Pasadena Water and Power Non-Potable Water Project

Focused Coastal California Gnatcatcher Report

Prepared for
City of Pasadena Water and Power

June 2016

ESA

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Section 1
Introduction

1.1 Survey Purpose

This report documents the results of protocol surveys for the coastal California gnatcatcher on the Pasadena Water and Power Recycled Water Project in the City of Pasadena, Los Angeles County, California. The coastal California gnatcatcher (*Polioptila californica californica*; CAGN) is listed as threatened under the federal Endangered Species Act (ESA) of 1973, whereby "take" of this species and its habitat requires authorization and permitting through the USFWS. The objective of the protocol survey was to determine the presence/absence and distribution of CAGN within the proposed project site and survey area, and to provide recommended measures to address potential project-related impacts to this species and its habitat according to federal act.

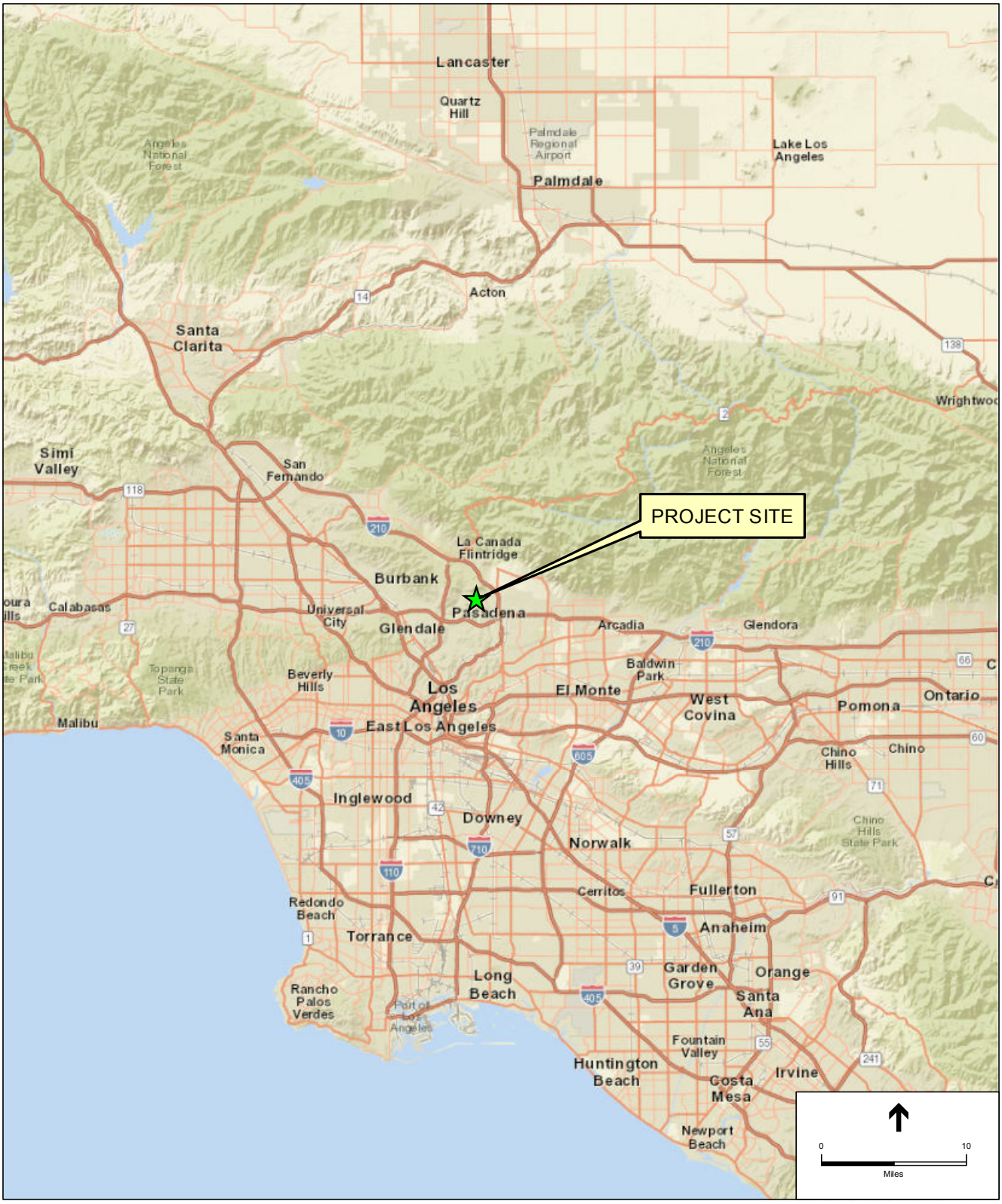
1.2 Site Location

The project site consists of several miles of proposed pipeline throughout the urbanized areas of the City of Pasadena. A majority of the project site is urbanized and does not contain suitable CAGN habitat; however, portion of the proposed pipeline west of the Art Center College of Design supports habitat potentially suitable for the CAGN, hereafter referred to as survey area.

Generally, the survey area is located within the San Rafael Hills, north of the State Route 134 (SR134), west and south of the Interstate 210 (I-210), and east of the SR 2 (Figure 1). The survey area consists of two geographically distinct survey areas, one of which hass in two non-contiguous components, referred to as Golf Course and Art Center. Specifically, the Golf Course survey area is located north of East Glenoaks Boulevard and Scholl Canyon Golf Course, south and west of the water tank. The Art Center survey area is specifically located south of Linda Vista Road, south and east of the Art Center College of Design parking lot. The study areas can be found in an unsectioned portion of the U.S. Geological Survey (USGS) 7.5-minute Pasadena California topographic quadrangle map (Figure 2).

The surrounding land use of the Golf Course survey area includes open space to the north, open space and golf course to the south, and open space to the east and west of the survey area. The surrounding land use of the Art Center includes open space to the north and south, the Art Center to the west and a residential development to the east.

The project site and survey areas are not located within U. S. Fish and Wildlife (USFWS) designated Critical Habitat for the CAGN.



SOURCE: ESRI Street Map.

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Figure 1

Regional Map

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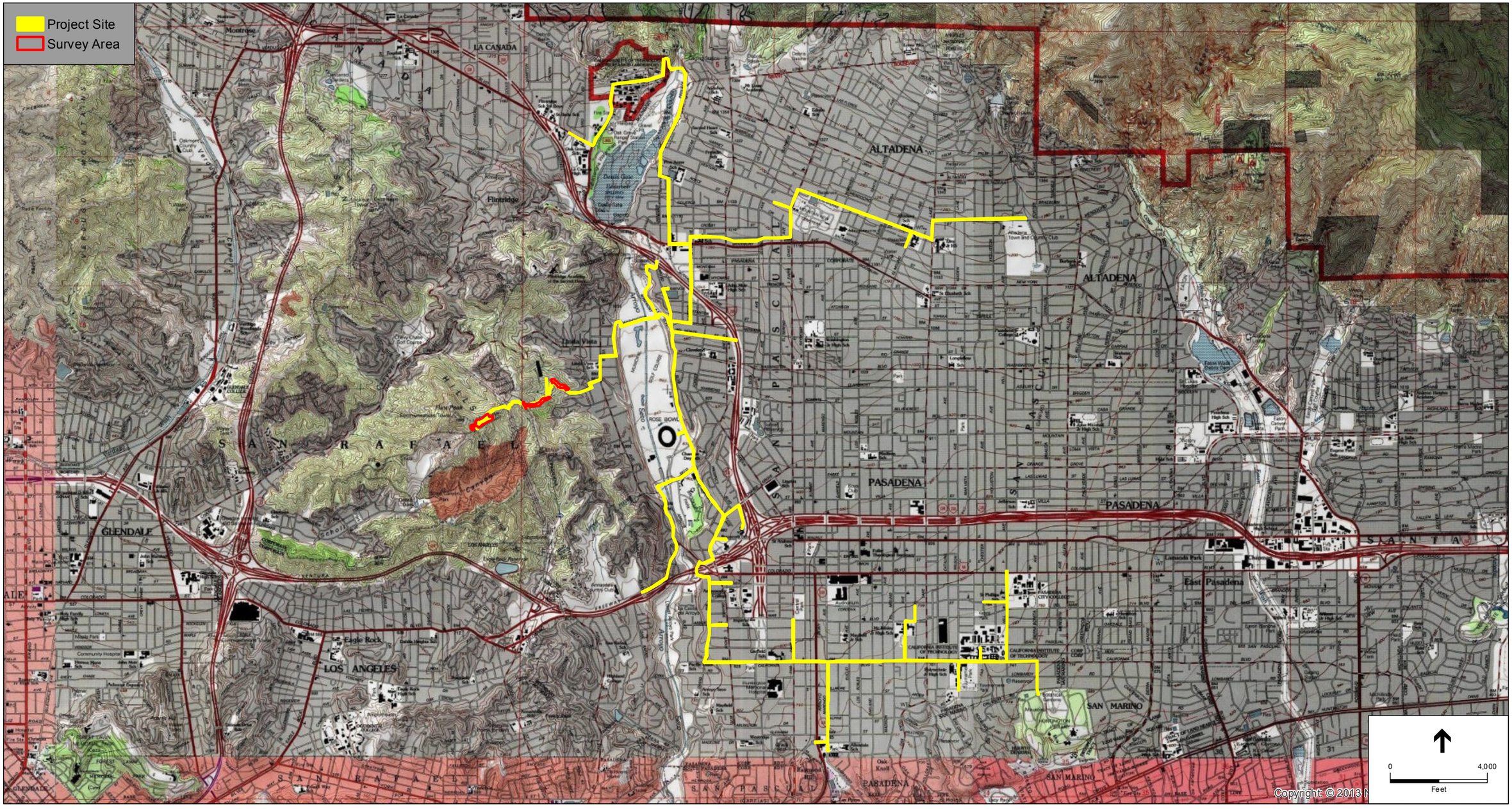

SOURCE: USGS Topographic Series (Pasadena, Mount Wilson, Los Angeles, El Monte, CA).

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Figure 2

Vicinity Map

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Section 2
Methodology

A literature review and records search was conducted for sensitive flora and faunal resources potentially occurring in the vicinity of the proposed project site. Based on the Results of Focused Coastal California Gnatcatcher Surveys (PCR 2011), suitable habitat was determined to occur within the project site and immediate vicinity. Focused surveys for CAGN were recommended by the State Water Resources Control Board and subsequently conducted within accessible areas containing suitable CAGN habitat.

2.1 Literature Review

Prior to conducting protocol surveys, a literature review was conducted to obtain background information and resources pertinent to the survey effort. The literature review began with a thorough review of aerial imagery of the proposed project site and vicinity, as well as electronic copies of the Pasadena, California USGS 7.5-minute topographic quadrangle map. Mapping sources used for the effort also included online interactive mapping tools provided by Google Earth.

Data on previous observations of the target species that have been recorded in the vicinity of the project site were compiled from the CDFW California Natural Diversity Database (CNDDB), a sensitive species and plant community account database. The CNDDB Geographical Information Systems (GIS) database was also used to confirm and map the locations of all sensitive species recorded by the CNDDB.

The literature review also included research of existing data and documents pertaining to the target species, including federal register listings, protocol survey guidelines, previous survey reports prepared for the Pasadena Water and Power Recycled Water Project**.** These and other references are provided in Section 9, References.

2.2 Focused Surveys

Protocol breeding season surveys for the CAGN were conducted by Kelly Rios under USFWS Section 10(a)(1)(A) Permit Number TE-018909-4. Methods employed were in conformance with USFWS Coastal California Gnatcatcher Presence/Absence Survey Guidelines, issued July 28, 1997 (USFWS 1997). Six surveys were performed at least 1 week apart, between May 3 and June 15, 2016, generally between 0730 hours and 1200 hours. The surveys were conducted within all suitable habitat, as discussed in Section 5, Survey Area.

The biologist slowly traversed the biological survey areas, stopping at approximately 100-foot intervals to listen for CAGN. If no CAGN were detected within 5-10 minutes the biologist made phishing sounds, and played an audio recording of CAGN vocalizations. The recording was played for several seconds at each interval, followed by a brief pause to listen for a response. If any CAGN individuals were detected, additional observations including sex, age, breeding status, and behavioral characteristics were documented, consistent with protocol requirements.

Section 3
Existing Conditions

3.1 Survey Area Description

Coastal California gnatcatchers are known to frequent gentle sloping hillsides adjacent to coastal sage scrub. The CAGN survey areas are located in the rolling hills containing coastal sage scrub or buckwheat scrub habitats or combinations with these habitats (Figure 3). During the first survey, the entire survey areas were surveyed for CAGN. Survey notes were made on an aerial photograph to depict areas of suitable habitat based on maps previously prepared by PCR. Based on the suitable habitat maps, the survey areas were established and served as baseline data for the CAGN surveys.

With the exception of dirt access roads that service the water tanks and waste disposal site, native vegetation occurs throughout most of the survey areas, including coastal sage scrub, buckwheat scrub, oak woodland, and mixed chaparral. Non-native vegetation communities included non-native grassland and ornamental. All areas of the project site containing coastal sage scrub or buckwheat scrub habitat, regardless of quality, were included as part of the survey areas, totaling approximately 10.0 acres. Descriptions of the plant communities supporting potentially suitable habitat are discussed below. They include a discussion of the vegetative constituents and overall structure of the habitats within the biological survey areas. Overall, both plant communities were poor quality habitat for CAGN. The habitats contained many non-native species, many larger chaparral plant species and occurred on relatively steep slopes.

3.1.1 Coastal Sage Scrub

Approximately 3.4 acres of coastal sage scrub occurs throughout the study areas. Dominant plant species is California sagebrush (*Artemisia californica*). Associated plant species include California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), deerweed (*Acmispon glaber*), and sticky monkey-flower (*Mimulus aurantiacus*). Non-native species observed within this plant community include but not limited to yellow sweet-clover (*Melilotus officinalis*), tree tobacco (*Nicotiana glauca*), foxtail chess (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena* sp.), castor bean (*Ricinus communis*), black mustard (*Brassica nigra*), red-stemmed filaree (*Erodium cicutarium*), and tocalote (*Centaurea melitensis*).

3.1.2 Mixed Chaparral/Buckwheat Scrub

Approximately 2.8 acres of mixed chaparral/buckwheat scrub occurs in the study areas. Dominant plant species include California buckwheat. Associated plant species include species from coastal sage scrub, including California sagebrush, deerweed, black sage, as well as from chaparral plant

SOURCE: Google Maps, 2015.

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Figure 3

Plant Communities

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communities, including toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), Our Lord's candle (*Hesperoyucca whipplei*), coast live oak (*Quercus agrifolia*), chamise (*Adenostoma fasciculatum*), and ceanothus (*Ceanothus* spp.).

3.1.3 Coastal Sage Scrub/Mixed Chaparral

Approximately 2.1 acres of coastal sage scrub/mixed chaparral occurs throughout the study areas. Dominant plant species include California sagebrush (*Artemisia californica*). Associated plant species include species typically found in coastal sage scrub communities such as California buckwheat, black sage, deerweed, and sticky monkey-flower. However, the plant community found within the survey area also includes elements from a chaparral community and include species such as toyon, laurel sumac, our Lord's Candle, poison oak (*Toxicodendron diversilobum*), and scrub oak (*Quercus berberidifolia*).

3.1.4 Buckwheat Scrub/Non-Native Grassland

Approximately 1.3 acres of buckwheat scrub/non-native grassland occurs in the study areas. Dominant plant species include California buckwheat. Associated plant species include California sagebrush, deerweed, black sage, toyon, laurel sumac, Our Lord's candle, coast live oak, chamise, and ceanothus. This habitat also contains foxtail chess (*Bromus madritensis* ssp. *rubens*), wild oat, and ripgut grass (*Bromus diandrus*).

3.2 Weather Conditions

Weather conditions during the surveys included morning temperatures ranging from 59 to 73 degrees Fahrenheit with cloudy to clear skies.

3.3 Topography and Soils

Topography of the study areas consists of steep-sloping hills and ridges. The elevation of the study areas ranges from approximately 1,180 to 1,705 feet above mean sea level (MSL).

3.4 Wildlife

Avian species were the majority of the wildlife observed during the surveys. Avian activity during the protocol surveys was relatively high, with a wide range of bird species observed or otherwise detected throughout the course of the surveys. Common bird species observed or otherwise detected during surveys include species commonly found in coastal sage scrub, chaparral, and urban habitats such as, but not limited to, house finch (*Haemorphous mexicanus*), lesser goldfinch (*Spinus psaltria*), bushtit (*Psaltriparus minimus*), wrentit (*Chamaea fasciata*), Anna's hummingbird (*Calypte anna*), and California towhee (*Melozone crissalis*). No brown-headed cowbirds (*Molothrus ater*), considered to be nest parasites for CAGN, were observed or otherwise detected during the surveys.

A complete list of avian species observed during the protocol surveys is provided in Appendix A, Fauna Compendium.

3.4.1 Sensitive Biological Resources

The following is a discussion of the sensitive avian species identified as potentially occurring within the survey areas.

Coastal California Gnatcatcher

On March 30, 1993, the USFWS issued its final ruling to list the CAGN as a federally threatened species under the federal ESA. This species is also designated as a California State species of special concern by the California Department of Fish and Wildlife (CDFW).

The CAGN is a small, blue-gray insectivorous songbird in the family Sylviidae. Adult males display a black cap during breeding season, which is molted out and absent during the non-breeding season. They have a thin, small bill that is compatible with their insectivorous foraging requirements.

The CAGN is an obligate resident of lower elevation coastal, Riversidean, or Venturan sage scrub habitats in southern California from Ventura County to the north and San Diego County to the south, and it is known to occur in northwestern Baja California, Mexico locations. This species' breeding habitat consists of moderately dense coastal sage scrub associated with shallow-sloping, arid hillsides, mesas, and washes, generally occurring below 2,000 feet in elevation. Coastal sage scrub habitat dominated by California sagebrush, California buckwheat, white sage (*Salvia apiana*), and black sage is preferred for breeding; however, breeding territories have been occasionally documented in non-sage scrub habitats, including chaparral scrub types, grasslands, and ruderal (weedy) dominated habitats. The breeding season for this species typically extends from February 15 through August 30, with peak nesting activities typically occurring from mid-March through mid-May. A high rate of nest predation is compensated for by up to 10 re-nesting attempts over this species' relatively long breeding season. The loss and fragmentation of suitable habitat because of expanding development have been major factors in the decline of CAGN in southern California.

Section 4
Focused Protocol Survey Results

No CAGN were observed at any time during the six protocol surveys on either the Golf Course survey area or the Art Center survey areas. Although no CAGN were observed, a pair of black-tailed gnatcatchers (*Polioptila melanura*) were observed within the Art Center survey area. Although this is a related species to the CAGN, it is not a sensitive species. The black-tailed gnatcatcher is a common species in chaparral dominated plant communities.

Table 1 below provides a summary of the protocol survey results. The entire coastal sage scrub and buckwheat scrub habitats and the modified forms of these habitats within the survey areas provide suitable nesting and foraging habitat for CAGN.

Table 1: Coastal California Gnatcatcher Protocol Survey Results

Survey	Surveyor	Date	Time		Temperature (°F)	Cloud Cover (%)	Wind Speed Average (mph)	Coastal California Gnatcatchers Observed/Detected
			Begin	End				
1	K. Rios	5/3/16	0800	1130	62	100	1-2	No
2	K. Rios	5/17/16	0900	1200	62	100	1-2	No
3	K. Rios	5/24/16	0900	1200	59	100	1-2	No
4	K. Rios	5/31/16	0920	1200	64	50	3-5	No
5	K. Rios	6/8/16	0915	1200	69	50	1-2	No
6	K. Rios	6/15/16	0920	1200	78	60	1-2	No

The location of the coastal sage scrub and buckwheat scrub habitats were primarily located on a hilltop and steep-sloping hillsides that generally are not typical CAGN habitat. CAGN are known to frequent gentle sloping hillsides usually below 1500 feet in elevation. Furthermore, the habitat was coastal sage scrub species intermixed with chaparral species such as oaks, toyon, and laurel sumac. The coastal sage scrub and buckwheat scrub habitats were disturbed and contained many non-native species. CAGN prefer a more sage scrub dominated native habitat.

During the surveys, rufous-crowned sparrow (*Aimophila ruficeps*), a species of special concern, was observed within the Golf Course survey area.

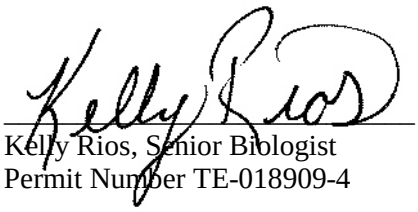
Section 5
Conclusion and Recommendations

This survey effort was conducted within all portions of the Pasadena Water and Power Non-Potable Water project site that contained suitable habitat for CAGN. The survey areas included two geographically distinct areas referred to as Golf Course and Art Center survey areas, the latter with two subareas. These surveys areas were located in coastal sage scrub and buckwheat scrub plant communities and variations of these that contained poor quality suitable CAGN habitat due to the presence of non-native and chaparral plant species.

No CAGN were observed within either of the two survey areas during any of the six protocol surveys. Therefore, implementation of the proposed project will not impact any CAGN.

Section 6
Certification

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.



Kelly Rios, Senior Biologist
Permit Number TE-018909-4

June 28, 2016
Date

Section 7
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AVIFAUNA COMPENDIA

Scientific Name	Common Name
Birds	
Apodiformes	**Swifts**
Aeronautes saxatalis	White-throated swift
Accipitridae	**Hawks, Eagles, and Kites**
Buteo jamaicensis	red-tailed hawk
Odontophoridae	**New World Quail**
Callipepla californica	California quail
Columbidae	**Pigeons and Doves**
* *Columba livia*	rock dove
Zenaida macroura	mourning dove
Hirundinidae	**Swallows**
Petrochelidon pyrrhonota	cliff swallow
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Selasphorus sasin	Allen's hummingbird
Tyrannidae	**Tyrant Flycatchers**
Myiarchus cinerascens	ash-throated flycatcher
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Tyrannus vociferans	Cassin's kingbird
Ptiliogonatidae	**Silky Flycatchers**
Phainopepla nitens	phainopepla
Corvidae	**Jays and Crows**
Aphelocoma californica	western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Icteridae	**New World Orioles, Blackbirds**
Icterus cucullatus	hooded oriole
Picidae	**Woodpeckers**
Dryobates nuttallii	Nuttall's woodpecker
Melanerpes formicivorus	acorn woodpecker
Parulidae	**New World Warblers**
Setophaga townsendi	Townsend's warbler
Paridae	**Chickadees and Titmice**
Baeolophus inornatus	oak titmouse
Psaltriparus minimus	bushtit

Scientific Name	Common Name
Polioptilidae	**Gnatcatcher**
Polioptila melanura	black-tailed gnatcatcher
Troglodytidae	**Wrens**
Thryomanes aedon	house wren
Thryomanes bewickii	Bewick's wren
Sylviidae	**Sylviid Warblers**
Chamaea fasciata	wrentit
Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	northern mockingbird
Toxostoma redivivum	California thrasher
Sturnida	**Starlings**
**Sturnus vulgaris*	European starling
Emberizidae	**Old World Sparrows**
†*Aimophila ruficeps*	rufous-crowned sparrow
Junco hyemalis	dark-eyed junco
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Pipilo maculatus	spotted towhee
Zonotrichia leucophrys	white-crowned sparrow
Estrildidae	**Munias and Mannikins**
**Lonchura punctulata*	spotted munia
Bombycillidae	**Waxwings**
Bombycilla cedrorum	cedar waxwing
Cardinalidae	**Grosbeaks, Cardinals**
Pheucticus melanocephalus	black-headed grosbeak
Turdidae	**Bluebirds**
Sialia Mexicana	western bluebird
Fringillidae	**Finches**
Haemorphous mexicanus	house finch
Spinus psaltria	lesser goldfinch
Passeridae	**Sparrows**
**Passer domesticus*	house sparrow

*Non-native
†Sensitive Species