bird season generally occurs between February 1 and September 15.



Map Date: 8/5/2020
Photo Source: NAIP (2018)
SEA Data: Los Angeles County Department of Regional Planning

4.6 Wildlife Movement Corridors and Linkages

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor is varied, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges, for example. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. Naturally, the nature of corridor uses, and wildlife movement patterns varies greatly among species.

Drainages generally serve as movement corridors because wildlife can move easily through these areas, and fresh water is available. Corridors also offer wildlife unobstructed terrain to forage in and for the dispersal of young individuals. Movement corridors are particularly important to larger terrestrial species, such as mountain lions, coyotes, bobcats (*Lynx rufus*), and mule deer (*Odocoileus hemionus*) due to the protective cover afforded by dense vegetation. Linkages and corridors facilitate regional wildlife movement and generally consist of waterways, riparian corridors, flood control channels, contiguous habitat, and upland habitat. Ridgelines may also serve as movement corridors.

The project is not located within a designated movement corridor or linkage area. The project is in an urbanized area and is subject to constant freeway noise as the majority of this section of trail occurs under and immediately adjacent to I-210. Flint Canyon Wash provides a water source and vegetative cover but is highly disturbed and confined in places by relatively steep banks. The northwest portion of the project ties into a residential neighborhood after passing Berkshire Avenue.

4.6.1 Aquatic Resources Delineation

Flint Canyon Wash is considered an aquatic resource under federal and state regulations, as a tributary to the Arroyo Seco, which flows ultimately to the Pacific Ocean. The channel bottom contains a streambed that ranges from 20 to 30 feet in width, while the entire channel from across the top of bank has the potential to contain larger flow events. Within the channel bottom, which is planar, a low-flow channel winds along that supports perennial flows. This area is considered to be jurisdictional to the USACE as a Water of the U.S. under the Navigable Waters Protection Rule and the CWA. Both the channel bottom and the entire channel width, across the top of bank, including associated riparian vegetation, would be considered jurisdictional to the CDFW and the SWRCB. A formal delineation was conducted at the site and the results are provided under separate cover (ECORP 2021).

4.6.2 Local Policies and Ordinances

Native tree species present in the project area that would be protected under the City of Pasadena Tree Ordinance include coast live oak, western sycamore, Southern California black walnut, and white alder. In addition, specimen, landmark, public, and mature trees as defined by Section 8.52.020 of the ordinance would also be protected.

Trees present in the project area that would be protected under the City of La Cañada Flintridge Municipal Code, Section 4.24, would include all City trees in the public right-of-way, as determined by the City approved arborist. Section 4.24.020 of the City of La Cañada Flintridge Municipal Code defines a City tree as any tree present in the public right-of-way and defines the public right-of-way as any city-owned or controlled property used for public travel and/or as a buffer between road use and private property (La Cañada Flintridge 2020).

4.7 Approved Local, Regional, or State Conservation Plans

The project area is not located in an area subject to an HCP or NCCP (Figure 5). The project area is located within the incorporated cities of La-Canada Flintridge and Pasadena; therefore, it is within the jurisdiction of these municipalities and not the County of Los Angeles.

5.0 IMPACT ANALYSIS

The purpose of the project is to improve a 1000-foot section of the Flint Canyon Wash Trail to prevent stream flows from eroding and undercutting the slope of the trail. A high density of nonnative plant species and disturbed conditions (eroded areas, tennis balls, trash, concrete slabs) were noted along the trail and in the areas below the trail where the erosion will be repaired. Nonnative and invasive plant species have established throughout this area and freeway noise is constant. Overall, the project has the potential to greatly enhance the quality of habitats in and adjacent to the trail as a result of the trail improvements.

5.1 Vegetation Communities/Habitats

The project will result in minimal impacts (1.79 acres), the majority of which would be temporary and located in areas that are subject to periodic scouring and erosion. One state-sensitive vegetation community, Goodding's willow – red willow riparian woodland, occurs within the project area. Of the 2.57 acres of this community that occurs within the project area, 2.35 acres were characterized as disturbed due to the presence of nonnative and invasive plant species in varying degrees and patchy understory consisting mostly of herbaceous and grassy nonnative species. The trail improvement areas within the wash are limited to disturbed areas (<0.04 acre), mixed nonnative woodland (0.22 acre), coast live oak woodland (0.73 acre), and disturbed Goodding's willow – red willow riparian woodland (0.21 acre) habitat. Project design has limited laydown areas to disturbed and developed areas within upland habitat that are largely devoid of vegetation, two within existing parking areas on the east side of I-210 and one in a disturbed upland area along the existing wash trail. Locations of natural resources were considered during the project design phase to avoid significant impacts to native habitat areas and leave most of the native oak and riparian trees in place. Access to the site will minimize disturbance to native vegetation and trees by utilizing the existing trail and access points with minimal grading involved and limited trimming of low overhanging oak tree branches that could interfere with equipment operations. Impacts to native and

sensitive vegetation communities would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3. The Mitigation Measures for the proposed Project are discussed in Section 6.0 below.

5.2 Impacts to Sensitive Plant and Wildlife Species

5.2.1 Listed and Special-Status Plant Species

No listed plant species were observed during the assessment surveys. The June biological resources assessment was conducted during the appropriate blooming period for all six listed species that were returned by the database search (three presumed absent) and the July survey was conducted during the blooming period for three of the six listed species (one presumed absent). Two federally- and state-listed endangered species (Nevin's barberry and smooth tarplant) have a moderate potential to occur and one federally-listed endangered species (Braunton's milkvetch) has a low potential to occur. Two CNPS rank 4.2 Southern California black walnut trees were documented within the project area, one within the impact area. Between the two biological resources assessments, at least one survey was conducted during the appropriate blooming period for all but one of the remaining special-status species with a high or moderate potential to occur, and these species were not observed. The species that was outside the blooming period during the assessment surveys (Parish's gooseberry), is a perennial shrub that is detectable even outside the blooming period, and this species was not detected either. Impacts in the form of ground disturbance, dust, vegetation removal, altered hydrology, soil compaction, and mortality may occur. Impacts to listed and special-status plant species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4.

5.2.2 Listed, Fully Protected, Candidate, and Special-Status Wildlife Species

One state candidate insect species (Crotch bumble bee) has a low potential to occur based on limited foraging habitat that occurs in the 500-foot buffer but is unlikely to nest within the riparian habitat. A final ruling that was due to be issued in January 2021, will likely be influenced by a recent court decision that determined that insects are not eligible for listing under the CESA. As the project would not alter the functionality of the project area for this species and this species is unlikely to be attracted to the impact area for nectaring or nesting, no impacts to Crotch bumble bee are expected.

Four special-status reptile species (Southern California legless lizard, two-striped garter snake, California glossy snake, coastal whiptail) and one special-status amphibian species (Coast Range newt) have a high or moderate potential to occur. If these species were present, impacts in the form of ground disturbance, vegetation removal, altered hydrology, loss of breeding pools, mortality, construction noise, and vibrations may occur. Impacts to special-status wildlife species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-5.

One special-status wildlife species (yellow warbler) was determined to be present during the nesting season. Although birds that choose to nest in the project area are likely more tolerant of human activity and noise, impacts in the form of vegetation removal, nest removal, mortality, and construction noise and vibrations that could cause nest abandonment may occur. One Fully Protected raptor species (peregrine falcon) has a moderate potential to occur based on a known recent record, but nesting habitat (cliffs and ledges of tall buildings and bridges) is limited (ledges on the I-210 and Oak Grove bridges) and are not

located within the project impact area. Two federally- and state-listed endangered riparian bird species (least Bell's vireo and southwestern willow flycatcher) and one CDFW SSC (yellow-breasted chat) have a moderate or low potential to occur due to presence of riparian habitat, but are unlikely to occur as nesting species due to the limited and disturbed quality of riparian habitat and lack of suitable understory structure. If these species were to occur, noise and temporary disturbances to vegetation could temporarily alter and limit foraging activities but are unlikely to result in direct impacts and may even improve the long-term functionality of the area. Impacts to listed and special-status bird species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-6.

Four special-status bat species (pallid bat, Townsend's big-eared bat, western yellow bat, big free-tailed bat) have a moderate potential to occur and evidence of bat roosts (guano) was detected under the I-210 and Oak Grove bridges. Trees within the project area provide potential bat roost habitat. If these species were to occur, impacts in the form of roost disturbance, vegetation removal, mortality, construction noise, and vibrations may occur. Impacts to special-status bat species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-7.

One state candidate species (mountain lion) has a high potential to occur in the area based on a recent known occurrence and presence of water and shelter but is not expected to den in the project area due to its highly urbanized surroundings and limited width. Several woodrat middens were found in upland areas between the existing trail and I-210, and although trapping would be required to determine species, were determined to likely belong to the common species of woodrat based on structure and microhabitat. No night-work is proposed for the project and project design was able to avoid all but one woodrat midden. Impacts to vegetative cover would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-5.

5.2.3 Critical Habitat

The project will not result in impacts to designated or proposed Critical Habitat, as Critical Habitat does not occur within the immediate project area.

5.2.4 Raptors and Migratory Birds

Potential nesting sites for raptors and migratory bird species are present throughout the site in the trees, shrubs, and under the bridges. One large stick nest that could be re-utilized annually for nesting by raptor or owl species occurs in a nonnative eucalyptus tree on the south side of I-210. Several active swallow and swift nests were observed under the Oak Grove Boulevard and I-210 overpasses. Impacts to raptors and nesting migratory bird species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-6.

5.3 Impacts to Wildlife Movement Corridors and Linkages

The project area is not located within a designated movement corridor or linkage area. Large animals like mule deer and mountain lion could potentially utilize this area but the constricted nature of the habitat and steep banks are likely a deterrent to these species. Smaller mammals that have adapted to life in and on the outskirts of urban areas, like coyotes, raccoons, opossums, would be expected to utilize this area for food and local movement. The project may result in additional noise and temporary restrictions to localized wildlife movement during working hours, however, it would not restrict nocturnal species from

utilizing the area nor alter the long-term functionality of the area. Additionally, the project is a trail restoration project to prevent further erosion of the wash below the trail, therefore, the functionality of the area will remain intact. Impacts to localized movement would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-5.

5.4 Impacts to Aquatic Resources

A total of 2.34 acres of potential USACE and 6.48 acres of potential CDFW aquatic resources have been mapped within the Delineation Area (ECORP 2021). This acreage represents a calculated estimation of the extent of aquatic resources within the Delineation Area and is subject to modification following USACE review and/or the verification process. The placement of dredged or fill material into jurisdictional features would require a permit pursuant to Section 404 of the CWA and certification or waiver in compliance with Section 401 of the CWA. No wetlands were identified within the DA. Impacts to jurisdictional aquatic resources would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-8.

5.5 Impacts to Local Policies and Ordinances

Native coast live oak, western sycamore, Southern California black walnut, and white alder trees surrounding staging areas and the southern portion of the project impact area are protected under the City of Pasadena Tree Ordinance, in addition to specimen, landmark, public, and mature trees as defined by Section 8.52.020 of the city's ordinance. City trees in the public right-of-way (as determined by a City approved arborist) are protected under the City of La Cañada Flintridge Municipal Code, Section 4.24 in the northern portion of the project impact area. Impacts to local policies and ordinances would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-9.

5.6 Impacts to Approved Local, Regional, or State Conservation Plans

The project is located within incorporated city limits (Pasadena and La Canada-Flintridge) and is not located in an area subject to an HCP or NCCP, therefore, the project will not result in impacts to approved local, regional or state conservation plans.

6.0 MITIGATION MEASURES

The following mitigation measures would reduce impacts to sensitive biological resources to a less than significant level.

- **BIO-1:** Worker Education: Within 30 days prior to ground-disturbing activities, a sensitive species educational briefing shall be conducted by a qualified biologist for construction personnel. The biologist will identify all sensitive habitat and resources that may be encountered onsite, and construction personnel will be instructed to avoid Environmentally Sensitive Areas (ESAs) and report any sightings of sensitive species to the monitoring biologist. No night work will be allowed.
- **BIO-2: Biological Monitoring.** A qualified biological monitor shall be present during initial ground- or vegetation-disturbing project-related activities to ensure the contractor remains within project limits, established ESAs are avoided, and to monitor for wildlife in harm's way. This includes working with the contractor prior to vegetation removal to determine an ingress/egress route that targets nonnative trees

and make sure that impact limits have been clearly staked and ESA fencing (as appropriate) has been installed by the contractor. At a minimum, ESA's shall be established around the one Southern California black walnut identified on the western edge of the project impact area, mapped woodrat middens inclusive of the one on the east edge of the project impact area, and the stick (raptor) nest tree just south of I-210. Following initial project-related activities, a qualified monitoring biologist shall be present as necessary to maintain the implemented protection measures and monitor for additional species in harm's way. These protection measures shall include, as appropriate: redirecting wildlife, identifying areas that may require exclusionary devices (e.g., silt fencing), or capturing and relocating wildlife outside the work area. Any captured species shall be immediately relocated to adjacent appropriate habitat that is contiguous to adjacent habitat and not impacted by project-related disturbance activities.

BIO-3: Restoration Plan: A combination of onsite habitat restoration, enhancement, and exotic plant removal shall be implemented by City of La Canada-Flintridge at a 1:1 ratio for impacted riparian habitat/ sensitive natural communities, habitat, and jurisdictional waters. Habitat restoration/enhancement shall include use of willow cuttings and exotic plant species removal. Nonnative, weedy habitats within the basin shall be targeted whenever possible as mitigation sites. Planting design, identification of onsite restoration areas, and native plant species and appropriate ratios for the project area will be addressed. The Restoration Plan will include a maintenance, monitoring, and reporting component for a 120-day Plant Establishment Period (PEP) and for five (5) years following the end of the 120-day PEP.

BIO-4: Preconstruction Sensitive Plant Survey: One focused plant survey with focus on detection of three listed species with moderate or low potential to occur shall be completed within the project impact limits (including ingress/egress routes and staging areas) prior to construction and during the appropriate time for identification (April-June). The survey will also focus on special-status plant species with a high or moderate potential to occur. If listed or special-status plant species are not detected, no further action is necessary. If a listed plant species is determined to occur and avoidance is not an option, an ESA would be established, and the project will be temporarily halted until a Biological Assessment (BA) and Section 7 agency consultation can be completed. If a special-status plant species is found during preconstruction surveys, an ESA shall be established, and the area will be avoided to the maximum extent possible. If avoidance is not an option, impacts will be addressed by the Project's Restoration Plan (BIO-2) and mitigation measures will be species specific and may include harvesting of seeds or cuttings for seeding/planting in on-site restoration areas, transplanting of individual trees/plants or topsoil in restoration areas and/or temporarily disturbed areas, and/or replacement at a 1:1 ratio.

BIO-5: Preconstruction Sensitive Wildlife Survey: A preconstruction survey for sensitive wildlife species will be conducted within two weeks (14 days) of initial grading, demolition, and/or grubbing activities. If special-status (non-listed) wildlife species are observed within the impact area, the qualified biologist will develop and implement appropriate protection measures for that species. These protection measures shall include, as appropriate: presence of a biological monitor during ground disturbing activities, redirecting the species, constructing exclusionary devices, protection of breeding pools (e.g., silt fencing), or capturing and relocating wildlife outside the work area (as project and/or individual permits allow). The biological monitor will have the authority to temporarily halt construction activities in order to allow special-status and general wildlife to safely move out of harm's way and may employ hazing methods to direct individual's to areas outside the construction limits. If a listed wildlife species is determined to nest or den within the project area, the project will be temporarily halted until a Biological

Assessment (BA) and Section 7 agency consultation can be completed. Observations of special-status species made during the surveys shall be recorded onto a CNDDB field data sheet and submitted to CDFW for inclusion into the CNDDB.

BIO-6: Nesting Bird Surveys and Protection Measures: All vegetation and tree removal activities shall be conducted during the bird non-breeding season (between September 16 and January 29 of any given year). Prior to commencement and within three (3) days of trail restoration activities that are scheduled to begin or continue within the bird breeding season (generally February 1-September 15 for most species), a preconstruction nesting survey shall be conducted by a qualified biologist for the detection of any special-status species and active nests (contain eggs, chicks, or young dependent on the nest or immediate nest area) within 300 feet of the construction work area. The surveys shall be conducted by a qualified biologist with experience in conducting nesting bird surveys. The surveys shall continue on a weekly basis throughout the nesting bird season throughout the duration of construction activities.

If an active nest is found, the qualified biologist will develop and implement appropriate protection and avoidance measures for that nest. Appropriately sized no-work buffers will be assigned to each active nest identified during the preconstruction and weekly surveys. The qualified biologist may approve adjustments to the buffer size based on the species' life history, species' sensitivity to disturbances (e.g., noise, vibration, human activity), individual behavior, nest stage (eggs, incubation, nestlings, etc.), location of nest and site conditions, presence of screening vegetation, anticipated project activities, preconstruction (ambient) conditions, and effectiveness of protection measures that may be employed. These protection measures shall include, as appropriate, installation of sound walls or visual barriers, and temporarily rescheduling of Project activities in the area until the nest is no longer active. The sound walls and visual barriers may consist of constructing temporary walls with k-rail, plywood, weed-free straw waddle, screens, or even the strategic placement of construction equipment/vehicles. Coordination with CDFW will be necessary to determine any further course of action to avoid impacts to nesting raptors including removal of an identified raptor nest and/or installation of exclusionary devices or netting to prevent re-use of an existing raptor nest. Nest monitoring shall be conducted as necessary to document effectiveness of avoidance buffers and determine when buffers may be removed. Work in the buffer area can resume once the nest is deemed no longer active by the monitoring biologist.

BIO-7: Special-Status Bats and Bat Maternity Roosts: Within 30 days prior to commencement of vegetation removal activities, a preconstruction bat survey shall be conducted by a qualified biologist for the presence of any roosting bats. Acoustic recognition technology shall be used if feasible and appropriate. If either a bat maternity roost or hibernacula (structures used by bats for hibernation) are present, a qualified biologist will develop and implement appropriate protection measures for that maternity roost or hibernacula. These protection measures shall include, as appropriate: safely evicting non-breeding bat hibernacula, establishment of avoidance buffers, or replacement of roosts at a suitable location. These measures shall also include as appropriate:

- To the extent feasible, trees that have been identified as roosting sites shall be removed or relocated between October 1 and February 28.
- If trees must be removed during the maternity roost season (March 1 to September 30), a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat for bats.

- Trees identified as potentially supporting an active nursery roost shall be inspected by a qualified biologist no greater than 7 days prior to tree disturbance to determine presence or absence of roosting bats.
- Trees determined to support active maternity roosts will be left in place until the end of the maternity season (September 30).
- If bats are not detected in a tree, but the qualified biologist determined that roosting bats may still be present, trees shall be removed as follows:
 - Pushing the tree down with heavy machinery instead of felling the tree with a chainsaw.
 - o First pushing the tree lightly 2 to 3 times with a pause of 30 seconds in between each nudge to allow bats to become active, and then pushing the tree to the ground slowly.
 - o Allowing the tree to remain in place for 24 to 48 hours until inspected by the qualified biologist for presence or absence of roosting bats.
- The qualified biologist shall document all bat survey, monitoring, and protection measure activities and prepare a summary report for the City.

BIO-8: Aquatic Resources: Applications for the appropriate state and federal permits shall be filed based on the results of the delineation survey and any mitigation and monitoring requirements of those permits will be in addition to the above mitigation measures.

BIO-9: City Tree Ordinances and Policies: Within 90 days prior to ground-disturbing activities, a qualified biologist (La Canada-Flintridge City approved arborist for La Canada-Flintridge land) will conduct a tree survey within the project footprint to identify native and/or city-protected trees (in accordance with the proper city jurisdiction – Pasadena or La Canada-Flintridge); and native and/or city-protected trees that would be removed or potentially affected by the Proposed Project; and native and/or city-protected trees that can be avoided, and native and/or city-protected trees that will require root zone protection. The City of La Canada-Flintridge would replace native city-protected trees that cannot be avoided with an in-kind native tree species or replacement of nonnative city-protected tree species with a native tree species). The replacement is expected to be at a 1:1 ratio by canopy acreage. The biological monitor shall implement measures to protect the root zone of oak trees and native city-protected trees that may be impacted immediately adjacent to the project impact areas, staging areas, and along ingress/egress roads. The acreage occupied by the canopies of the native and/or city-protected trees to be removed will determine the appropriate level of tree replacement. The City of La Canada-Flintridge shall identify tree replacement areas in the Restoration Plan (BIO-3) that are no less than the acreage of the native and/or city-protected tree canopies to be removed. The number of replacement trees installed by City of La Canada-Flintridge will be greater than the number of trees to be removed should the replacement tree be smaller and younger than the tree to be removed. The City of La Canada-Flintridge shall monitor the survival of the replacement trees for five (5) years and replace those that do not survive within the monitoring period, ensuring that no less than 1:1 ratio of replacement, or no net loss, has been achieved.

7.0 LITERATURE CITED

- [AOU] American Ornithologists' Union. 2019. Sixtieth Supplement to the A.O.U Checklist of North American Birds, Seventh edition. 135:798-813. Accessed from: http://www.americanornithology.org/content/checklist-north-and-middle-american-birds.
 . 1998. Check-list of North American Birds, Seventh edition.
- Bradley, R.D., L.K. Ammerman, R.J. Baker, L.C. Bradley, J.A Cook, R.C. Dowler, C. Jones, D.J Schmidly, F.B. Stangl, Jr., R.A. Van Den Bussche, B. Wursig. 2014. Revised Checklist of North American Mammals North of Mexico. Museum of Texas Tech University.
- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley, California. 1400 pp.
- Calflora. 2020. Information on California plants for education, research and conservation. [web application]. Berkeley, California: The Calflora Database [a non-profit organization]. Available: http://www.calflora.org/. Accessed: June 2020.
- [CCH] Consortium of California Herbaria. 2020. Data provided by the participants of the Consortium of California Herbaria. [Web Application]. Berkley, California: Consortium of California Herbaria: Available: ucjeps.berkeley.edu/consortium/
- [CDFW] California Department of Fish and Wildlife. 2020a. California Native Diversity Database. Rarefind 5 [computer program]. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Wildlife. Accessed on June 6, 2020.
- . 2020b. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 140 pp. August.

 . 2019. Special Animals List. Periodic publication. 67 pp. August.
- [CFGC] California Fish and Game Commission. Notice of Findings accepted for consideration the petition submitted to list an evolutionarily significant unit (ESU) of mountain lions (*Puma concolor*) in southern and central coastal California as threatened or endangered under the California Endangered Species Act. April 21, 2020.
- City of La Cañada Flintridge. 2020. La Cañada Flintridge Municipal Code. Accessed July 1, 2020. Website https://qcode.us/codes/lacanadaflintridge/.
- City of Pasadena. 2020. Pasadena Municipal Code. Accessed July 1, 2020. Website: https://library.municode.com/ca/pasadena/codes/code of ordinances.
- [CNPS] California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 5 June 2020].
- County of Los Angeles. 2015. General Plan 2035. Los Angeles County Department of Regional Planning, Los Angeles. Adopted November 5, 2015.

- [ECORP] ECORP Consulting, Inc. 2021. Least Bell's Vireo 2018 Survey Report for the Devil's Gate Reservoir Sediment Removal and Management Project. Prepared for Los Angeles County Department of Public Works. 2018.
 _____. 2018a. Least Bell's Vireo 2018 Survey Report for the Devil's Gate Reservoir Sediment Removal and Management Project. Prepared for Los Angeles County Department of Public Works. 2018.
 _____. 2018b. Southwestern Willow Flycatcher and Least Bell's Vireo 2017 Survey Report for the Devil's Gate Reservoir Sediment Removal and Management Project Los Angeles County, California. Prepared for Los Angeles County Department of Public Works. January 2018.
- [gSSURGO] Soil Survey Staff. Gridded Soil Survey Geographic (gSSURGO) Database for California United States Department of Agriculture, Natural Resources Conservation Service. Available online at https://gdg.sc.egov.usda.gov/. June 5, 2020 (FY2019 official release).
- Hall, E.R. 1981. The Mammals of North America, 2nd. ed. John Wiley & Sons, New York, 1:1-600+ 90, 2:601-1181 + 90.
- Halterman, M., M. Johnson, J. Holmes and S. Laymon. 2015. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo: U.S. Fish and Wildlife Techniques and Methods. 45 pp.
- Leatherman Biological Consulting, Inc. 2016. Results of Focused Surveys for the Southwestern Willow Flycatcher, Western Yellow-billed Cuckoo and Least Bell's Vireo for the Devil's Gate Reservoir Sediment Removal and Management Project. Letter report to ECORP Consulting, Inc. dated September 16, 2016.
- [LADPW] Los Angeles Department of Public Works. 2020. Devil's Gate Reservoir Restoration Project website: devilsgateproject@pw.lacounty.gov accessed June 2020.
- _____. 2014. Habitat Conservation Plan for Los Angeles Department of Water and Power's Land Management and Operation and Maintenance Activities on Its Land in Inyo and Mono Counties, California. Appendix B Habitat Suitability Analysis.
- Nafis, G. 2019. California Herps A Guide to the Amphibians and Reptiles of California. Available at: http://www.californiaherps.com/ (accessed August 2019).
- Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society, Sacramento, CA.
- [SSAR] Society for the Study of Amphibians and Reptiles. 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, With Comments Regarding Confidence in our Understanding. Eighth Edition. Committee on Standard English and Scientific Names.
- [USFWS] United States Fish and Wildlife Service. 2002. Southwestern Willow Flycatcher Recovery Plan.

 Albuquerque, New Mexico. i-ix + 210 pp., Appendices A-O.

 [USFWS] United States Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and

- Plants; Revised Designation of Critical Habitat for Santa Ana Sucker; Final Rule. Federal Register 75(239): 77962-78027.
- _____. 1918. Migratory Bird Treaty Act of 1918. Section 16 of the U.S. Code (703-712), as amended 1989.
- Williams, P. H., R. W. Thorp, L. L. Richardson, and S. R. Colla. 2014. The Bumble bees of North America: An Identification guide. Princeton University Press, Princeton.
- Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Available from https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range.

LIST OF APPENDICES

Appendix A - Representative Site Photographs

Appendix B - Plant Compendium

Appendix C - Wildlife Compendium

Appendix D - Potential for Occurrence of Special-Status Plant Species

Appendix E - Potential for Occurrence of Special-Status Wildlife Species

APPENDIX A

Representative Site Photographs



Photo 1. Looking northeast from pedestrian bridge at Flint Canyon Wash outlet into Devil's Gate Reservoir. June 10, 2020.

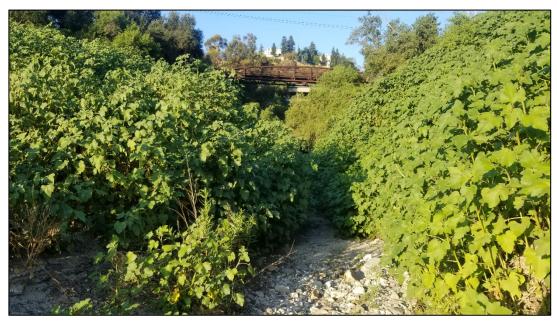


Photo 2. Looking southwest toward Oak Grove Boulevard from buffer at Flint Canyon Wash outlet. July 17, 2020.



Photo 3. Looking southwest at willow riparian habitat in southeast portion of project area. July 17, 2020.



Photo 4. Looking north toward trail at erosion under I-210. July 17, 2020.



Photo 5. Looking west at open habitat under I-210 and disturbed willow riparian habitat west of I-210. July 17, 2020.



Photo 6. Looking at erosion downslope of trail under I-210 and disturbed willow riparian habitat west of I-210. June 10, 2020.



Photo 7. Bat roost location under I-210 based on guano on ground and bat vocalizations. June 10, 2020.



Photo 8. Inactive stick nest west of I-210 likely recently used by greathorned owl. June 10, 2020.



Photo 9. Looking southeast from trail at oak and disturbed willow riparian canopy. June 10, 2020.



Photo 10. Woodrat midden between trail and I-210. June 10, 2020.



Photo 11. Looking west toward Tennis Club and at nonnative woodland and concrete debris in wash. June 10, 2020.



Photo 12. Looking downstream of the trail at-grade crossing of Flint Canyon Wash in northern portion of the project area. June 10, 2020.



Photo 13. Looking east from under oak woodland canopy at Berkshire Place undercrossing just north of project area. June 10, 2020.



Photo 14. Outlet of trail on to Berkshire Avenue at northwest end of survey buffer. June 10, 2020.

APPENDIX B

Plant Compendium

APPENDIX B – FLINT CANYON WASH PLANT COMPENDIUM

Scientific Name	Common Name							
VASCULAR PLANTS GYMNOSPERMS								
Pinaceae	Pine Family							
Pinus canariensis*								
	Canary Island pine							
	(DICOTYLEDONS)							
Adoxaceae	Elderberry Family							
Sambucus nigra ssp. cerulea (= S. mexicana)	blue elderberry							
Anacardiaceae	Sumac Family							
Malosma laurina	laurel sumac							
Rhus aromatica	fragrant sumac							
Toxicodendron diversilobum	poison oak							
Apiaceae	Carrot Family							
Conium maculatum*	poison hemlock							
Apocynaceae	Dogbane Family							
Nerium oleander*	oleander							
Asteraceaea	Sunflower Family							
Artemisia californica	California sagebrush							
Artemisia douglasiana	mugwort							
Baccharis salicifolia	mulefat							
Baccharis pilularis	coyote brush							
Carduus pycnocephalus*	Italian thistle							
Centaurea melitensis*	tocalote							
Encelia farinosa	brittlebush							
Erigeron canadensis	Canada horseweed							
Heterotheca grandiflora	telegraph weed							
Lactuca serriola*	wild prickly lettuce							
Pseudognaphalium californicum	ladies' tobacco							
Salsola tragus*	Russian thistle							
Sonchus asper*	spiny sowthistle							
Betulaceae	Birch Family							
Alnus rhombifolia	white alder							
Boraginaceae	Borage Family							
Phacelia cicutaria	caterpillar phacelia							
Brassicacaeae	Mustard Family							
Brassica nigra*	black mustard							
Sisymbrium irio*	London rocket							
Caprifoliaceae	Honeysuckle Family							
Lonicera sp.	honeysuckle							
Caryophyllaceae	Carnation Family							
Stellaria media*	chickweed							
Cistaceae	Rock Rose Family							
Cistus incanus*	hairy rockrose							
Convolvulaceae	Bindweed Family							
Convolvulus arvensis*	field bindweed							
Convolvatas arvensis	neid billuweed							

Scientific Name	Common Name						
VA	SCULAR PLANTS continued						
ANGIOSPERMS (DICOTYLEDONS) continued							
Euphorbiaceae	Spurge Family						
Ricinus communis*	castorbean						
Fabaceae	Legume Family						
Acacia sp.*	acacia						
Acmispon americanus	Spanish lotus						
Acmispon glaber	deerweed						
Melilotus indicus*	sourclover						
Robinia pseudoacacia*	black locust						
Spartium junceum*	Spanish broom						
Fagaceae	Oak Family						
Quercus agrifolia	coast live oak						
Gernaniaceae	Geranium Family						
Erodium cicutarium*	red stemmed filaree						
Juglandaceae	Walnut Family						
Juglans californica**	Southern California black walnut						
Lamiaceae	Mint Family						
Marrubium vulgare*	white horehound						
Salvia apiana	white sage						
Salvia mellifera	black sage						
Malvaceae	Mallow Family						
Malva parviflora*	cheeseweed mallow						
Moraceae	Mulberry Family						
Ficus carica*	common fig						
Myrtaceae	Myrtle Family						
Eucalyptus camaldulensis*	red gum						
Eucalyptus globulus*	blue gum						
Oleaceae	Olive Family						
Fraxinus uhdei*	shamel ash						
Fraxinus velutina	velvet ash						
Onagraceae	Evening Primrose Family						
Eulobus californicus	California primerose						
Oenothera elata	evening primerose						
Plantaginaceae	Plantain Family						
Penstemon spectabilis	showy penstemon						
Phrymaceae	Lopseed Family						
Diplacus aurantiacus	sticky monkeyflower						
Platanaceae	Plane Tree Family						
Platanus racemosa	western sycamore						
Polygonaceae	Buckwheat Family						
Eriogonum fasciculatum	California buckwheat						
Rumex crispus*	curly dock						
Rosaceae	Rose Family						
Adenostoma fasciculatum	chamise						

Scientific Name	Common Name					
VASC	CULAR PLANTS continued					
ANGIOSPERMS (DICOTYLEDONS) continued						
Rosaceae continued	Rose Family					
Heteromeles arbutifolia	toyon					
Prunus ilicifolia	holly leaf cherry					
Rubus ursinus	California blackberry					
Rubiaceae	Bedstraw Family					
Galium aparine	common bedstraw					
Salicaceae	Willow Family					
Salix gooddingii	black willow					
Salix laevigata	red willow					
Salix lasiolepis	arroyo willow					
Sapindaceae	Soapberry Family					
Acer negundo	boxelder					
Simaroubaceae	Quassia Family					
Ailanthus altissima*	tree of heaven					
Solanaceae	Nightshade Family					
Datura wrightii	jimsonweed					
Nicotiana glauca*	tree tobacco					
Solanum americanum	common nightshade					
Ulmaceae	Elm Family					
Ulmus sp.	elm					
ANGIOSPE	RMS (MONOCOTYLEDONS)					
Arecaceae	Palm Family					
Washingtonia robusta*	Mexican fan palm					
Cyperaceae	Sedge Family					
Cyperus eragrostis	umbrella sedge					
Poaceae	Grass Family					
Avena fatua*	wild oat					
Bromus madritensis*	red brome					
Bromus tectorum*	cheat grass					
Elymus condensatus	giant wild rye					
Hordeum murinum*	foxtail barley					
Phragmites australis	common reed					

^{*}Nonnative species

** Federally endangered or threatened/State endangered or threatened or CNPS designated

APPENDIX C

Wildlife Compendium

FLINT CANYON WASH TRAIL WILDLIFE SPECIES LIST

FLINT CANYON WASH TRAIL WILDLIFE SPECIES LIST								
Scientific Name	Common Name							
INSECTA (INSECTS)								
Order: Odonata	Dragonflies and Damselflies							
	dragonfly spp.							
	damselfly spp.							
Papilionidae	Swallowtails							
Papilio rutulus	western tiger swallowtail							
Pieridae	Orange-Tips, Whites and Sulfurs							
Pieris rapae	cabbage white butterfly							
AMPHIBIA (A	MPHIBIANS)							
Hylidae	Treefrogs and allies							
Pseudacris hypochondriaca	Baja California treefrog (tadpoles)							
REPTILIA (I	REPTILES)							
Phrynosomatidae	Spiny Lizards, Horned Lizards, etc.							
Sceloporus occidentalis	western fence lizard							
	(BIRDS)							
Columbidae	Pigeons and Doves							
Patagioenas fasciata (Previously Columba	band-tailed pigeon							
fasciata)								
Zenaida macroura	mourning dove							
Strigidae	Owls							
Bubo virginianus	great horned owl (nest)							
Apodidae	Swifts							
Aeronautes saxatalis	white-throated swift							
Trochilidae	Hummingbirds							
Calypte anna	Anna's hummingbird							
Selasphorus sasin	Allen's hummingbird							
Picidae	Woodpeckers & Allies							
Picoides nuttallii	Nuttall's woodpecker							
Tyrannidae	Tyrant flycatchers							
Empidonax difficilis	pacific-slope flycatcher							
Sayornis nigricans	black phoebe							
Corvidae	Jays and Crows							
Aphelocoma californica	California scrub-jay							
Corvus brachyrhynchos	American crow							
Corvus corax	common raven							
Hirundinidae	Swallows							
Stelgidopteryx serripennis	northern rough-winged swallow							
Paridae	Titmice and Chickadees							
Baeolophus inornatus	oak titmouse							
Aegithalidae	Bushtits							
Psaltriparus minimus	bushtit							
Parulidae	Wood warblers							
Geothlypis trichas	common yellowthroat							
Oreothlypis celata (Previously Vermivora celata)	orange-crowned warbler							
J. J. L. Mark (C. L. M. C.	1 3							

Scientific Name	Common Name		
Setophaga petechia (Previously Dendroica	yellow warbler		
petechia)**			
Emberizidae	Towhees and Sparrows		
Junco hyemalis	dark-eyed junco		
Melospiza melodia	song sparrow		
Pipilo crissalis	California towhee		
Pipilo maculatus	spotted towhee		
Icteridae	Blackbirds & Orioles		
Icterus cucullatus	hooded oriole		
Fringillidae	Finches		
Spinus psaltria	lesser goldfinch		
Haemorhous mexicanus	house finch		
MAMMALI	A (MAMMALS)		
Suborder: Microchiroptera	Microbats		
	bat spp. (guano and vocalizations)		
Sciuridae	Squirrels		
Sciurus niger*	eastern fox squirrel		
Otospermophilus beecheyi	California ground squirrel		
Geomyidae	Pocket gophers		
Thomomys bottae	Botta's pocket gopher (burrows)		
Muridae	Old World Rats & Mice		
Neotoma sp.	woodrat (midden)		
Rattus norvegicus domestica*	domestic (fancy) rat (carcass)		
Canidae	Dogs, Wolves, & Foxes		
Canis lupus familiaris*	domestic dog		
Canis latrans	coyote (scat)		
Equidea	Horses and allies		
Equus caballus*	domestic horse		

^{*} Nonnative species

^{**} CDFW California Species of Special Concern/Watch List Species/FP Species
*** State and/or Federally Listed Species

APPENDIX D

Potential for Occurrence of Special-Status Plant Species

Special-Status Plant Species Potential to Occur

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence	
Arctostaphylos glandulosa ssp. gabrielensis San Gabriel manzanita	Fed: Ca: CNPS:	None None 1B.2	March 950-2000	Occurs in chaparral habitat on granitic soils.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area. The project impact area occurs outside of the known elevation range for this species.	
Asplenium vespertinum western spleenwort	Fed: Ca: CNPS:	None None 4.2	Feb-Jun 180-1000	Occurs in chaparral, cismontane woodland, and coastal sage scrub habitats.	High: Suitable habitat for this species occurs within the project impact area and multiple records were returned during the database search, including within five miles of the project impact area.	
Astragalus brauntonii Braunton's milkvetch	Fed: Ca: CNPS:	END None 1B.1	Jan- Aug <650	Occurs in chaparral, coastal sage scrub, and valley and foothill grassland habitats. Often found in recently burned or disturbed areas.	Low: Marginally suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however none within five miles of the project impact area.	
Atriplex parishii Parish's brittlescale	Fed: Ca: CNPS:	None None 1B.1	June-Oct 25-1900	Occurs in chenopod scrub, playas, and vernal pools.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.	
Atriplex serenana var. davidsonii Davidson's saltscale	Fed: Ca: CNPS:	None None 1B.2	April-Oct 10-200	Occurs in coastal bluff scrub and coastal sage scrub habitat, typically on alkaline soils.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area. The project impact area occurs outside of the known elevation range for this species.	
Berberis nevinii Nevin's barberry	Fed: Ca: CNPS:	END END 1B.1	(Feb) March-June 70-825	Occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian scrub habitats, typically on sandy or gravelly soil.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple historical records were returned during the database search, including within five miles of the project impact area.	
Calochortus catalinae Catalina mariposa lily	Fed: Ca: CNPS:	None None 4.2	(Feb) Mar- June 15-700	Occurs in chaparral, cismontane woodland, coastal sage scrub, and valley and foothill grassland.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however none within five miles of the project impact area.	
Calochortus clavatus var. gracilisi slender mariposa lily	Fed: Ca: CNPS:	None None 1B.2	March-June 320-1000	Occurs in chaparral, coastal sage scrub, and valley and foothill grassland.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.	
Calochortus palmeri var. palmeri Palmer's mariposa-lily	Fed: Ca: CNPS:	None None 1B.2	April-July 1200-2200	Occurs in chaparral, yellow pine forest, and wetland-riparian habitats.	Presumed Absent: The project impact area occurs outside of the known elevation range for this species.	
Calochortus plummerae Plummer's mariposa-lily	Fed: Ca: CNPS:	None None 4.2	May-July 100-1700	Occurs in chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, and valley and foothill grassland habitat, typically in granitic, rocky soils.	High: Suitable habitat for this species occurs within the project impact area and multiple records were returned during the database search, including within five miles of the project impact area.	

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Calochortus weedii var. intermedius intermediate mariposa lily	Fed: Ca: CNPS:	None None 1B.2	May-July <680	Occurs in chaparral, valley grassland, and coastal sage scrub communities, usually on dry rocky slopes.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Calystegia felix lucky morning-glory	Fed: Ca: CNPS:	None None 1B.1	March-Sep NA	Historically associated with wetlands, marshes, and alluvial riparian scrub.	Low: Suitable habitat for this species occurs within the project impact area; however, only historical records, greater than five miles from the project impact area, were returned during the database search.
Castilleja gleasoni Mt. Gleason paintbrush	Fed: Ca: CNPS:	None None 1B.2	May-June 1100-2200	Occurs in yellow pine forest habitat.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area. The project impact area occurs outside of the known elevation range for this species.
Castilleja plagiotoma Mojave paintbrush	Fed: Ca: CNPS:	None None 4.3	April-June 300-2500	Occurs in Great Basin scrub (alluvial), Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Centromadia parryi ssp. australis southern tarplant	Fed: Ca: CNPS:	None None 1B.1	May-Nov <480	Occurs on margins of salt-marshes and swamps, in vernally mesic valley and foothill grassland, and vernal pools.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Centromadia pungens ssp. laevis smooth tarplant	Fed: Ca: CNPS:	END END 1B.2	April-Sep <640	Occurs in chenopod scrub, meadows and seeps, playas, riparian woodlands, and valley and foothill grassland habitats. Often found on disturbed sites.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple historical records were returned during the database search, including within five miles of the project impact area.
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	Fed: Ca: CNPS:	CAN END 1B.1	April-June 150-1220	Occurs in sandy soils in coastal sage scrub habitats and in valley and foothill grassland.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Chorizanthe parryi var. parryi Parry's spineflower	Fed: Ca: CNPS:	None None 1B.1	April-June 275-1220	Occurs in chaparral, cismontane woodland, coastal sage scrub, and valley and foothill grassland habitats in openings, often in sandy or rocky soils.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple historical records were returned during the database search, including within five miles of the project impact area.
Cladium californicum California sawgrass	Fed: Ca: CNPS:	None None 2B.2	June-Sep 60-1600	Occurs in freshwater wetlands, alkali sink, and wetland-riparian habitats.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however none within five miles of the project impact area.
Clinopodium mimuloides monkey-flower savory	Fed: Ca: CNPS:	None None 4.2	June-Oct 305-1800	Occurs in chaparral and North Coast coniferous forest, typically on streambanks or in mesic areas.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Convolvulus simulans small-flowered morning- glory	Fed: Ca: CNPS:	None None 4.2	March-July 30-740	Occurs in chaparral (openings), coastal sage scrub, and valley and foothill grassland habitats.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Dodecahema leptoceras slender-horned spineflower	Fed: Ca: CNPS:	END END 1B.1	April-June 200-760	Occurs in chaparral, cismontane woodland, and alluvial fan coastal sage scrub habitats in sandy soils.	Low: The project impact area does not provide suitable alluvial fan habitat for this species. Multiple historical records were returned during the database search, including within five miles of the project impact area.
Dudleya multicaulis many-stemmed dudleya	Fed: Ca: CNPS:	None None 1B.2	April-July <600	Occurs in chaparral, coastal sage scrub, and valley and foothill grassland habitats. Often found in clay soils.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Galium grande San Gabriel bedstraw	Fed: Ca: CNPS:	None None 1B.2	Jan-July 425-1220	Occurs in chaparral, foothill woodland, yellow pine forest, and mixed evergreen forest habitats.	Presumed Absent: The project impact area occurs outside of the known elevation range for this species.
Helianthus nuttallii ssp. parishii Los Angeles sunflower	Fed: Ca: CNPS:	None None 1A	Aug-Oct 15-1525	Occurs in marshes and swamps.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Horkelia cuneata var. puberula mesa horkelia	Fed: Ca: CNPS:	None None 1B.1	Feb-Sep 70-870	Typically occurs in maritime chaparral, cismontane woodland, and coastal sage scrub habitats in sandy or gravelly soils.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple historical records were returned during the database search, including within five miles of the project impact area.
Imperata brevifolia California satintail	Fed: Ca: CNPS:	None None 2B.1	Sep-May <500	Occurs in mesic habitats of chaparral, coastal sage scrub, Mojavean desert scrub, riparian scrub, and meadows and seeps which are often alkaline.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however none within five miles of the project impact area.
Juglans californica Southern California black walnut	Fed: Ca: CNPS:	None None 4.2	March-Aug 50-900	Occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian woodland habitats.	Present: This species was observed within the project impact area during the biological resources assessment.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	Fed: Ca: CNPS:	None None 1B.1	Feb-June <1220	Occurs in marshes, swamps, and vernal pools.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Lepechinia fragrans fragrant pitcher sage	Fed: Ca: CNPS:	None None 4.2	March-Oct 20-1310	Occurs in chaparral habitat.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Lepidium virginicum var. menziesii Robinson's peppergrass	Fed: Ca: CNPS:	None None 4.3	Jan-July <885	Occurs in chaparral and coastal sage scrub habitats, often in disturbed areas and meadows.	Low: Marginally suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however no recent records within five miles of the project impact area.
Lilium humboldtii ssp. ocellatum Humboldt lily	Fed: Ca: CNPS:	None None 4.2	March-Jul (Aug) 30-1800	Occurs in chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, and riparian woodland habitats.	High: Suitable habitat for this species occurs within the project impact area and multiple records were returned during the database search, including within five miles of the project impact area.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Malacothamnus davidsonii Davidson's bush mallow	Fed: Ca: CNPS:	None None 1B.2	June-Jan 185-1140	Occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian woodland habitats.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however no recent records within five miles of the project impact area.
Muhlenbergia californica California muhly	Fed: Ca: CNPS:	None None 4.3	June-Sep 100-2000	Occurs in chaparral, coastal sage scrub, and lower montane coniferous forest habitats, typically in meadows and seeps.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Nasturtium gambelii Gambel's water cress	Fed: Ca: CNPS:	END THR 1B.1	April-Oct 5-330	Occurs in marshes and swamps.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Navarretia prostrata prostrate vernal pool navarretia	Fed: Ca: CNPS:	None None 1B.1	April-July <1210	Occurs in coastal sage scrub, meadows and seeps, valley and foothill grassland (alkaline), and vernal pools.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Opuntia basilaris var. brachyclada short joint beavertail	Fed: Ca: CNPS:	None None 1B.2	April-June 1200-1800	Occurs in creosote bush scrub, chaparral, Joshua tree woodland, and pinyon-juniper woodland.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area. The project impact area occurs outside of the known elevation range for this species.
Phacelia hubbyi Hubby's phacelia	Fed: Ca: CNPS:	None None 4.2	April-July <1000	Occurs in chaparral, coastal sage scrub, and valley and foothill grassland habitat, typically in rocky or gravelly soils.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Phacelia stellaris Brand's star phacelia	Fed: Ca: CNPS:	None None 1B.1	March-June <400	Occurs on coastal dunes and in coastal sage scrub habitat.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Pickeringia montana var. tomentosa woolly chaparral pea	Fed: Ca: CNPS:	None None 4.3	May-Aug <1700	Occur in chaparral habitat with Gabbroic, granitic, clay soils.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: Ca: CNPS:	None None 2B.2	July-Dec <2100	Occurs in habitats with sandy or gravelly soils including chaparral, cismontane woodland, coastal sage scrub, and riparian woodland.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however no recent records within five miles of the project impact area.
Quercus dumosa Nuttall's scrub oak	Fed: Ca: CNPS:	None None 1B.1	Feb-March <200	Occurs in chaparral and coastal sage scrub habitats, often with sandy soils near the coast.	Presumed Absent: The project impact area occurs outside of the known elevation range for this species.
Quercus engelmannii Engelmann oak	Fed: Ca: CNPS:	None None 4.2	March-June 50-1300	Occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland habitats.	High: Suitable habitat for this species occurs within the project impact area and multiple records were returned during the database search, including within five miles of the project impact area.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence
Ribes divaricatum var. parishii Parish's gooseberry	Fed: Ca: CNPS:	None None 1A	Feb-April 60-310	Occurs in coastal sage scrub and riparian habitats.	Moderate: Suitable habitat for this species occurs within the project impact area. Only one historical record returned during database search within five miles of the project impact area.
Romneya coulteri Coulter's matilija poppy	Fed: Ca: CNPS:	None None 4.2	March-July <1200	Occurs in chaparral and coastal sage scrub habitats, typically in dry washes and canyons.	High: Suitable habitat for this species occurs within the project impact area and multiple records were returned during the database search, including within five miles of the project impact area. This species was observed within the 500-foot survey buffer.
Sidalcea neomexicana salt spring checkerbloom	Fed: Ca: CNPS:	None None 2B.2	March-June 15-1530	Typically occurs in mesic and alkaline habitats including coastal sage scrub, chaparral, lower montane coniferous forest, Mojavean desert scrub, and playas.	Presumed Absent: Suitable habitat for this species does not occur within the project impact area.
Symphyotrichum defoliatum San Bernardino aster	Fed: Ca: CNPS:	None None 1B.2	July-Nov <2050	Occurs in cismontane woodland, coastal sage scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland, and disturbed areas.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however no recent records within five miles of the project impact area.
Symphyotrichum greatae Greata's aster	Fed: Ca: CNPS:	None None 2B.2	June-Oct 300-2010	Occurs in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland habitats.	Moderate: Suitable habitat for this species occurs within the project impact area. Multiple records returned during database search, however no recent records within five miles of the project impact area.
Thelypteris puberula var. sonorensis Sonoran maiden fern	Fed: Ca: CNPS:	None None 2B.2	Jan-Sep 50-610	Occurs in riparian habitat, meadows, and seeps typically along streams.	High: Suitable habitat for this species occurs within the project impact area and multiple records were returned during the database search, including within five miles of the project impact area.

Federal Designations:

(Federal Endangered Species Act, United State Fish and Wildlife Service [USFWS])

END: Federally listed, endangered **THR:** Federally listed, threatened

State Designations:

(California Endangered Species Act, California Department of Fish and Wildlife [CDFW])

END: State-listed, endangered **THR:** State-listed, threatened

CAN: Candidate Rare: CDFW Rare

California Rare Plant Ranks (CRPR):

- 1A: Presumed extirpated in California and rare or extinct elsewhere
- 1B: Rare, threatened, or endangered in California and elsewhere
- 2A: Presumed extirpated in California, but more common elsewhere
- 2B: Rare, threatened, or endangered in California, but more common elsewhere
- 3: Review list of plants requiring more study
- 4: Watch list of plants of limited distribution

California Native Plant Society (CNPS) Threat Code:

0.1: Seriously threatened in California0.2: Moderately threatened in California0.3: Not very threatened in California

Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CNPSEI) Sunland, Condor Peak, Chilao Flat, Burbank, Pasadena, Mount Wilson, Hollywood, Los Angeles, and El Monte 7.5-minute topographic quadrangles.

APPENDIX E

Potential for Occurrence of Special-Status Wildlife Species

Special-Status Wildlife Species Potential to Occur

Scientific Name Common Name	Status		Habitat	Potential for Occurrence					
INVERTEBRATES									
Bombus crotchii Crotch bumble bee	Fed: CA:	none CAN END	Inhabits open grassland and scrub habitats. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (Williams et al. 2014).	Low. No suitable open grassland or scrub habitat occurs within the impact limits and limited scrub and nectaring habitat occurs within the 500' survey buffer. Six CNDDB records occur within five miles of the site, the closest and most recent from 1974 approximately 1.74 miles northeast of the site.					
OSTEICTHYES									
Catostomus santaanae Santa Ana sucker	Fed: CA:	THR none	Pools and runs of creeks and small to medium rivers with cool, shallow, clear, and unpolluted water, low turbidity, and little emergent aquatic vegetation. Prefers coarse substrates such as boulders, cobbles, and gravels but also found in areas with sand or fine sediment.	Presumed Absent. The wash does not provide suitable riverine habitat due to shallow depth, limited width, relatively high gradient, and large amounts of debris. No CNDDB records occur within five miles of site.					
Gila orcuttii arroyo chub	Fed: CA:	none SSC	Creeks, streams, and rivers with areas of slow moving water with sand or mud bottoms. Ranges from San Diego to San Luis Obispo County.	Low. Flint Wash provides limited and low-quality habitat in scattered portions. Most of the wash on site was also unsuitable due to shallow depth, cobbly substrate, and large amounts of debris. No CNDDB records occur within five miles of site.					
Rhinichthys osculus ssp. 3 Santa Ana speckled dace	Fed: CA:	none SSC	Requires permanent flowing streams with summer water temps of 17-20°C. Usually inhabits shallow cobble and gravel riffles.	Low. Flint Wash provides limited and low-quality habitat in scattered portions due to relatively high gradient and large amounts of debris. No CNDDB records occur within five miles of site.					
АМРНІВІА									
Anaxyrus californicus arroyo toad	Fed: CA:	END SSC	Sandy banks of rivers, arroyos, and streams with shallow sandy pools. Also found in riparian woodlands or uplands adjacent to arroyos.	Presumed Absent. Limited low- quality habitat exists in and along the narrow and steep wash. Site supports a wash with adjacent riparian oak woodland and upland habitat; however, it had limited amounts of arroyos,					

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
				sandy banks, and pools. Only records were two recent occurrences more than five miles from site.
Rana muscosa southern mountain yellow- legged frog	Fed: CA:	END, WL	Rocky streams within narrow canyons and the chaparral belt in Southern California mountains. The known range includes four isolated clusters from Palomar Mountain in San Diego County through the San Jacinto, San Bernardino and San Gabriel Mountains of Riverside, San Bernardino and Los Angeles Counties in Southern California.	Presumed Absent. The site is located in lowlands outside the closest known range for this species (San Gabriel Mountains). Four CNDDB records occur within five miles of site, all based on specimens collected in or prior to 1967.
Spea hammondii western spadefoot	Fed: CA:	none SSC	Open areas with sandy or gravelly soils in a wide range of habitats including grasslands, coastal sage scrub, alluvial fans, open chaparral, mixed woodlands, foothills, and mountains. Prefers areas with open vegetation and short grasses. Requires rain pools or lowmoving streams for breeding and upland habitats for feeding and burrow construction.	Low. Flint Wash provides marginal and limited breeding pool habitat adjacent to upland habitat with open vegetation and short grasses for feeding and burrow construction. Two historical CNDDB records occur within five miles of the site, the closest approximately 2.9 miles east of the site from 1923.
Taricha torosa Coast Range newt	Fed: CA:	None SSC	Upland areas including grasslands, forests, and woodlands. Burrows in soil or wood debris.	High. Flint Wash provides suitable oak woodland and mixed riparian woodland habitat. One record from 2003 occurs approximately 1.3 miles northeast of the site within Arroyo Seco.
REPTILIA				
Anniella stebbinsi southern California legless lizard	Fed: CA:	None SSC	Typically occurs in moist warm loose soil with plant cover or leaf litter in sparsely vegetated beach dunes, pine-oak woodlands, desert scrub, chaparral, alluvial fans, sandy washes, and stream terraces with sycamores, oaks, or cottonwoods. Sometimes found in suburban gardens.	High. Flint Wash provides suitable oak woodland and mixed riparian woodland habitat. Twelve recent CNDDB records occur within five miles of the site, the closest approximately 0.2 mile northeast of the site in Oak Grove Park from 2018.
Arizona elegans occidentalis California glossy snake	Fed: CA:	None SSC	Most common in desert habitats but also found in arid scrub, rocky washes, grasslands, low	Moderate. Flint Wash provides suitable rocky wash habitat. No

Scientific Name Common Name	Status		Habitat	Potential for Occurrence	
			elevation coastal scrub, and chaparral. Prefers washes and sandy areas with patchy brush and rocks. Habitat includes perennial plants for prey's food source. Prefers habitats with open areas and loose soil for burrowing.	CNDDB records occur within five miles of the site.	
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: CA:	None SSC	Arid habitats including chaparral, woodland, and dry riparian areas with sparse foliage.	Moderate. A limited amount of suitable dry riparian habitat occurs at the southeast outlet of Flint Wash in to Devil's Gate Reservoir. This species has been documented at the Devil's Gate Reservoir Restoration Project (ECORP 2018a).	
Emys marmorata western pond turtle	Fed: CA:	none SSC	Rivers, creeks, small lakes and ponds, marshes, unlined irrigation canals, and reservoirs; including both permanent and intermittent waters and occasionally brackish waters. Often basks on logs, vegetation mats or rocks.	Low. Flint Wash provides marginal pond habitat and limited basking locations. One CNDDB record occurs within five miles of the site, a specimen collected approximately 2.6 miles northeast of the site in 1971.	
Phrynosoma blainvillii coast horned lizard	Fed: CA:	none SSC	Frequents a wide variety of habitats (open areas of valleys, foothills, and semiarid mountains with sandy soil and low vegetation including chaparral, woodlands, and grasslands). Most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of harvester ants and other insects.	Low. A limited amount of suitable open and sandy habitat occurs at the southeast outlet of Flint Wash in to Devil's Gate Reservoir. Four historical CNDDB records occur within five miles of the site, the most recent from 1972 approximately 3.8 miles north of the site; the closest, a specimen collected 1.6 miles southeast of the site in 1931.	
Thamnophis hammondii two-striped gartersnake	Fed: CA:	none SSC	Typically occurs near permanent or semi- permanent water in a variety of habitats including chaparral and oak woodland.	High. Flint Wash provides suitable aquatic and oak woodland habitat. This species has been documented at the Devil's Gate Reservoir Restoration Project (ECORP 2018a).	
AVES					
Aimophila ruficeps canescens southern California rufous- crowned sparrow	Fed: CA:	none WL	Coastal sage scrub, dominated by California sagebrush, or in coastal bluff scrub with low scattered scrub and moderate to steep, dry, and rocky slopes.	Low. Limited nesting habitat occurs within the disturbance limits and survey buffer. No CNDDB records occur within five miles of the site.	

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
			Nests on ground or within 1 meter of ground in shrubs or trees.	
Athene cunicularia burrowing owl (burrow sites and some wintering sites)	Fed: CA:	none SSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Also uses vacant lots or airports when prey and suitable burrow sites are available. Nests in abandoned dirt burrows.	Low. The site is located within a heavily wooded area with hilly terrain. Marginal habitat and limited open habitat occurs near the Tennis Club and a small graded lot located just west of Flint Wash. Two historic CNDDB records occur within five miles of the site, approximately 2.1 miles southeast of the site (1894) and 4.9 miles southwest of the site (1921).
Buteo swainsoni Swainson's hawk (nesting)	Fed: CA:	BCC THR	Open pine-oak woodland, savannah, and agricultural fields with scattered trees. Nests in solitary bush or tree, or in small groves.	Presumed Absent. The site is located within a heavily wooded area and is outside the current known breeding range. No CNDDB records within five miles of the site.
Cypseloides niger black swift	Fed: CA:	BCC SSC	Open sky over mountains, forests, or coastal cliffs. Nests in crevices or ledges of steep cliffs near streams or mountainous waterfalls or along the coast.	Low. Marginal and limited cliff habitat for nesting is present within the survey area, primarily in the form of steep road cuts and under bridges. No CNDDB records within five miles of the site.
Coccyzus americanus occidentalis western yellow-billed cuckoo (nesting)	Fed: CA:	THR, BCC END	Riparian forest nester, typically along the broad, lower flood-bottoms of larger river systems. Prefers dense understory and second- growth stands of willow and cottonwood that are often streamside. In California, most likely to be found in patches of willow-cottonwood riparian habitat greater than 20 hectares (50 acres) in size (Halterman et al. 2015).	Presumed Absent. Flint Wash provides limited and marginal riparian forest habitat that is narrow and contains a high concentration of oak and nonnative tree species intermixed with willow trees. No cottonwoods present. No CNDDB records within five miles of the site.
Empidonax traillii extimus southwestern willow flycatcher (nesting)	Fed: CA:	END END	Breeds in riparian forests. Nests are often placed in dense vegetation along streams or rivers including willow. Low to midelevation sites range from single plant species to mixtures of native broadleaf trees and shrubs including willows, cottonwood, boxelder, ash, alder, blackberry, and nettle (USFWS 2002).	Low. Only disturbed riparian and oak woodland habitat with limited understory occur within the impact area and are unlikely to provide suitable "riparian forest" habitat for nesting. Two historic records occur (1894 and 1906) within five miles of the site, specimens collected from "Los Angeles" and "Pasadena, Arroyo Seco". Southwestern willow

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
				flycatchers have not been detected during focused surveys at the Devil's Gate Reservoir Restoration Project just east of the project (Leatherman 2016; ECORP 2018b).
Falco mexicanus prairie falcon (nesting)	Fed: CA:	BCC WL	Open habitats such as plains, prairies, steppe, and mountainous areas. Nests in a sheltered ledge of rocky cliffs.	Low. The site is located within a heavily wooded area that does not provide open foraging habitat for this species. No CNDDB records occur within five miles of the site.
Falco peregrinus anatum American peregrine falcon (nesting)	Fed: CA:	DL, BCC DL, FP	Open habitat from coastlines to mountains. Nests on rocky cliffs or crags, and sometimes on manmade structures. Occasionally nests in tree or snag cavities or old raptor nests.	Moderate. Limited nesting habitat is present under the Oak Grove and I- 210 bridges. One recent CNDDB record from 2005 occurs at an undisclosed "completely urban area" within five miles of the site.
Icteria virens yellow-breasted chat (nesting)	Fed: CA:	None SSC	Riparian and upland thickets, and dry overgrown pastures. Prefers to nest in dense scrub along streams or at the edges of ponds or swamps.	Moderate. Flint Wash provides a limited and marginal amount of suitable riparian thicket habitat for nesting. This species has been documented at the Devil's Gate Reservoir Restoration Project (ECORP 2018a).
Polioptila californica californica coastal California gnatcatcher	Fed: CA:	THR SSC	Obligate, permanent resident of coastal sage scrub below 2,500 feet. Low, coastal sage scrub in arid washes, on mesas and slopes.	Presumed Absent. No suitable coastal sage scrub habitat was present within the project impact area. Scrub habitat within the survey buffer is separated by topographical features and developed areas and would not be impacted by the project. No CNDDB records occur within five miles of the site.
Riparia riparia bank swallow (nesting)	Fed: CA:	none THR	Open and semi-open habitats, such as fields or marshes, often near flowing water. Nests in colonies in vertical banks of sand or dirt along a water body typically in lowland areas. The species is considered extirpated as a breeder in southern California.	Presumed Absent. The Project site is outside of the current breeding range for this species and vertical banks for nesting do not occur within the impact areas. One historic CNDDB record from 1894 in the "Vicinity of Alhambra" is mapped approximately 2.8 miles south of the site.
Setophaga petechia yellow warbler (nesting)	Fed: CA:	BCC SSC	Riparian woodlands especially with willows, open scrub, gardens, and thickets often near water.	Present. Flint Wash provides suitable riparian woodland habitat. This species was detected within the project limits during the survey.

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
Vireo bellii pusillus least Bell's vireo (nesting)	Fed: CA:	END END	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Riparian woodlands and willow- cottonwood forests particularly with streamside thickets and dense brush. Usually nests in willow, mulefat, mesquite.	Moderate: Flint Wash provides patchy and low-quality nesting habitat throughout the riparian corridor due to high concentrations of nonnative tree species throughout, and lack of suitable understory in most areas. Two recent (2013 and 2015) and four historic CNDDB records occur within five miles of the site. Irregular detections of vireo were documented during focused surveys at the Devil's Gate Reservoir Restoration Project between 2013 and 2019 (ECORP 2018a, 2019). A successful nest was documented at the Hahamongna Watershed Park while providing biological services for the Devil's Gate Reservoir Restoration Project in 2020 (ECORP observations).
MAMMALIA				
Antrozous pallidus pallid bat	Fed: CA:	None SSC	Generally in mountainous areas, lowland desert scrub, arid grasslands near water and rocky outcrops, and open woodlands. Forages along the edges between shrubs and small open areas. Roosts in rock crevices, caves, mines, buildings, bridges, and in hollow trees.	Moderate. Suitable roosting habitat is present under the concrete bridges and bats were detected (guano, vocalizations) in crevices under the bridges during the survey. One historic CNDDB record for museum specimens collected in the "Pasadena" area in 1910 occurs within five miles of the site.
Corynorhinus townsendii Townsend's big-eared bat	Fed: CA:	None SSC	Mountain forests including coniferous and mixed mesophytic, and deserts. Forages in a wide variety of habitats including forested and edge habitats, and riparian areas. Requires spacious areas with broad and open surfaces for roosting. Mainly roosts in abandoned mines or caves with little to no disturbance but may also use abandoned buildings, bridges, or other crevices.	Moderate. Suitable roosting habitat is present under the concrete bridges and bats were detected (guano, vocalizations) in crevices under the bridges during the survey. No CNDDB records occur within five miles of the site.
Eumops perotis californicus western mastiff bat	Fed: CA:	None SSC	Roosts high above ground in rock and cliff crevices, shallow caves, and rarely in buildings. Occurs in arid and semiarid regions including rocky canyon habitats.	Low. The survey area provides limited cliff and rock crevices for roosting by this species. Five historic CNDDB records occur within five miles of the site, the closest 1.6 miles east of the site

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
				from 1958 and the most recent a specimen collected in 1987 approximately 4.2 miles southwest of the site.
Lasiurus xanthinus western yellow bat	Fed: CA:	None SSC	Riparian habitats including woodlands in arid regions, valley foothill, and desert but also oak woodlands, desert washes, palm oasis habitats, and human developed areas. Roosts in trees, especially in fan palms. Forages over water and among trees.	Moderate. Suitable oak and riparian woodland habitat and fan palms for roosting occur throughout the survey area. One CNDDB record occurs within five miles of the site, a specimen collected 4.2 miles southwest of the site in 1984.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: CA:	None SSC	Variety of open or semi-open country including grasslands, croplands, and sparse coastal scrub. Found in intermediate canopy stages of shrub habitats. Rarely found in tall grasses or dense brush.	Presumed Absent. The site is located within a heavily wooded area that lacks open or semi-open country. No CNDDB records occur within five miles of the site.
Microtus californicus stephensi south coast marsh vole	Fed: CA:	None SSC	California voles live in a wide variety of grassland associations, especially in the wet months when there Is an abundance of green, herbaceous plants. This subspecies is known from tidal marshes at Point Mugu, Orange County, and Playa del Rey and Sunset Beach, Los Angeles County (Hall, 1981).	Presumed Absent. The project does not provide suitable tidal marsh or grassland habitat and is located outside of the known geographic range for this species. No CNDDB records occur within five miles of the site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: CA:	None SSC	Found in a variety of habitats including coastal scrub, sagebrush scrub, chaparral from San Diego County to San Luis Obispo County. Prefers moderate to dense canopies. Particularly abundant in rock outcrops & rocky cliffs & slopes. Food plants include buckwheat, sagebrush, mustard, oak, and chamise.	Low. Limited scrub habitat with moderate to dense canopies occurs within the project area. Although woodrat middens were detected within the disturbed habitat upslope of Flint Canyon Wash Trail, these likely belong to the dusky foot woodrat (<i>Neotoma fuscipes</i>) based on structure and microhabitat. No CNDDB records occur within five miles of the site.
Nyctinomops macrotis big free-tailed bat	Fed: CA:	None SSC	Roosts in cliff crevices, and less often in buildings, caves, and tree cavities. Occurs in rocky areas of rugged and hilly country including woodlands, evergreen forests, river floodplain- arroyo habitats, and desert scrub.	Moderate. The site is located in rugged and hilly, wooded terrain adjacent to arroyo habitat and provides potential roosting habitat within the various woodlands. No CNDDB records occur within five miles of the site.
Onychomys torridus ramona southern grasshopper mouse	Fed: CA:	None SSC	Low, semi-open, and open scrub habitats especially in arid desert. Habitats include chaparral,	Low. Limited scrub habitat occurs within the project area. One CNDDB record occurs

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
			coastal sage scrub, and low sagebrush.	within five miles of the site, a specimen collected from Arroyo Seco just south of Devil's Gate Reservoir in 1904 mapped within the survey limits.
Puma concolor mountain lion (Southern California/Central Coast Evolutionarily Significant Unit (ESU)	Fed: Ca:	None CAN	Require large areas of relatively undisturbed habitats with adequate connectivity to allow for dispersal and gene flow. They have large home ranges that include heterogenous habitats. In the United States these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats.	High. The project area is a restricted wash within a highly urbanized setting that contains riparian and oak woodland for protective cover and a water source with connectivity to an open area (Hahamongna Watershed Park) that eventually connects with the San Gabriel Mountains to the north. A mountain lion has been observed by ECORP staff on multiple occasions within 0.3 mile of the site within the Hahamongna Watershed Park while providing biological services for the Devil's Gate Reservoir Restoration Project in 2020.
Taxidea taxus American badger	Fed: CA:	none SSC	Open habitats with friable soil such as grasslands, brushlands with sparse ground cover, open chaparral, and sometimes riparian zones. More common in drier areas of herbaceous, shrub, and forest habitats.	Low. The project is located within a heavily wooded area with limited open habitat. One CNDDB record from "Los Angeles" is mapped within five miles of the site but no location or date the specimen was collected is known.

Federal Designations (Federal Endangered Species Act, USFWS)

END: federally listed, endangered

THR: federally listed, threatened

DL: federally delisted

BCC: Bird of Conservation Concern State designations: (California Endangered Species Act, CDFW)

END: state-listed, endangered state-listed, threatened candidate for state listing THR: CAN:

DL: state delisted FP: Fully Protected species

California Species of Special Concern SSC:

WL: Watch List species

Source: California Natural Diversity Data Base (CNDDB) Sunland, Condor Peak, Chilao Flat, Burbank, Pasadena, Mount Wilson, Hollywood, Los Angeles, and El Monte 7.5-minute topographic quadrangles.