

**ATTACHMENT E: COASTAL CALIFORNIA GNATCATCHER SURVEY REPORT**





Pipeline Safety & Reliability  
Project U.S. Fish and  
Wildlife Service Protocol  
Presence/Absence 2015  
Survey Report for the  
Coastal California Gnatcatcher  
(*Poliioptila californica*  
*californica*)

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September 9, 2015





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## **1. SUMMARY**

This report summarizes surveys conducted by Rocks Biological Consulting (RBC) for the federally-listed threatened coastal California gnatcatcher (CAGN; *Poliophtila californica californica*) for the San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company Pipeline Safety & Reliability Project (Proposed Project). Surveys were conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) 1997 CAGN presence/absence survey protocol (USFWS 1997; CAGN survey protocol) for Natural Community Conservation Planning (NCCP) areas. Surveys were conducted between April 14 and June 1, 2015. A total of five CAGN pairs and three individual CAGN were detected during the 2015 surveys.

## **2. INTRODUCTION**

### **2.1. PROJECT DESCRIPTION**

The Proposed Project involves construction, operation, and maintenance of an approximately 47-mile-long, 36-inch-diameter natural gas transmission pipeline that will carry natural gas from SDG&E's existing Rainbow Metering Station to the pipeline's terminus on Marine Corps Air Station (MCAS) Miramar.

### **2.2. SURVEY LOCATION AND BACKGROUND**

The Proposed Project is located in San Diego County, California, and crosses the cities of Escondido, Poway, and San Diego, unincorporated communities of San Diego County and federal land. U.S. Geological Survey (USGS) 7.5-minute series quadrangle maps (quads) that cross the Proposed Project include Temecula, Bonsall, San Marcos, Valley Center, Escondido, Poway, and La Mesa quads (Figure 1).

Surveys were conducted within suitable habitats as described in the USFWS CAGN survey protocol along the Proposed Project alignment. The area comprising the Biological Resource Survey Area (BRSA) was 2,264.1 acres; of this a total of 575.6 acres are CAGN-suitable vegetation communities. MCAS Miramar lands, which are administered by the Department of the Navy/U.S. Marine Corps (USMC), were excluded from the 2015 survey area because the USMC regularly surveys these areas for CAGN. A total of 97.7 acres of MCAS Miramar lands were excluded from the 2015 survey area. As a result, a total of 478.5 acres was included in the 2015 CAGN Survey Area.

### **2.3. COASTAL CALIFORNIA GNATCATCHER NATURAL HISTORY**

The CAGN is a year-round resident of southern California found in the six southernmost California counties (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside) located within the coastal plain. Coastal California gnatcatchers typically occur in coastal sage scrub (CSS) vegetation communities of southern California, especially in locations dominated by California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Other shrubs in CAGN-occupied CSS include black

sage (*Salvia mellifera*), California bush sunflower (*Encelia californica*), white sage (*Salvia apiana*), lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), and brittlebush (*Encelia farinosa*).

Coastal California gnatcatchers are typically found in stands of CSS that have moderate shrub canopy cover, generally greater than 50 percent (Beyers and Wirtz 1997). Coastal California gnatcatchers will use sparsely vegetated CSS as long as perennial shrubs are available, although there appears to be a minimum cover threshold below which the habitat becomes unsuitable (USFWS 2007). The relative density of shrub cover influences CAGN territory sizes, with territory sizes increasing as shrub cover decreases, likely due to limited resource availability (Beyers and Wirtz 1997). The CAGN preys upon arthropods, including insects such as leafhoppers and planthoppers (Homoptera) and spiders commonly found in CSS plant communities (Burger et al. 1999). Beyers and Wirtz (1997) speculate that the non-native grasses and forbs that typically occupy the gaps between shrub species do not support a sufficient insect fauna and that there are probably differences in insect availability among shrub species as well, which may explain CAGN's shrub preference.

The breeding season of the coastal California gnatcatcher extends from approximately February 15 through August 30, with peak nesting activity typically occurring from mid-March through mid-May; incubation takes 14 days. The young fledge at 8 to 13 days of age and are dependent upon their parents for as little as three to four weeks (ERCE 1990) or may associate with their parents for up to several months (USFWS 1997).

### **3. METHODS**

#### **3.1. VEGETATION COMMUNITY MAPPING AND SUITABLE HABITATS**

Vegetation mapping was conducted within all areas north of MCAS Miramar on October 28, November 4, and November 11, 2014, and January 5, 2015. Vegetation mapping in these areas was finalized during habitat assessments and special-status plant surveys conducted in the spring of 2015. Biologists noted vegetation communities and boundaries on a hard-copy field map printed at a scale of one foot to 200 feet. These boundaries and vegetation community names were later recorded as a Geographic Information System (GIS) shapefile using ArcMap software. Minimum mapping units for upland vegetation communities was generally an acre or less. For wetland/riparian communities, no minimum mapping unit was established so as to ensure that even very small wetland areas were documented. Vegetation classifications conform to Oberbauer et al. (2008).

The following vegetation communities were considered CAGN suitable: 1) Diegan coastal sage scrub; 2) Southern mixed chaparral; 3) Chamise chaparral; 4) Coastal sage-chaparral transition; and 5) Open coast live oak woodland (less than 50% cover). Modified versions of these habitats through disturbance or fire were also considered suitable habitats, as were habitats dominated by atypical species or revegetated/restored areas (USFWS 1997).

### **3.2. COASTAL CALIFORNIA GNATCATCHER SURVEYS**

On January 30, 2015 a 15-day pre-survey notification letter was sent to the USFWS stating the intent to conduct CAGN surveys for the Proposed Project. CAGN survey methodology followed the CAGN survey protocol for NCCP<sup>1</sup> areas, which requires three (3) protocol surveys. CAGN surveys in NCCP areas can be conducted any time of year; however, the peak breeding period of February 15 through August 30 is preferable (USFWS 1997).

Surveys for the Proposed Project were conducted in the 478.5-acre CAGN Survey Area during three individual surveys spaced by at least one week during the peak-breeding season (March to June). Surveys were conducted by meandering through suitable habitat at a rate of approximately four acres/hour generally working north to south within the CAGN Survey Area. Taped vocalizations were used sparingly to elicit a CAGN response and were ceased upon hearing or observing a CAGN. Surveyors recorded the locations of CAGN using handheld Geographic Position System (GPS) devices. CAGN were observed with the aid of 8x42 binoculars and details of CAGN behavior were recorded on field survey forms, provided in Attachment B – Surveyor Field Notes. A total of 23 surveys were conducted from April 14 to June 1, 2015. Survey dates, conditions, and personnel are presented in Table 1 Coastal California Gnatcatcher Survey Dates/Conditions, below.

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<sup>1</sup> The Proposed Project is located within the San Diego Multiple Species Conservation Plan, the Multiple Habitat Conservation Plan, and the North County Multiple Species Conservation Plan.

**Table 1. Coastal California Gnatcatcher Survey Dates/Conditions**

Survey Number	Date	Surveyor(s)	Time (Start-End)	Temp F (Start-End)	Cloud Cover (Start-End)	Wind Range in mph (Start-End)
#1	4/14/15	GH	0600-1200	60-76	100-0	0; 2-5
#1	4/16/15	SW	0600-1200	43-75	0-0	0-2; 0-1
#1	4/17/15	SW	0600-1040	39-73	0-0	1-4; 0-1
#1	4/18/15	SW	0600-1200	55-77	0-0	0-3; 0-1
#1	4/19/15	SW	0600-0830	54-60	0-0	0-2; 0-1
#1	4/23/15	BL	0610-1145	55-57	100-100	0-1; 3-5
#1	4/23/15	MD	0600-1200	59-66	100-100	0-2; 0-1
#1	4/24/15	BL	0610-1145	57-57	100-100	0-1; 1-5
#1	4/26/15	GH, SW	0900-1130	60-76	50-30	0-2; 1-3
#1	4/29/05	BL	0820-1000	70-82	0-0	0-1; 0-3
#2	4/25/15	SW	0600-1130	53-63	100-100	0-2; 2-5
#2	5/1/15	SW, GH	0600-1200	68-90	10-20	0-2; 2-5
#2	5/3/15	SW	0615-1115	61-70	100-40	0-1; 1-3
#2	5/3/15	GH	1130-1200	74-75	40-30	3-7; 3-6
#2	5/4/15	SW, GH	0600-1200	61-75	100-80	1-4; 1-3
#2	5/5/15	SW, GH	0600-1200	60-66	100-80	0-3; 1-4
#2	5/7/15	SW	0600-1145	64-65	100-90	0-1; 3-6
#3	5/13/15	SW, GH	0600-1200	56-80	100-60	0-2; 1-3
#3	5/17/15	GH	0600-1200	60-70	100-20	1-3; 2-5
#3	5/17/15	SW	0610-1200	59-70	100-5	1-5; 0-2
#3	5/24/15	GH	0600-1200	57-66	100-100	1-4; 2-4
#3	5/25/15	GH	0600-1200	55-66	100-100	1-3; 3-5
#3	6/1/15	SW	0545-1200	62-75	100-20	0-1; 2-4
Surveyors: BL= Brian Lohstroh (TE-063608-5), GH= Garrett Huffman (TE-20168A-0), MD= Melanie Dicus (TE-049175-3), SW=Shannon Walsh (authorized individual under TE-221290-3.1)						

## 4. RESULTS

### 4.1. COASTAL CALIFORNIA GNATCATCHER CRITICAL HABITAT

The USFWS has designated 641.1 acres of critical habitat for the CAGN throughout the BRSA for the Proposed Project. As mentioned, surveys for CAGN were conducted on 478.5 acres within the BRSA, of which 298.4 acres are also within critical habitat for CAGN. Critical habitat is shown on Figure 2 2015 CAGN Survey Area and Sightings. CAGN occurrences in critical habitat are discussed in Section 4.3.



#### **4.2. SUITABLE HABITAT AND VEGETATION COMMUNITIES**

As described above, the total area included in the 2015 CAGN Survey Area was 478.5 acres. Suitable vegetation communities included five primary vegetation communities:

- 1) Diegan coastal sage scrub (CSS) species are typically up to three feet in height and drought deciduous, typical consistent species include California sagebrush, California buckwheat, white sage, and laurel sumac. Some areas were modified versions of Diegan coastal sage scrub including areas notably open, disturbed, restored, burned, or areas dominated specifically by a single species or low diversity community such as *Adolphia californica* (spineshrub) dominated, *Opuntia* or *Cylindropuntia* (cactus) dominated, or *Baccharis* (coyote bush or broom baccharis) dominated;
- 2) Southern mixed chaparral (M-CHAP) is dominated by broad, leathery-leaved, woody shrubs that are four to nine feet in height and form a dense vegetation canopy. Dominant species include scrub oaks (*Quercus* spp.), chamise (*Adenostoma fasciculatum*), and several manzanita (*Arctostaphylos* spp.) and ceanothus (*Ceanothus* spp.) species;
- 3) Chamise chaparral (C-CHAP) dominated by chamise (*Adenostoma fasciculatum*);
- 4) Coastal sage-chaparral transition (CSS-CHAP) is comprised of a mix of leathery-leaved chaparral species and drought-deciduous sage scrub species. This often post-fire successional vegetation community is characterized by a co-dominance of California sagebrush and chamise. Other plant species often found in coastal sage-chaparral transition include black sage, ceanothus species and poison oak (*Toxicodendron diversilobum*); and
- 5) Open Coast Live Oak Woodland (CLOW-O) is dominated by coast live oak (*Quercus agrifolia*), an evergreen oak that reaches 32-82 feet (10-25 meters) in height. Open coast live oak woodland has a coast live oak canopy cover of less than 50 percent absolute cover. Coast live oak is often co-dominant with other CSS or chaparral species, such as California buckwheat or California sagebrush. As a result of the presence of these CSS or chaparral shrub species, open coast live oak woodland was mapped as CAGN suitable habitat. Some areas were modified versions of open coast live oak woodland, including areas notably disturbed, or burned.

All CAGN suitable vegetation communities are presented in Figure 2 2015 CAGN Survey Area and Sightings.

#### **4.3. 2015 COASTAL CALIFORNIA GNATCATCHER SURVEYS**

A total of 20 CAGN individuals were observed during the 2015 focused surveys. These individuals included 13 adults – five CAGN pairs and three individual CAGN – and seven fledglings.

The CAGN Survey Area supported a moderate diversity of bird species with 70 species observed over 23 surveys. The 70 bird species observed represent 14 percent of all bird

species documented within San Diego County<sup>2</sup>. A complete list of birds observed during surveys is presented in Attachment A and field notes are included in Attachment B. Detailed results are described below from the northern end to southern end of the Proposed Project and presented in Figure 2 2015 CAGN Survey Area and Sightings.

The CAGN pair depicted on Figure 2 Page 6 (Unique ID 27) was observed in CSS habitat and just north of Canonita Drive. A male was observed and heard calling on all three surveys, and a female was also observed with the male in this area during the third survey. This pair is within USFWS designated CAGN critical habitat.

The CAGN pair on Figure 2 Page 8 (Unique ID 3) was observed in CSS habitat just north of Dulin Road. A male CAGN was observed on all three surveys and during the third survey both the male and female were observed feeding two fledglings. This pair is within USFWS designated critical habitat.

Three CAGN territories were identified within revegetated CSS between Old Hwy 395 and I-15 (Figure 2; page 10). The northern-most observation (Unique ID 21) was a single male that responded to the taped CAGN call during only the second survey. The second observation was a CAGN pair (Unique ID 22), which was observed defending a territory on the second survey only. Another CAGN pair (Unique ID 23) was observed on all three surveys. During the first survey, they were aggressively defending a large area of habitat and during the second survey they were observed feeding at least one fledgling. On the third survey a group of four juveniles were observed foraging independently near the pair, and the adults were observed incubating a nest with three eggs. This nest was likely a second clutch based on the observation of fledglings nearby. All three territories are within USFWS designated CAGN critical habitat.

An individual CAGN was observed in the CSS habitat south of Casa Avenida (Figure 2 page 24; Unique ID 14). In this area, one male responded to the taped CAGN call during the first survey but was not subsequently observed.

A CAGN pair was observed in the CSS habitat just south of Ted Williams Parkway during all three surveys (Figure 2 page 25; Unique ID 16). A fledgling was observed in the pair's territory during survey one but did not appear to be directly interacting with the pair.

The CAGN on Figure 2 page 27 (Unique ID 25) was observed in the CSS habitat north of Scripps Poway Parkway. One male responded to the taped CAGN call during the second survey but was not subsequently observed.

In summary, five CAGN pairs and three single male CAGN were identified within the CAGN Survey Area during the 2015 breeding season; four of the five pairs and one of three individuals were within USFWS designated critical habitat. Three of the five pairs were observed with fledglings, for a total of 20 CAGN individuals detected during the surveys.

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<sup>2</sup> San Diego County Bird Atlas (Unit 2004) documents 492 bird species in San Diego County

#### **4.4 2015 MCAS MIRAMAR SURVEYS**

MCAS Miramar conducted CAGN surveys in 2013 and documented four CAGN breeding pairs within a quarter mile of the BRSA for the Proposed Project (USMC 2013). MCAS Miramar is currently conducting 2015 surveys for CAGN and the survey results, once available, will be incorporated in future documents regarding the Proposed Project.

#### **5. CERTIFICATION**


*We certify that the information in this survey report and attached figures fully and accurately represent our work.*



Jim Rocks  
TE-063230-4



Lee Ripma  
TE-221290-3.1



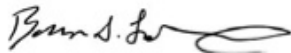
Shannon Walsh  
Authorized Individual under TE-221290-3.1



Melanie Dicus  
TE-049175-3



Garrett Huffman  
TE-20168A-0



Brian Lohstroh  
TE-063608-5

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2007. Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (*Poliioptila californica californica*). *Federal Register* Vol. 72, No. 243. December 19, 2007.
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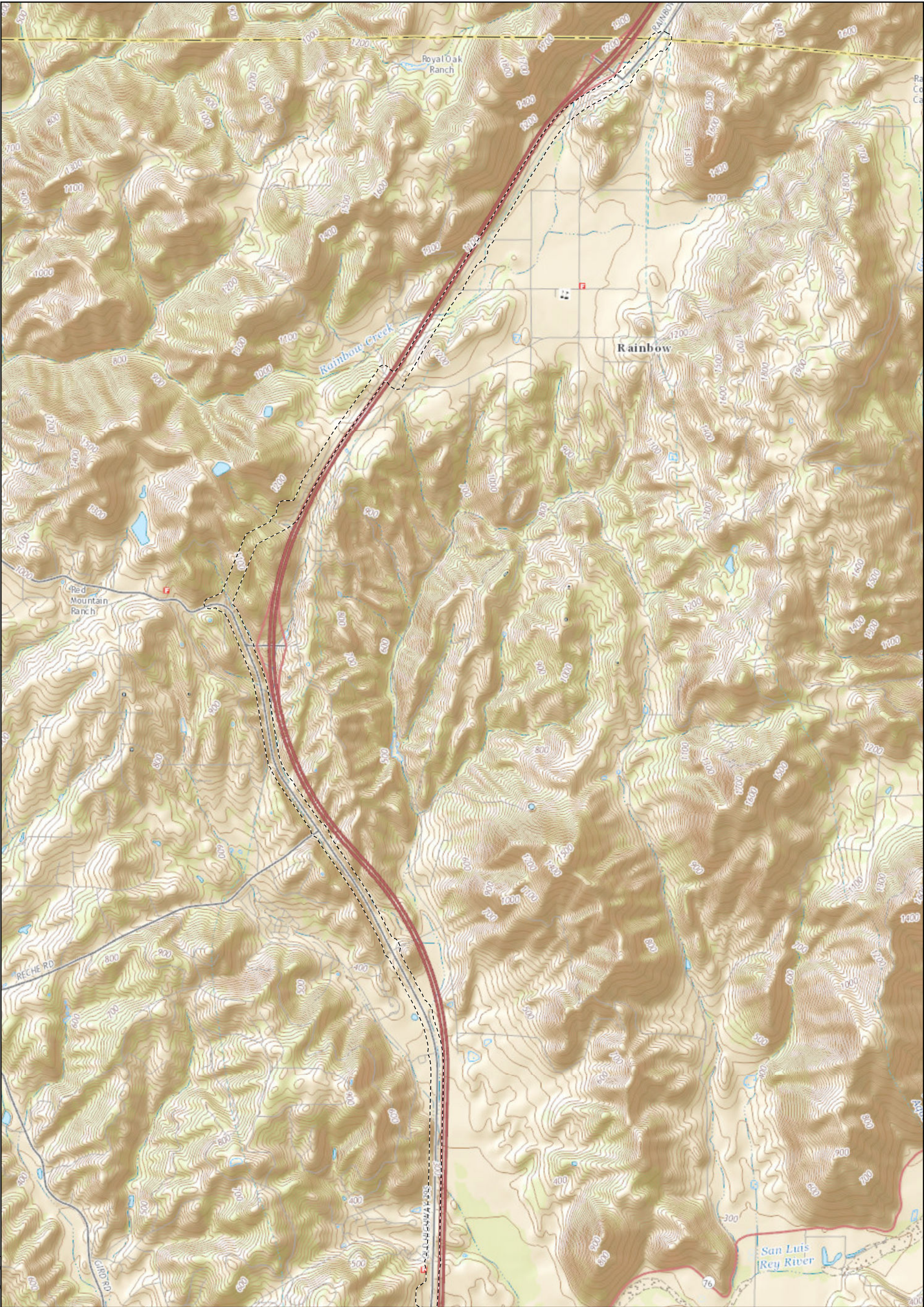
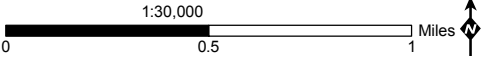
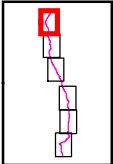


Figure 1: USGS Quadrangle Map 1 of 6

Pipeline Safety & Reliability Project

[ ] Biological Resource Survey Area





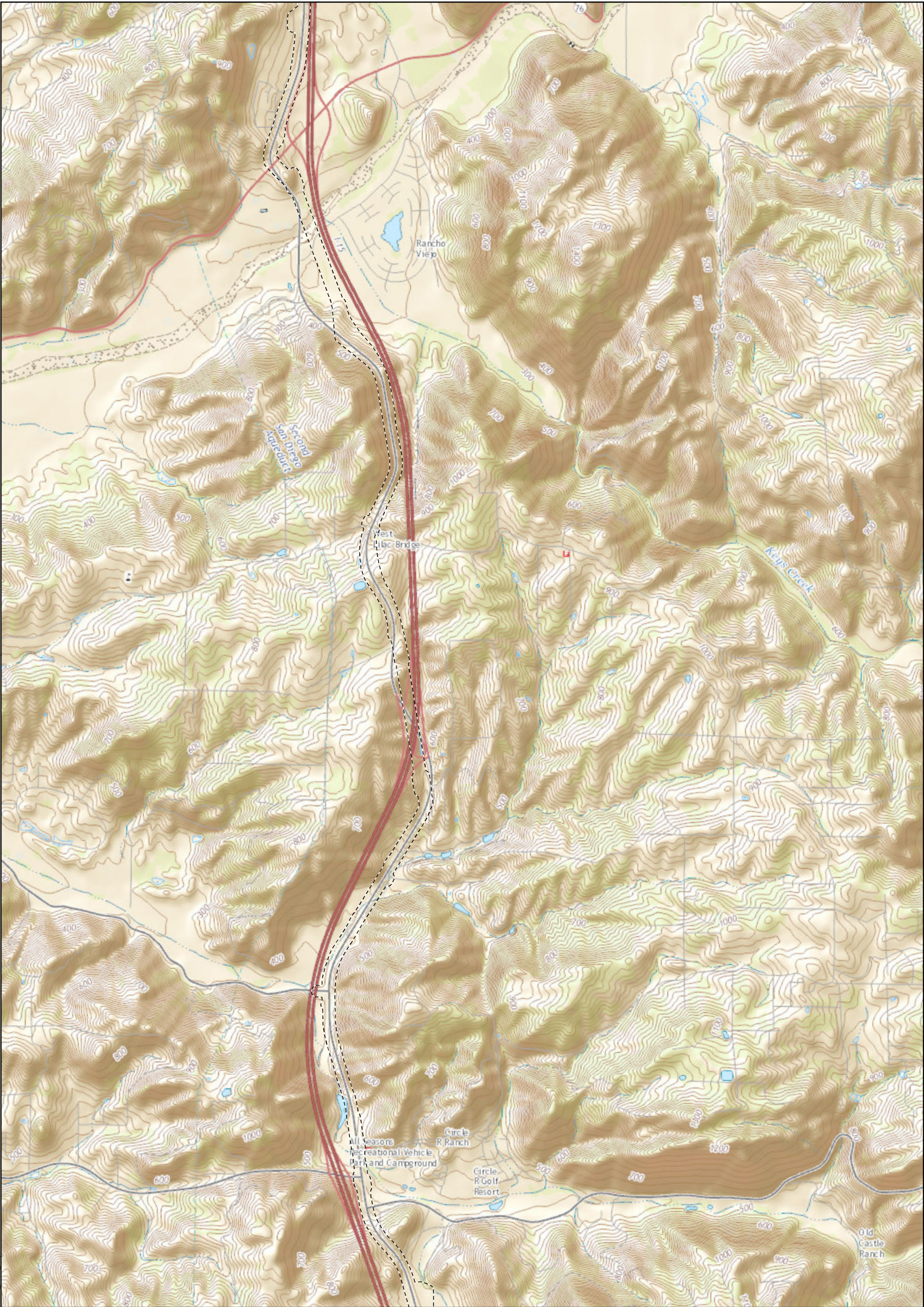
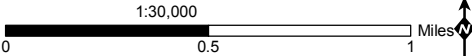
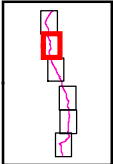


Figure 1: USGS Quadrangle Map 2 of 6

Pipeline Safety & Reliability Project

[ ] Biological Resource Survey Area





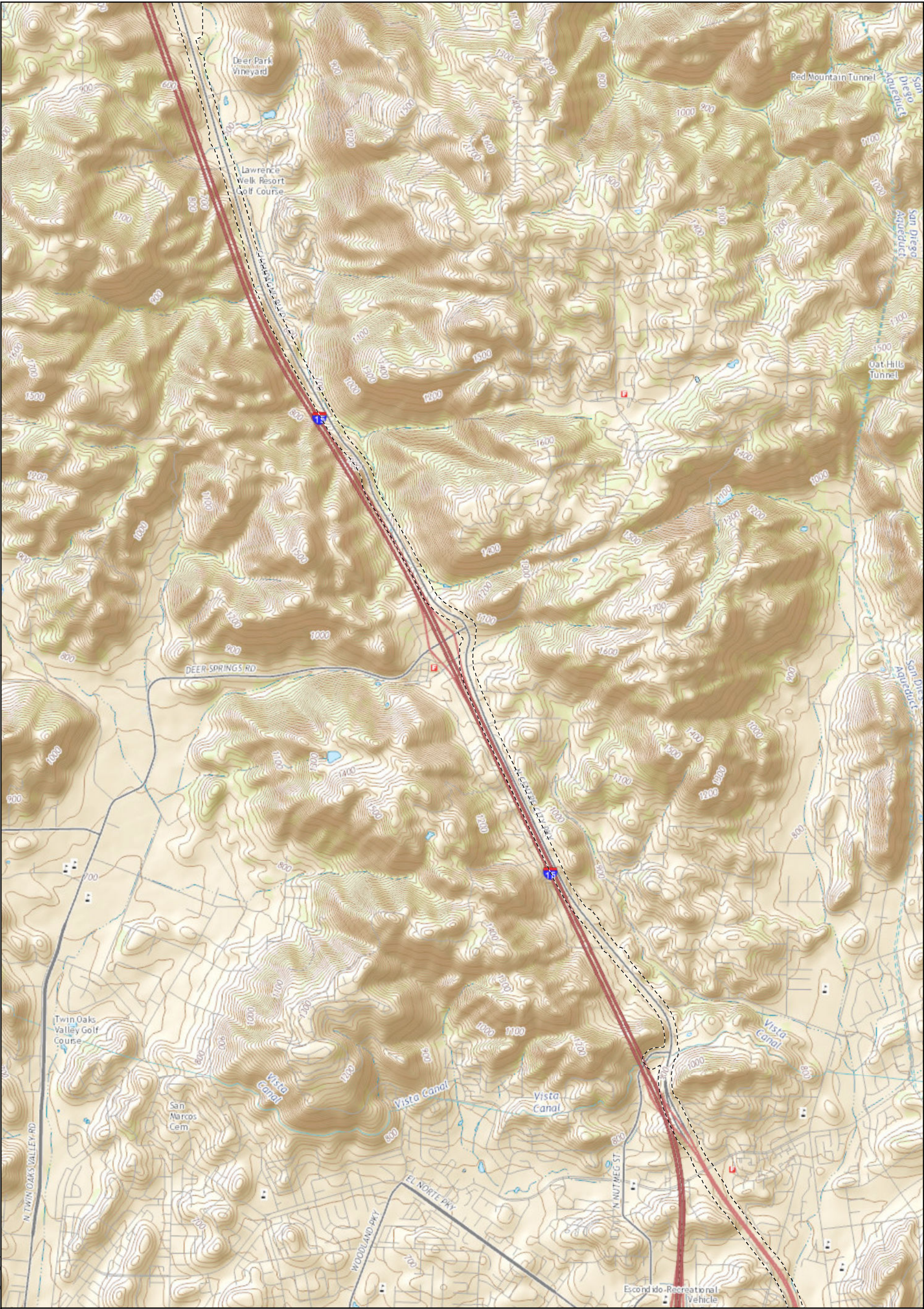
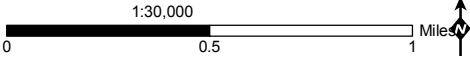
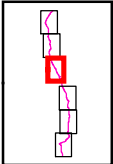


Figure 1: USGS Quadrangle Map 3 of 6

Pipeline Safety & Reliability Project

[ ] Biological Resource Survey Area





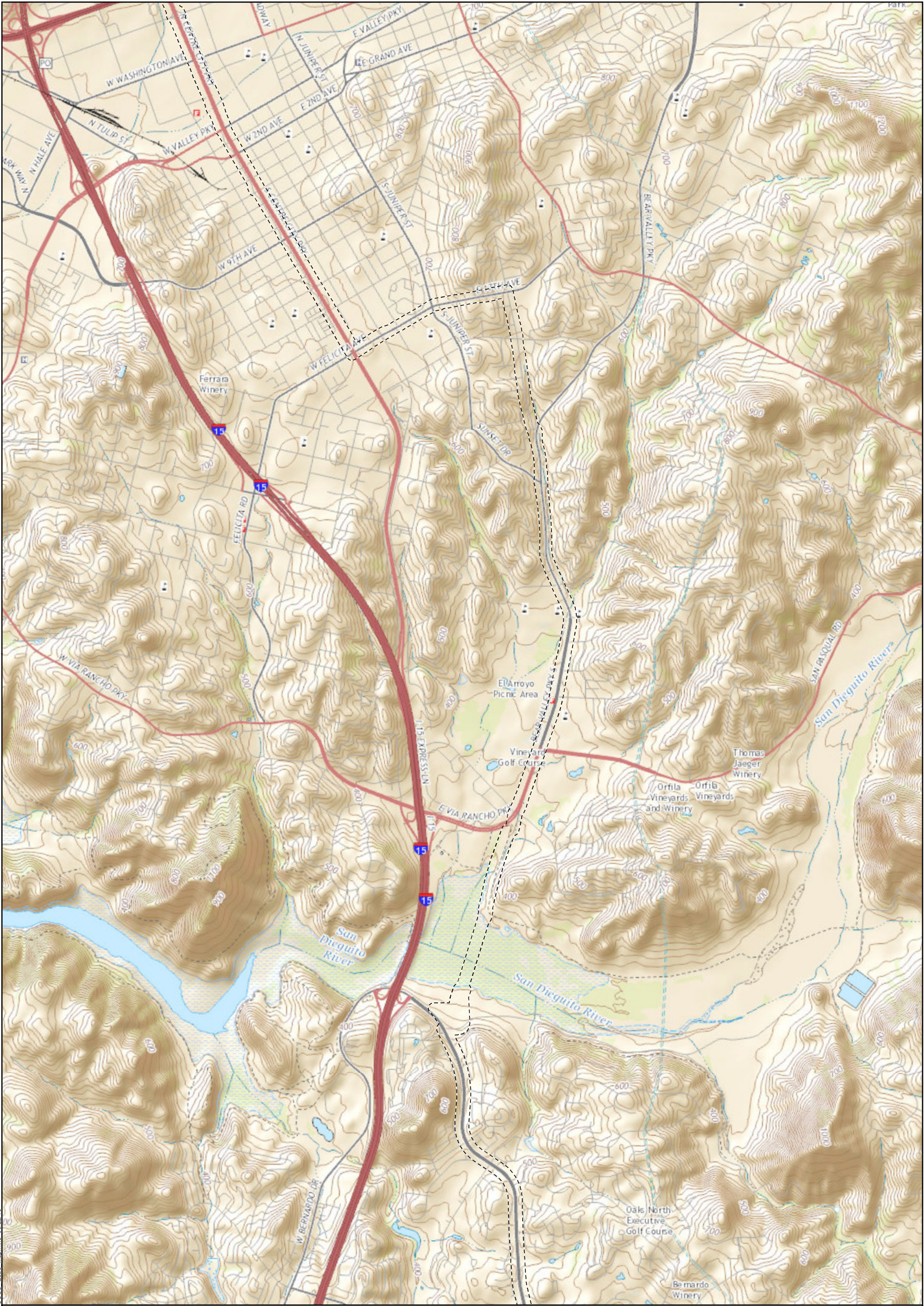
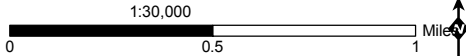
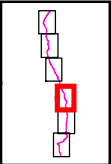


Figure 1: USGS Quadrangle Map 4 of 6 Pipeline Safety & Reliability Project

Biological Resource Survey Area









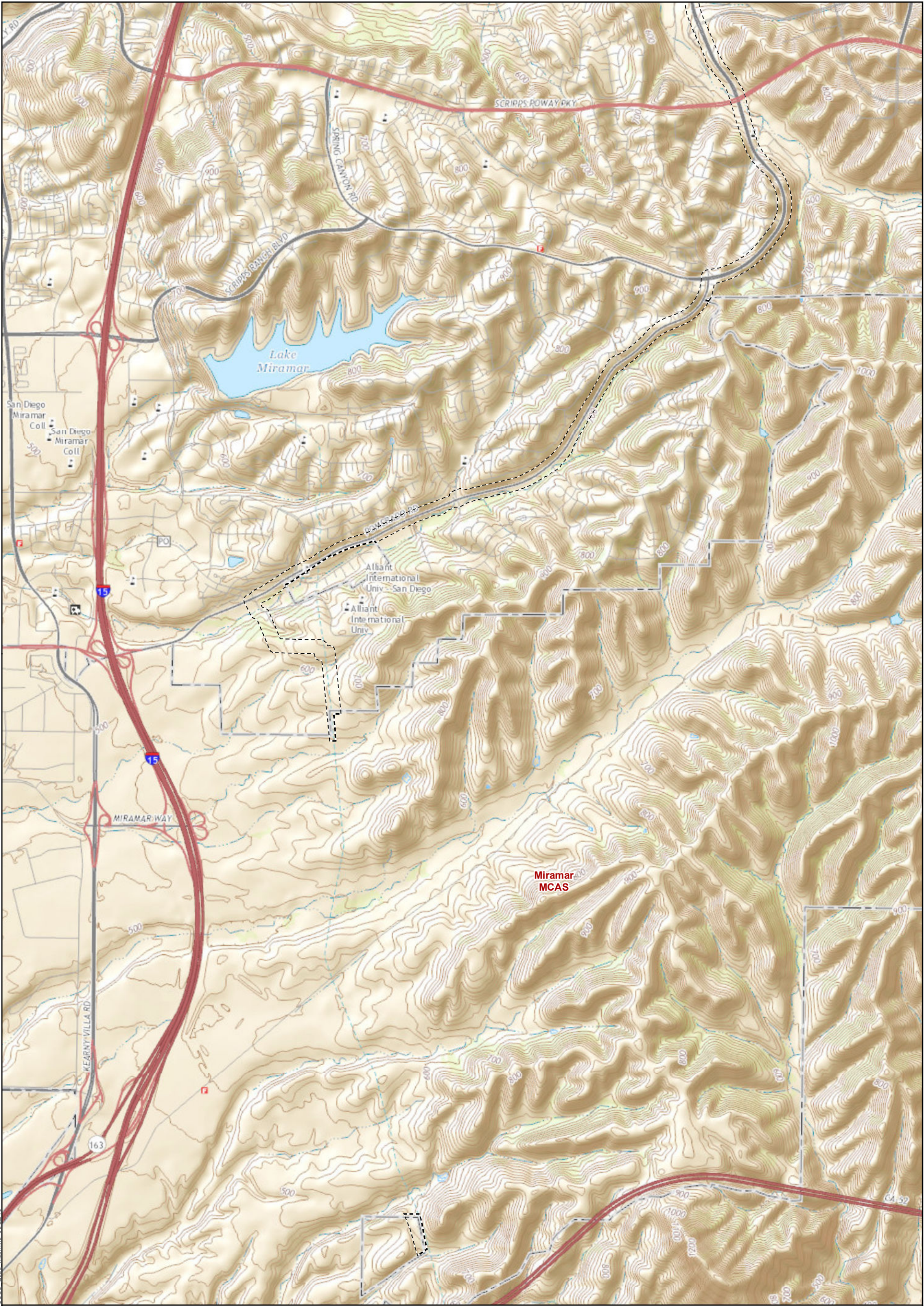


Figure 1: USGS Quadrangle Map 6 of 6 Pipeline Safety & Reliability Project

[ ] Biological Resource Survey Area

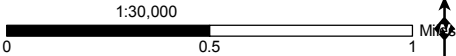
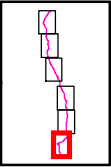






Figure 2: 2015 CAGN Survey Area and Sightings Map 1 of 32

Pipeline Safety & Reliability Project

- Milepost
- MCAS Miramar
- Biological Resource Survey Area
- CAGN Survey Area
- Excluded from CAGN Survey Area
- CAGN individual
- CAGN pair
- USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**  
CLOW-O - Open Coast Live Oak Woodland (<50%)  
CSS - Diegan Coastal Sage Scrub  
dCSS - Diegan Coastal Sage Scrub (disturbed)  
rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

1:5,000  
0 200 400 Feet







Figure 2: 2015 CAGN Survey Area and Sightings Map 2 of 32

Pipeline Safety & Reliability Project

- |                                   |  |  |
|-----------------------------------|--|--|
| ■ Milepost                        | ● CAGN individual                        | <b>CAGN Suitable Vegetation Code</b>                     |
| ■ MCAS Miramar                    | ● CAGN pair                              | CLOW-O - Open Coast Live Oak Woodland (<50%)             |
| ■ Biological Resource Survey Area | ■ USFWS designated CAGN critical habitat | CSS - Diegan Coastal Sage Scrub                          |
| ■ CAGN Survey Area                |  | CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated |
| ■ Excluded from CAGN Survey Area  |  | M-CHAP - Southern Mixed Chaparral                        |
|                                   |  | rCSS - Diegan Coastal Sage Scrub (restored)              |

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

1:5,000  
0 200 400 Feet





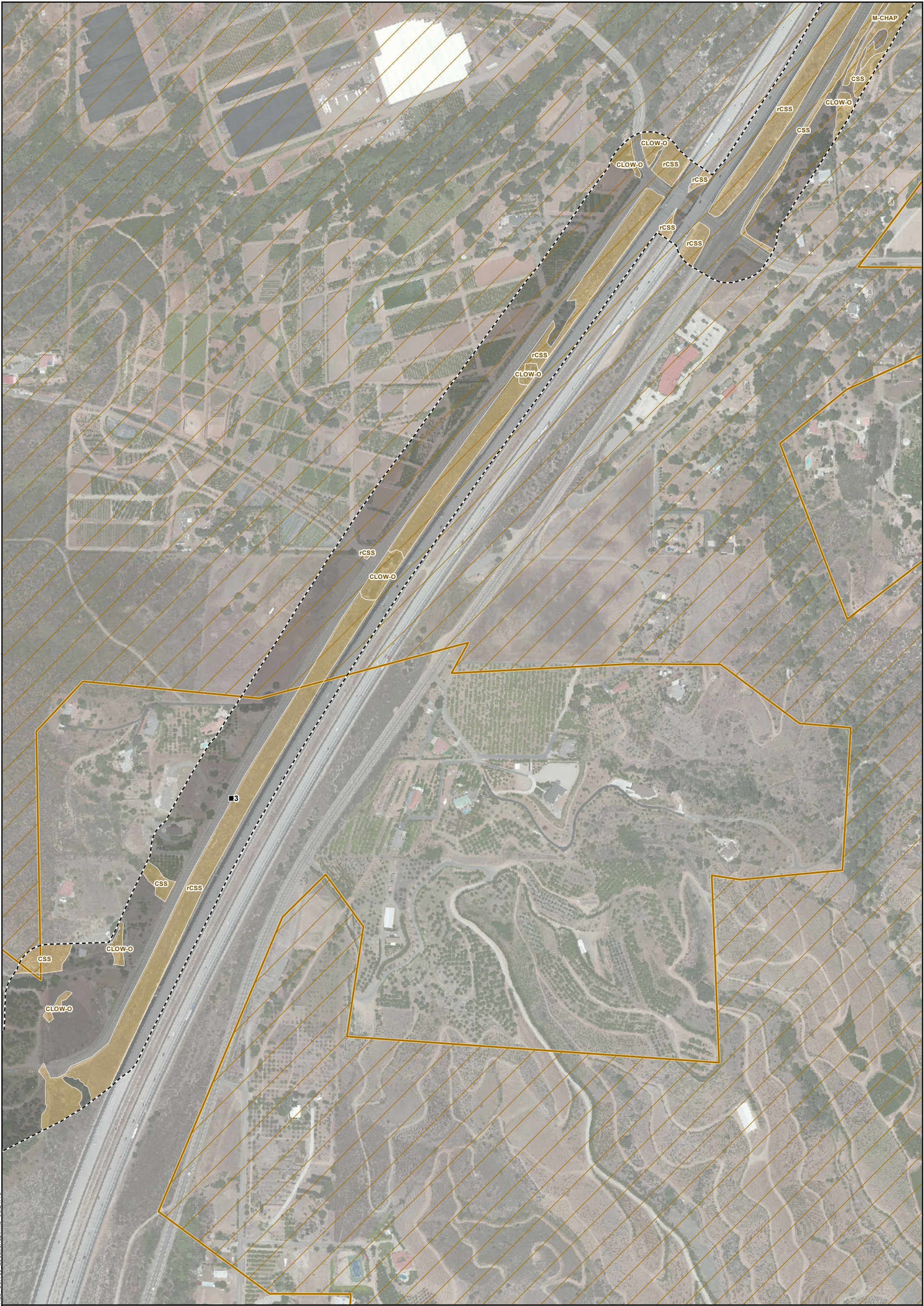


Figure 2: 2015 CAGN Survey Area and Sightings Map 3 of 32

Pipeline Safety & Reliability Project

- Milepost
- MCAS Miramar
- Biological Resource Survey Area
- CAGN Survey Area
- Excluded from CAGN Survey Area
- CAGN individual
- CAGN pair
- USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**  
CLOW-O - Open Coast Live Oak Woodland (<50%)  
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1:5,000  
0 200 400 Feet







**Figure 2: 2015 CAGN Survey Area and Sightings Map 4 of 32** **Pipeline Safety & Reliability Project**

■ Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-O - Diegan Coastal Sage Scrub (open)

M-CHAP - Southern Mixed Chaparral

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys



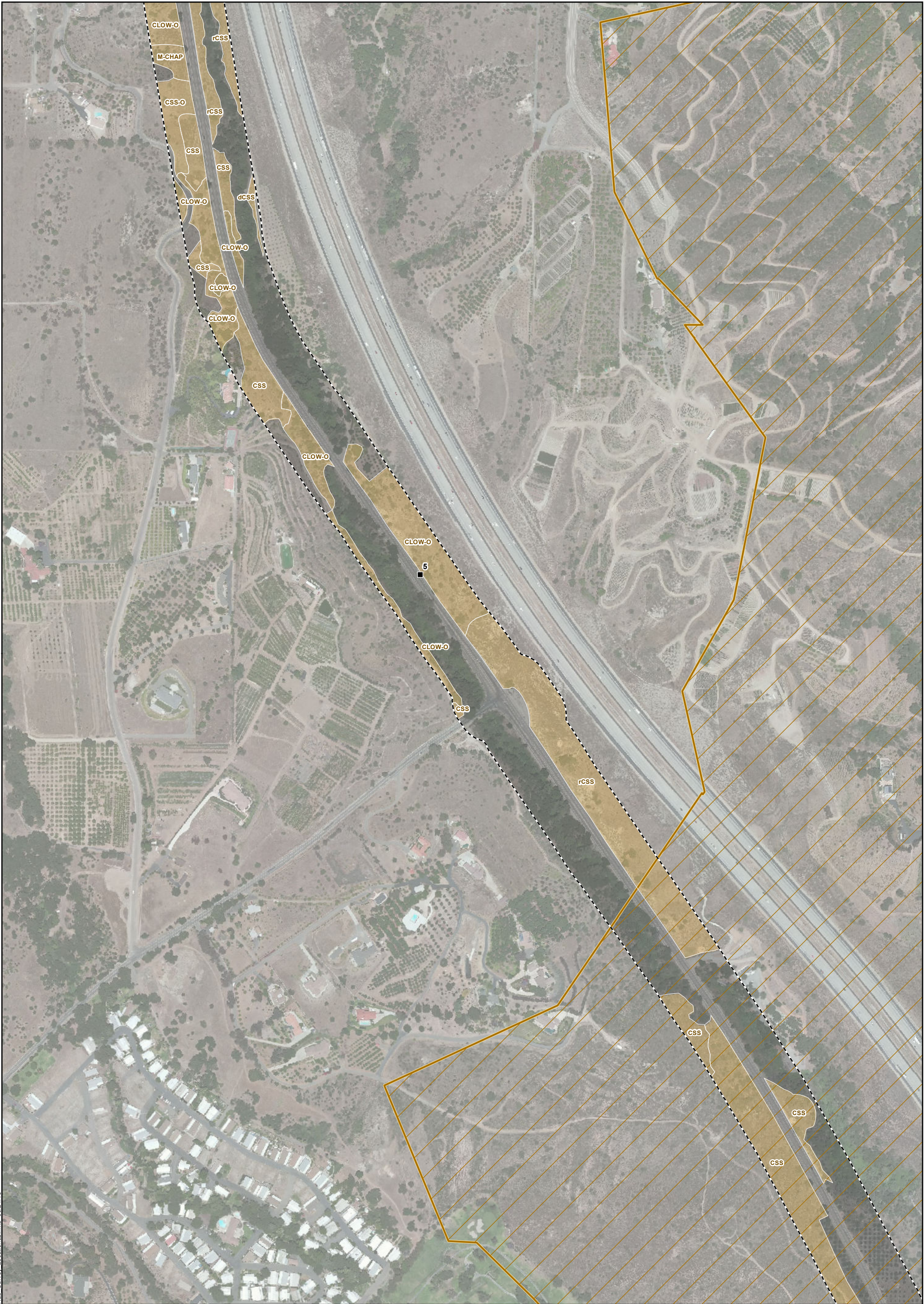


Figure 2: 2015 CAGN Survey Area and Sightings Map 5 of 32

Pipeline Safety & Reliability Project

■ Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

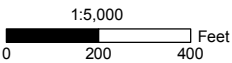
CSS-O - Diegan Coastal Sage Scrub (open)

M-CHAP - Southern Mixed Chaparral

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)

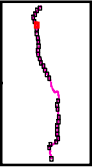
- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys



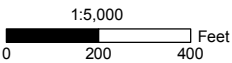




**Figure 2: 2015 CAGN Survey Area and Sightings Map 6 of 32** **Pipeline Safety & Reliability Project**

<ul style="list-style-type: none"><li>■ Milepost</li><li>■ MCAS Miramar</li><li>--- Biological Resource Survey Area</li><li>■ CAGN Survey Area</li><li>■ Excluded from CAGN Survey Area</li></ul>	<ul style="list-style-type: none"><li>● CAGN individual</li><li>● CAGN pair</li><li>■ USFWS designated CAGN critical habitat</li></ul>	<b>CAGN Suitable Vegetation Code</b> <ul style="list-style-type: none"><li>CLOW-O - Open Coast Live Oak Woodland (&lt;50%)</li><li>CSS - Diegan Coastal Sage Scrub</li><li>CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated</li><li>CSS-OPU - Diegan Coastal Sage Scrub</li><li>dCLOW-O - Open Coast Live Oak Woodland (&lt;50%) (disturbed)</li></ul>	<ul style="list-style-type: none"><li>dCSS - Diegan Coastal Sage Scrub (disturbed)</li><li>rCSS - Diegan Coastal Sage Scrub (restored)</li></ul>	
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- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





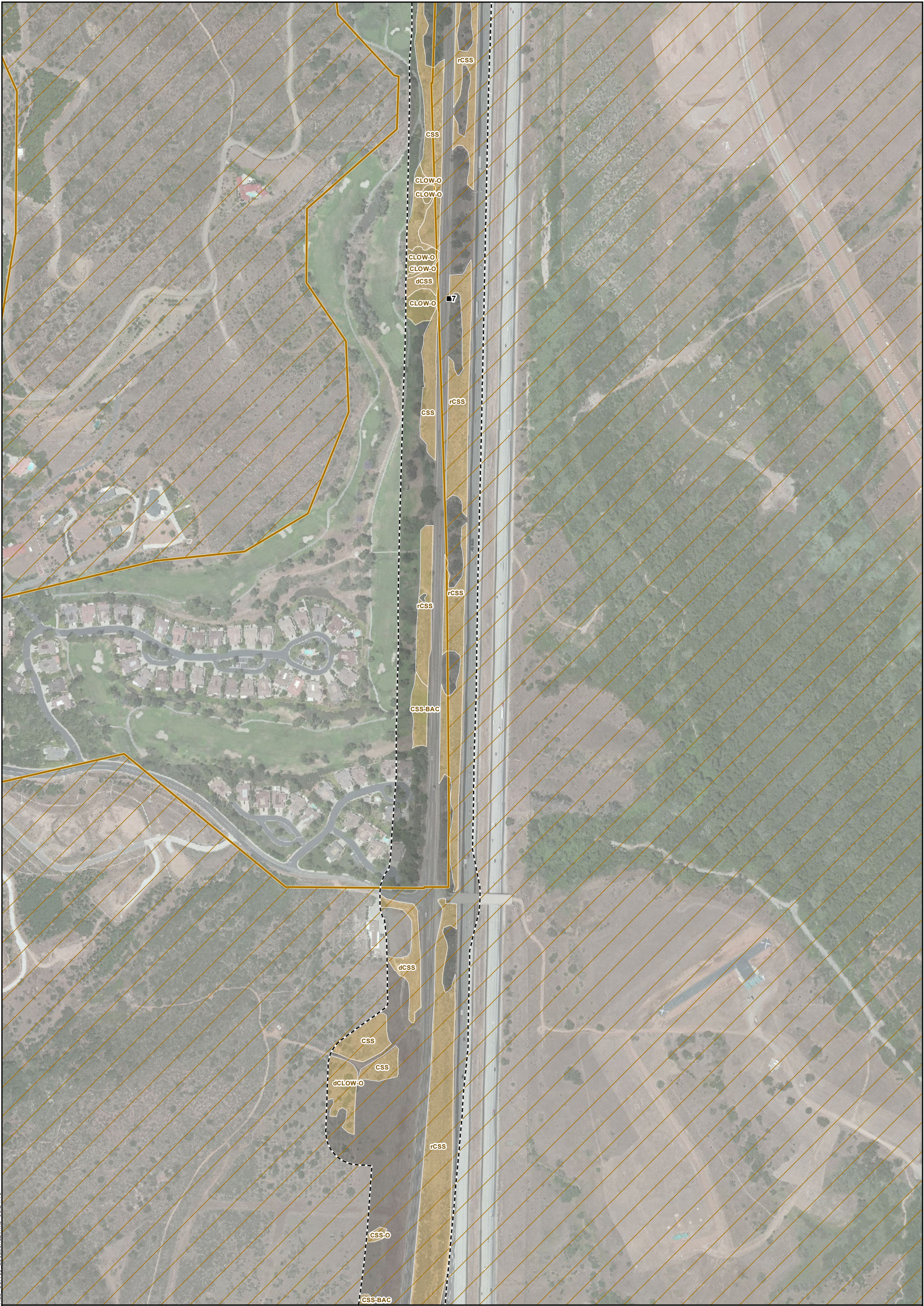


Figure 2: 2015 CAGN Survey Area and Sightings Map 7 of 32 Pipeline Safety & Reliability Project

■ Milepost

■ MCAS Miramar

■ Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

CAGN Suitable Vegetation Code

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

CSS-O - Diegan Coastal Sage Scrub (open)

dCLOW-O - Open Coast Live Oak Woodland (<50%) (disturbed)

dCSS - Diegan Coastal Sage Scrub (disturbed)

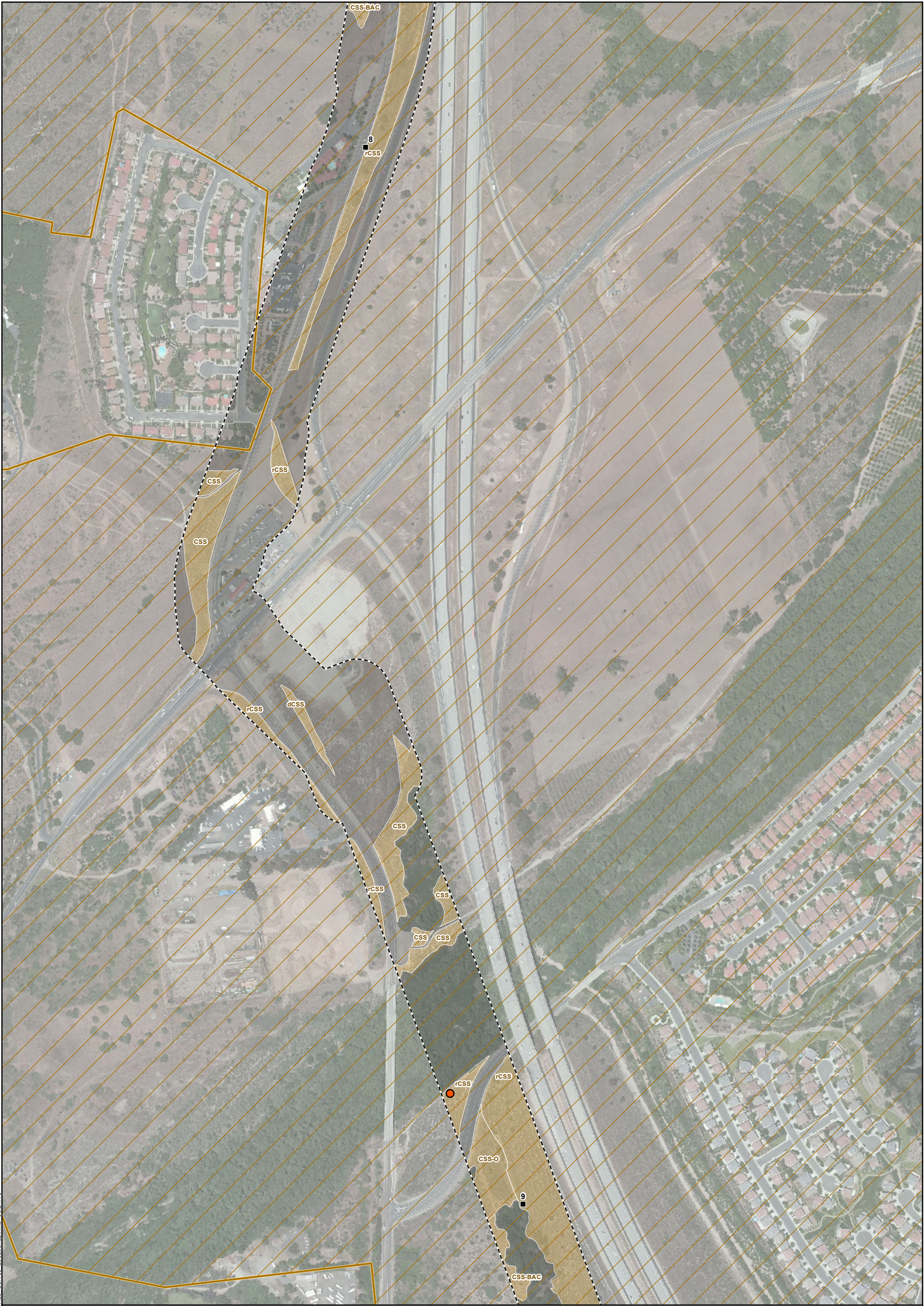
rCSS - Diegan Coastal Sage Scrub (restored)

INSIGNIA

ENVIRONMENTAL

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





**Figure 2: 2015 CAGN Survey Area and Sightings Map 8 of 32** **Pipeline Safety & Reliability Project**

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CSS - Diegan Coastal Sage Scrub

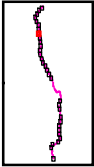
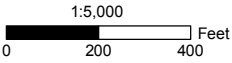
CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

CSS-O - Diegan Coastal Sage Scrub (open)

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





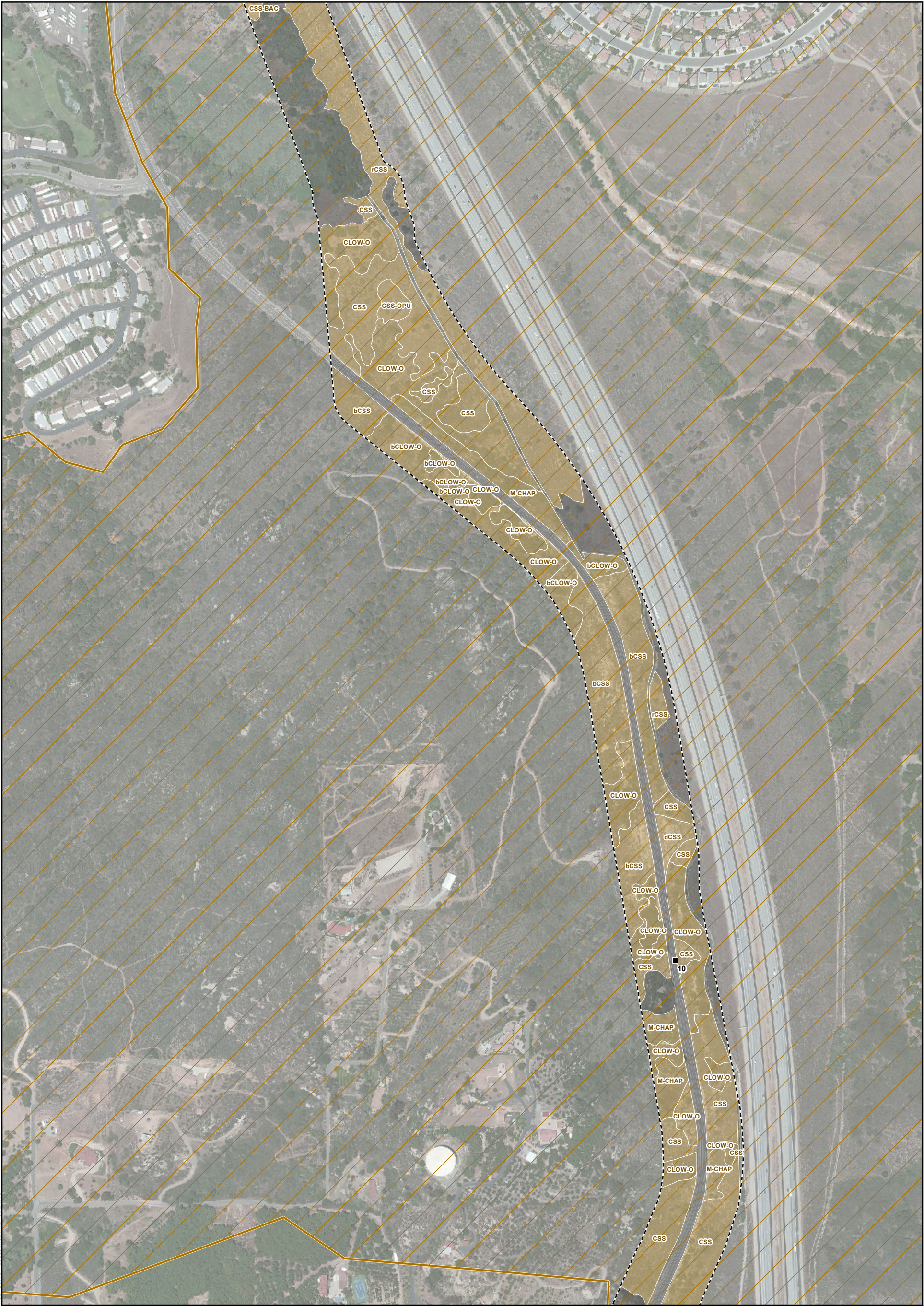


Figure 2: 2015 CAGN Survey Area and Sightings Map 9 of 32

Pipeline Safety & Reliability Project

■ Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

CSS-OPU - Diegan Coastal Sage Scrub

M-CHAP - Southern Mixed Chaparral

bCLOW-O - Open Coast Live Oak Woodland (<50%) (burned)

bCSS - Diegan Coastal Sage Scrub (burned)

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)

10

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys



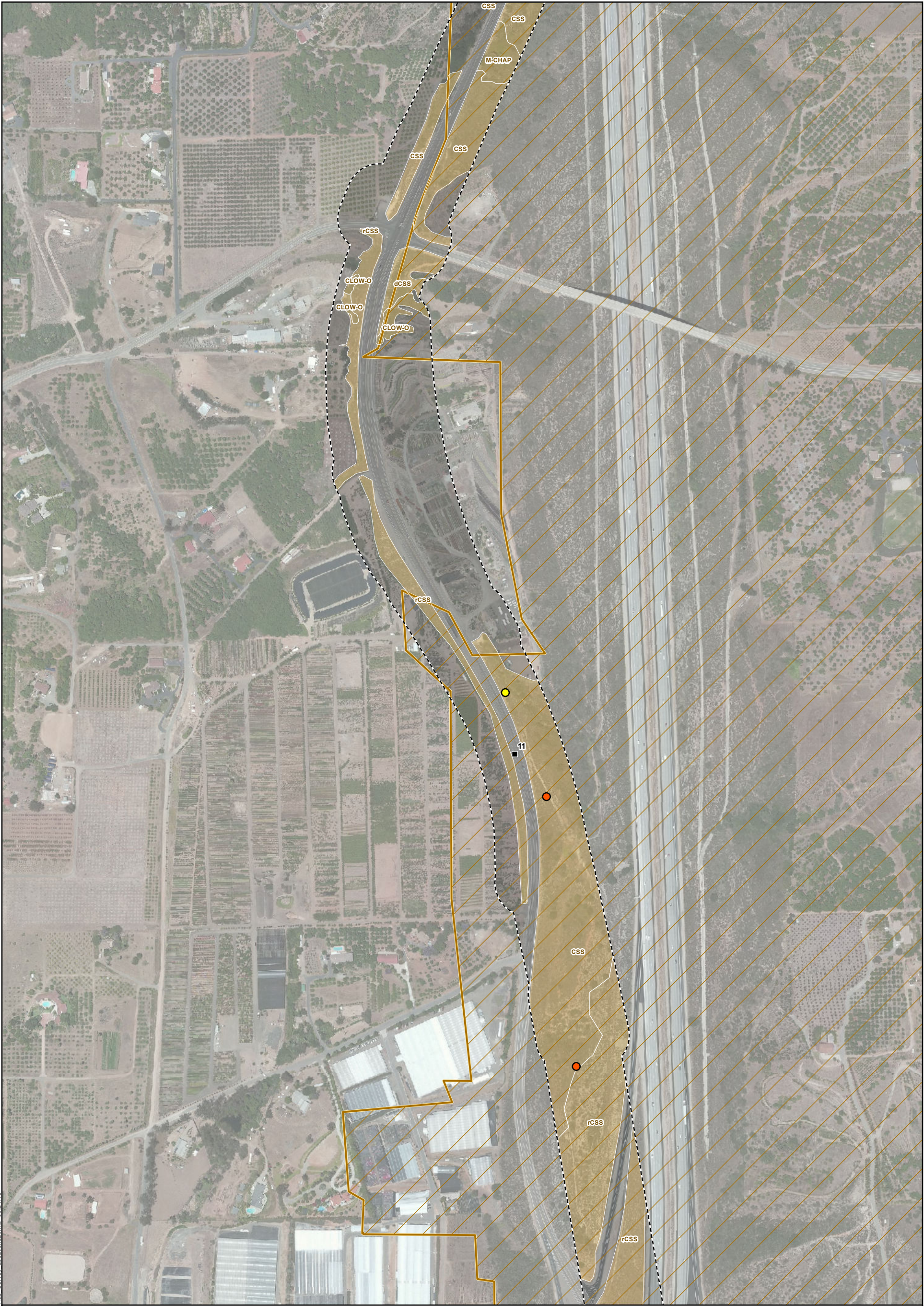


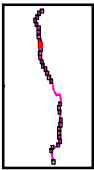
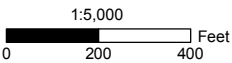
Figure 2: 2015 CAGN Survey Area and Sightings Map 10 of 32

Pipeline Safety & Reliability Project

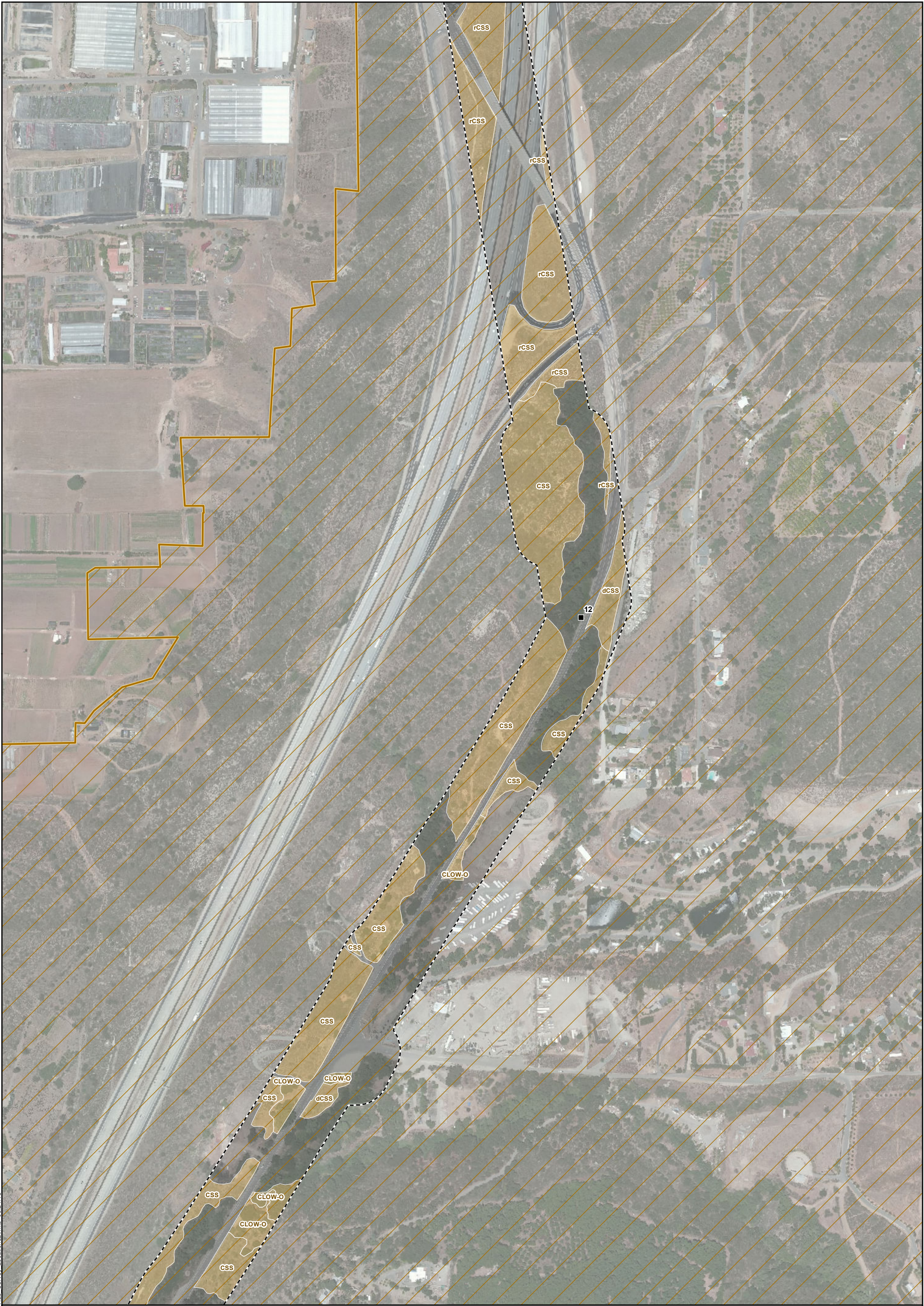
- Milepost
- MCAS Miramar
- Biological Resource Survey Area
- CAGN Survey Area
- Excluded from CAGN Survey Area
- CAGN individual
- CAGN pair
- USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**  
CLOW-O - Open Coast Live Oak Woodland (<50%)  
CSS - Diegan Coastal Sage Scrub  
M-CHAP - Southern Mixed Chaparral  
dCSS - Diegan Coastal Sage Scrub (disturbed)  
rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys







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Figure 2: 2015 CAGN Survey Area and Sightings Map 11 of 32 Pipeline Safety & Reliability Project

■ Milepost

MCAS Miramar

Biological Resource Survey Area

CAGN Survey Area

Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

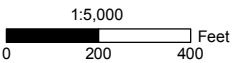
CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





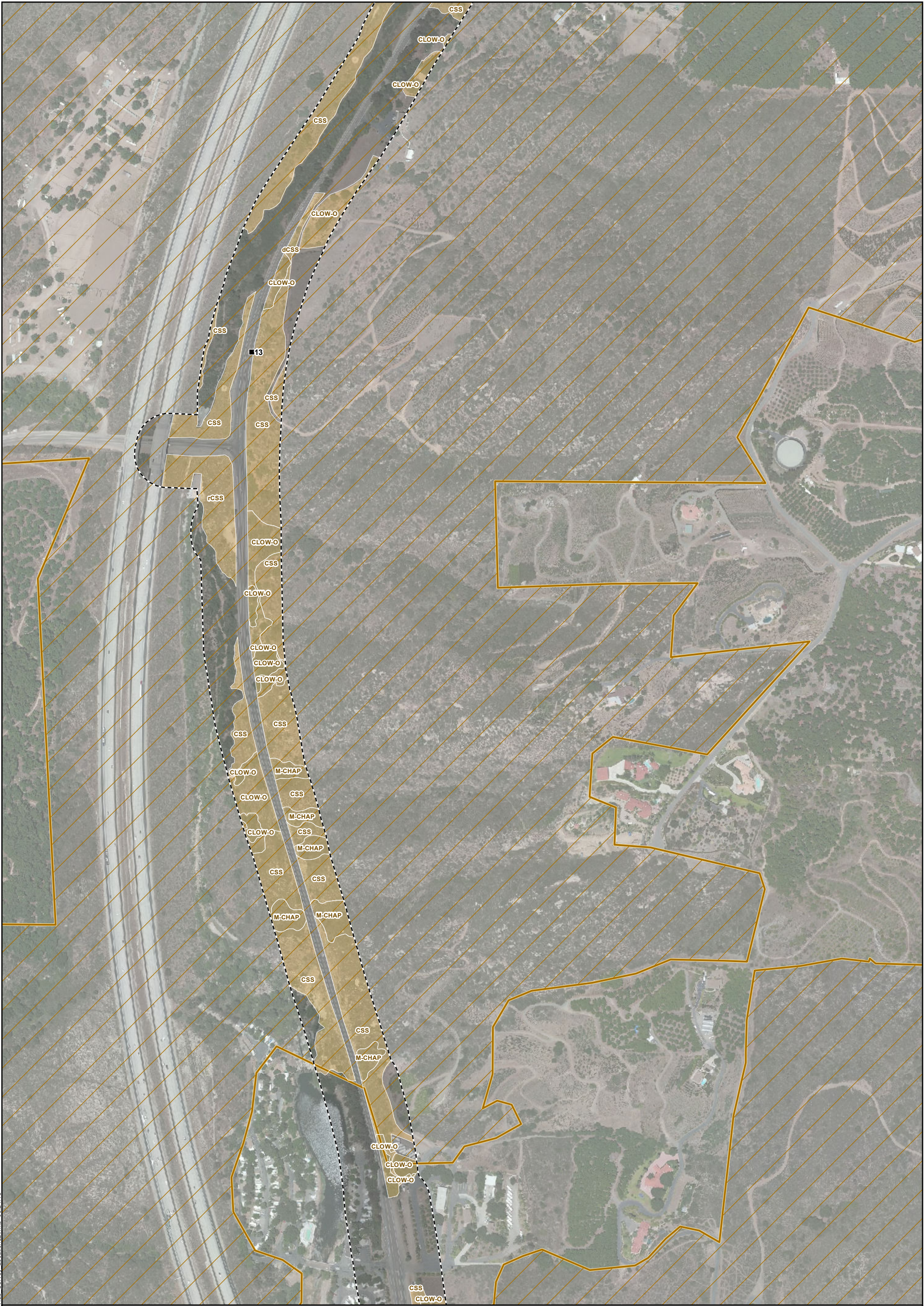


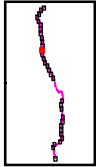
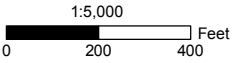
Figure 2: 2015 CAGN Survey Area and Sightings Map 12 of 32

Pipeline Safety & Reliability Project

- Milepost
- MCAS Miramar
- Biological Resource Survey Area
- CAGN Survey Area
- Excluded from CAGN Survey Area
- CAGN individual
- CAGN pair
- USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**  
CLOW-O - Open Coast Live Oak Woodland (<50%)  
CSS - Diegan Coastal Sage Scrub  
M-CHAP - Southern Mixed Chaparral  
dCSS - Diegan Coastal Sage Scrub (disturbed)  
rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





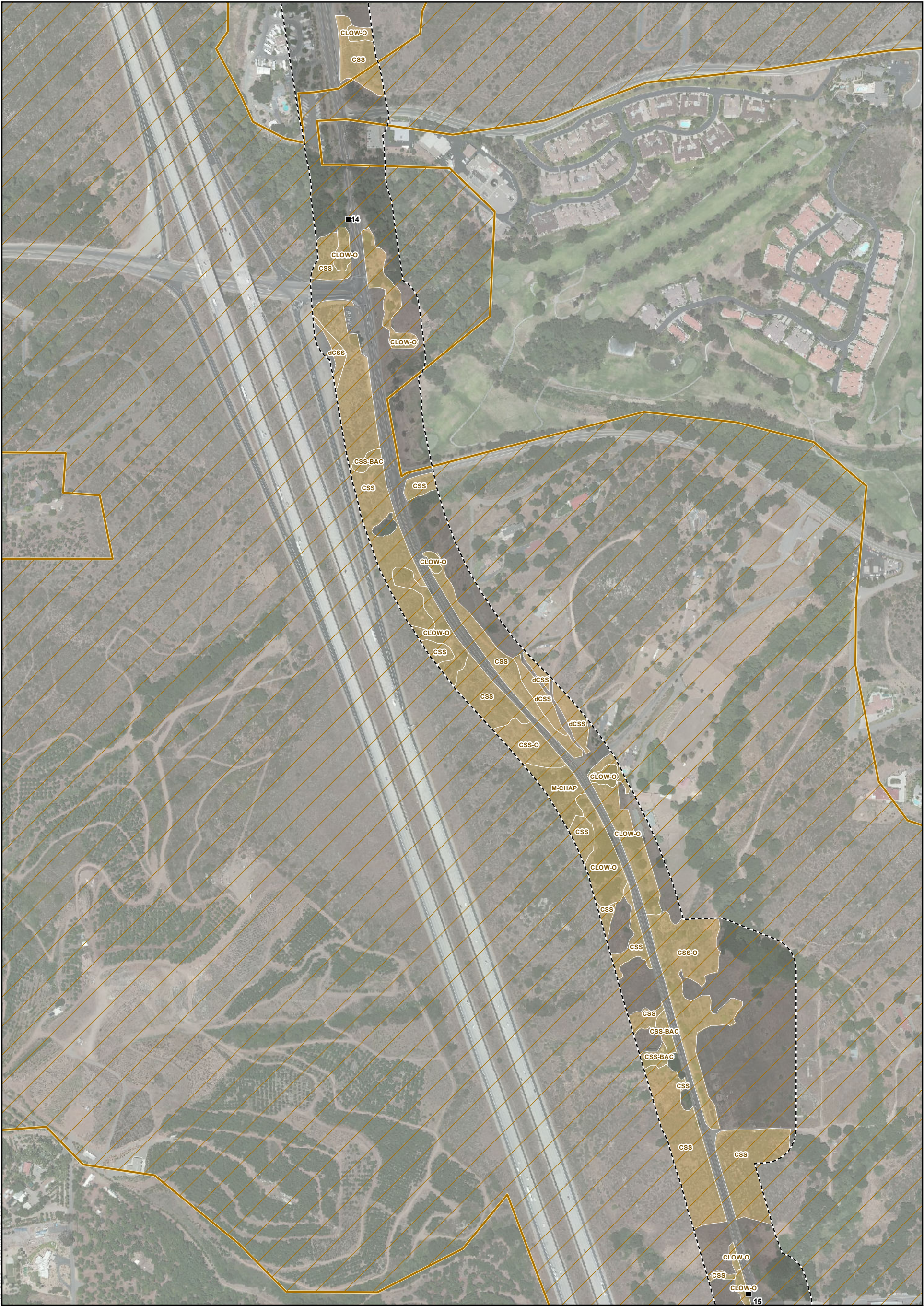


Figure 2: 2015 CAGN Survey Area and Sightings Map 13 of 32 Pipeline Safety & Reliability Project

■ Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**  
CLOW-O - Open Coast Live Oak Woodland (<50%)  
CSS - Diegan Coastal Sage Scrub  
CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated  
CSS-O - Diegan Coastal Sage Scrub (open)  
M-CHAP - Southern Mixed Chaparral

**dCSS - Diegan Coastal Sage Scrub (disturbed)**

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

1:5,000

0 200 400 Feet





Figure 2: 2015 CAGN Survey Area and Sightings Map 14 of 32 Pipeline Safety & Reliability Project

■ Milepost

■

 MCAS Miramar

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 Biological Resource Survey Area

■

 CAGN Survey Area

■

 Excluded from CAGN Survey Area

●

 CAGN individual

●

 CAGN pair

■

 USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-CHAP - Coastal Sage-Chaparral Transition

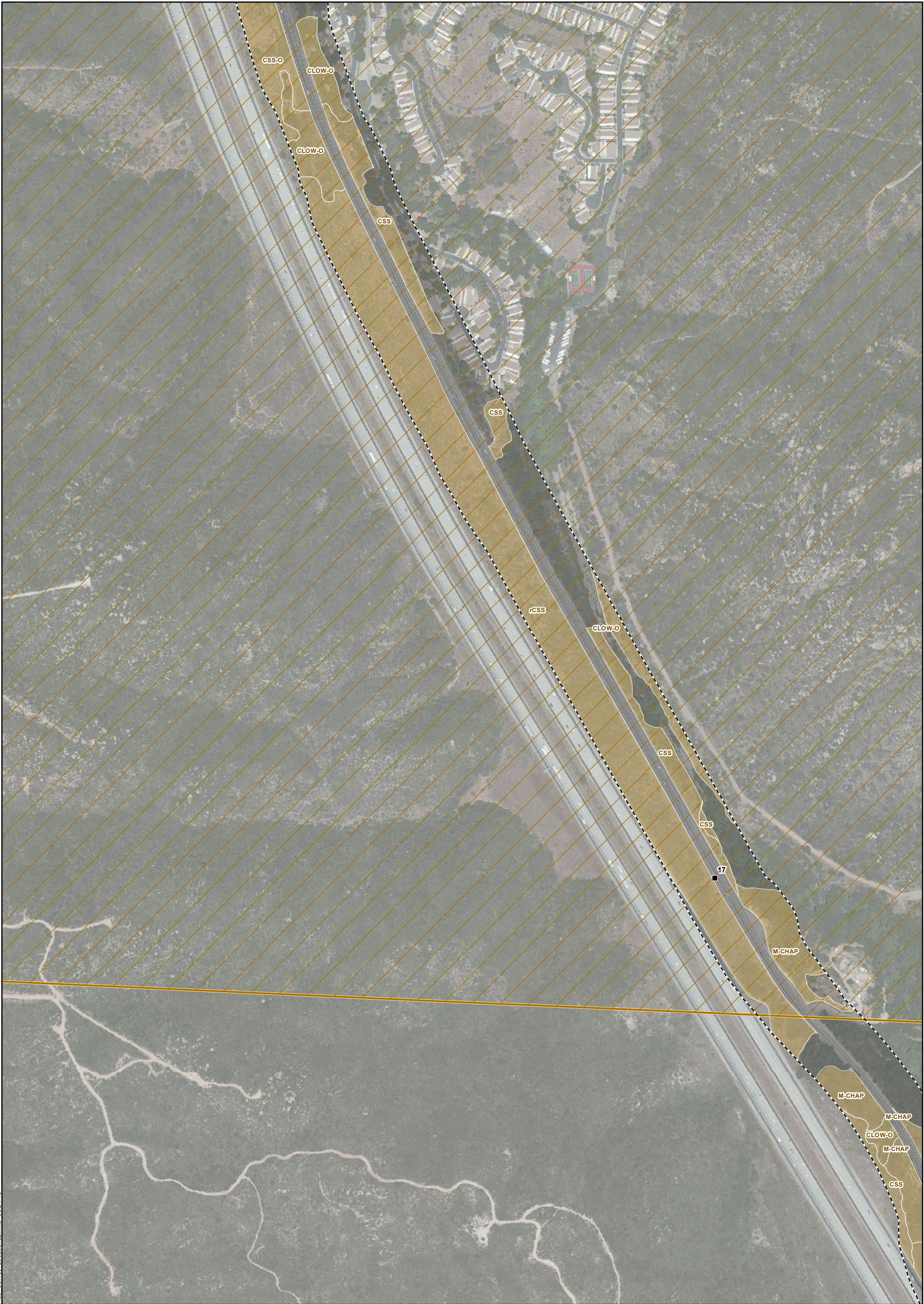
CSS-O - Diegan Coastal Sage Scrub (open)

M-CHAP - Southern Mixed Chaparral

dCLOW-O - Open Coast Live Oak Woodland (<50%) (disturbed)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





**Figure 2: 2015 CAGN Survey Area and Sightings Map 15 of 32** **Pipeline Safety & Reliability Project**

■ Milepost

■ MCAS Miramar

Biological Resource Survey Area

CAGN Survey Area

Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

CSS-O - Diegan Coastal Sage Scrub (open)

M-CHAP - Southern Mixed Chaparral

rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

1:5,000

0200400

Feet

SoCalGas

SDGE

INSIGNIA





Figure 2: 2015 CAGN Survey Area and Sightings Map 16 of 32

Pipeline Safety & Reliability Project

■ Milepost

■ MCAS Miramar

■ Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

CAGN Suitable Vegetation Code

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

M-CHAP - Southern Mixed Chaparral

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)

INSIGNIA

ENVIRONMENTAL

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





Figure 2: 2015 CAGN Survey Area and Sightings Map 17 of 32 Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

▭ Biological Resource Survey Area

▭ CAGN Survey Area

▭ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

▭ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

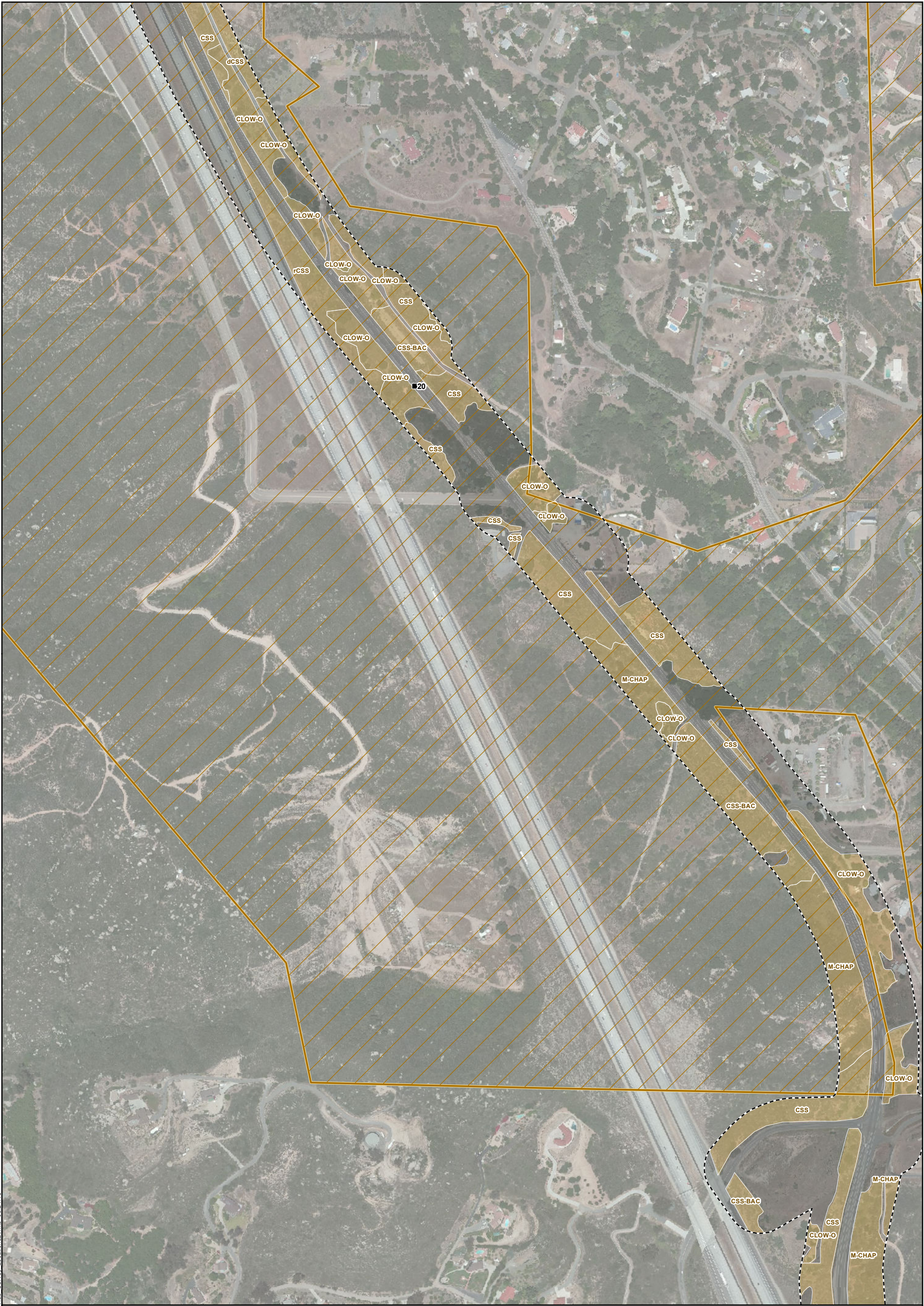
CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

dCSS - Diegan Coastal Sage Scrub (disturbed)
- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys
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- MXDs\PEABio\CAGN\_Hab\_Survey\_Locations2.mxd 09/24/15





**Figure 2: 2015 CAGN Survey Area and Sightings Map 18 of 32** **Pipeline Safety & Reliability Project**

■ Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

M-CHAP - Southern Mixed Chaparral

dCSS - Diegan Coastal Sage Scrub (disturbed)

rCSS - Diegan Coastal Sage Scrub (restored)





**Figure 2: 2015 CAGN Survey Area and Sightings Map 19 of 32** **Pipeline Safety & Reliability Project**

- Milepost

MCAS Miramar

Biological Resource Survey Area

CAGN Survey Area

Excluded from CAGN Survey Area

CAGN individual

CAGN pair

USFWS designated CAGN critical habitat
- CAGN Suitable Vegetation Code**

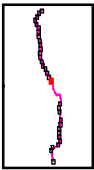
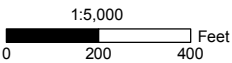
CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS - Diegan Coastal Sage Scrub

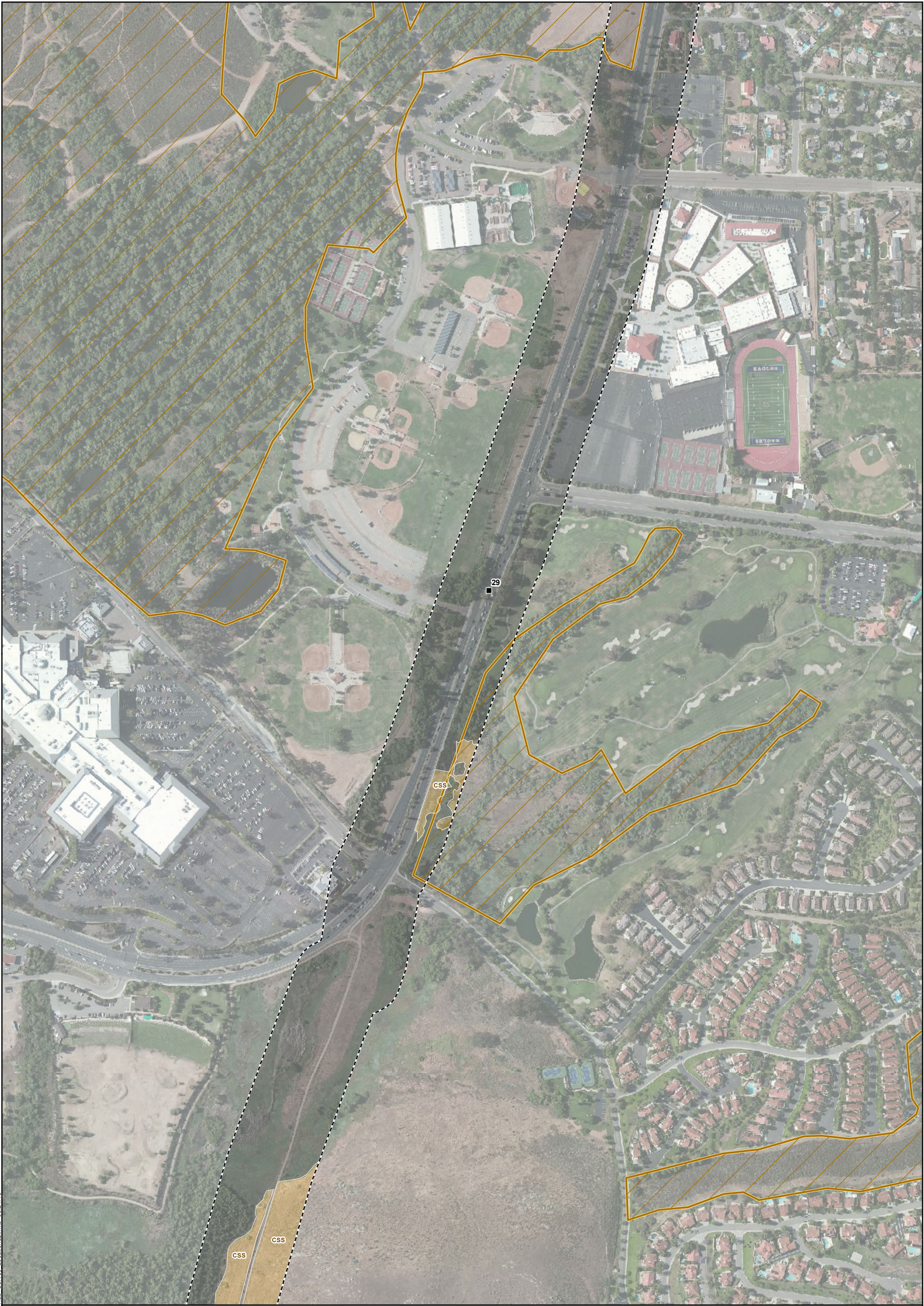
CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

M-CHAP - Southern Mixed Chaparral

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys







**Figure 2: 2015 CAGN Survey Area and Sightings Map 20 of 32** **Pipeline Safety & Reliability Project**

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

CAGN Suitable Vegetation Code

CSS - Diegan Coastal Sage Scrub

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





Figure 2: 2015 CAGN Survey Area and Sightings Map 21 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

■ Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

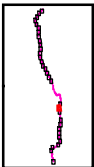
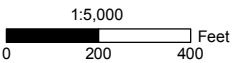
CSS - Diegan Coastal Sage Scrub

CSS-ADO - Diegan Coastal Sage Scrub (Adolphia californica dominated)

CSS-O - Diegan Coastal Sage Scrub (open)

rCSS - Diegan Coastal Sage Scrub (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys



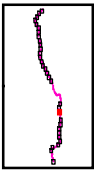
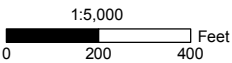




**Figure 2: 2015 CAGN Survey Area and Sightings Map 22 of 32** **Pipeline Safety & Reliability Project**

- |                                   |  |  |
|-----------------------------------|--|--|
| ■ Milepost                        | ● CAGN individual                        | <b>CAGN Suitable Vegetation Code</b>                                 |
| ■ MCAS Miramar                    | ● CAGN pair                              | CSS-ADO - Diegan Coastal Sage Scrub (Adolphia californica dominated) |
| ■ Biological Resource Survey Area | ■ USFWS designated CAGN critical habitat |  |
| ■ CAGN Survey Area                |  |  |
| ■ Excluded from CAGN Survey Area  |  |  |

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





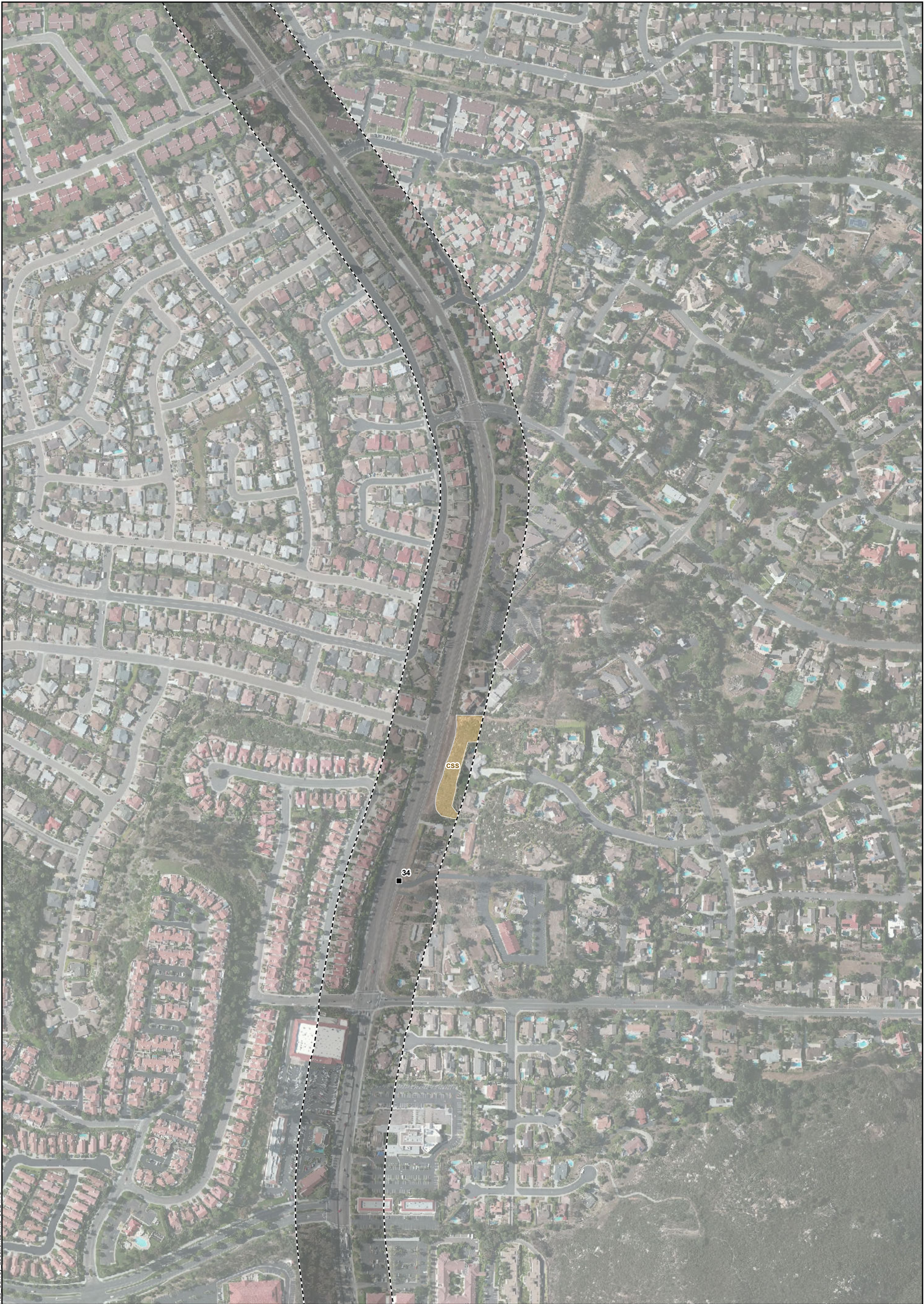


Figure 2: 2015 CAGN Survey Area and Sightings Map 23 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

■ Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CSS - Diegan Coastal Sage Scrub
- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys
- 
- 
- 
-





**Figure 2: 2015 CAGN Survey Area and Sightings Map 24 of 32** **Pipeline Safety & Reliability Project**

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

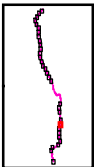
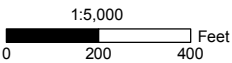
CSS - Diegan Coastal Sage Scrub

CSS-O - Diegan Coastal Sage Scrub (open)

dCLOW-O - Open Coast Live Oak Woodland (<50%) (disturbed)

dCSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated (disturbed)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





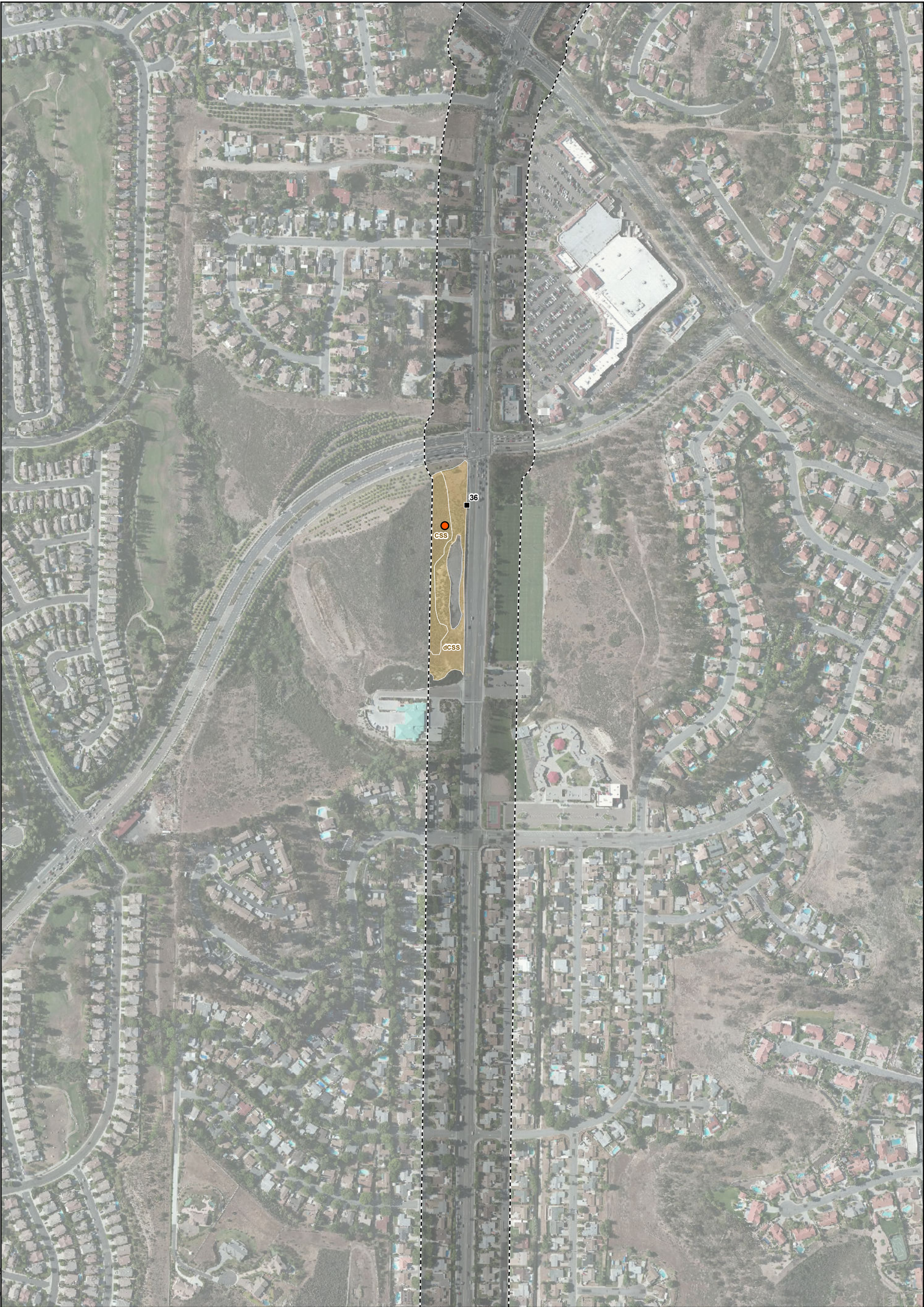


Figure 2: 2015 CAGN Survey Area and Sightings Map 25 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

CAGN Suitable Vegetation Code

CSS - Diegan Coastal Sage Scrub

dCSS - Diegan Coastal Sage Scrub (disturbed)
- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys
- 
- 
- 
-





Figure 2: 2015 CAGN Survey Area and Sightings Map 26 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

▭ Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CSS-O - Diegan Coastal Sage Scrub (open)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

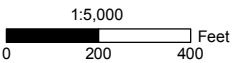






Figure 2: 2015 CAGN Survey Area and Sightings Map 27 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

CLOW-O - Open Coast Live Oak Woodland (<50%)

CSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated

CSS-O - Diegan Coastal Sage Scrub (open)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

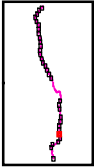
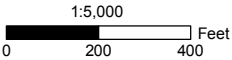




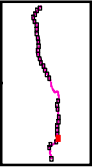
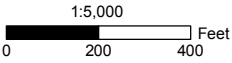


Figure 2: 2015 CAGN Survey Area and Sightings Map 28 of 32

Pipeline Safety & Reliability Project

- Milepost
- MCAS Miramar
- Biological Resource Survey Area
- CAGN Survey Area
- Excluded from CAGN Survey Area
- CAGN individual
- CAGN pair
- USFWS designated CAGN critical habitat

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





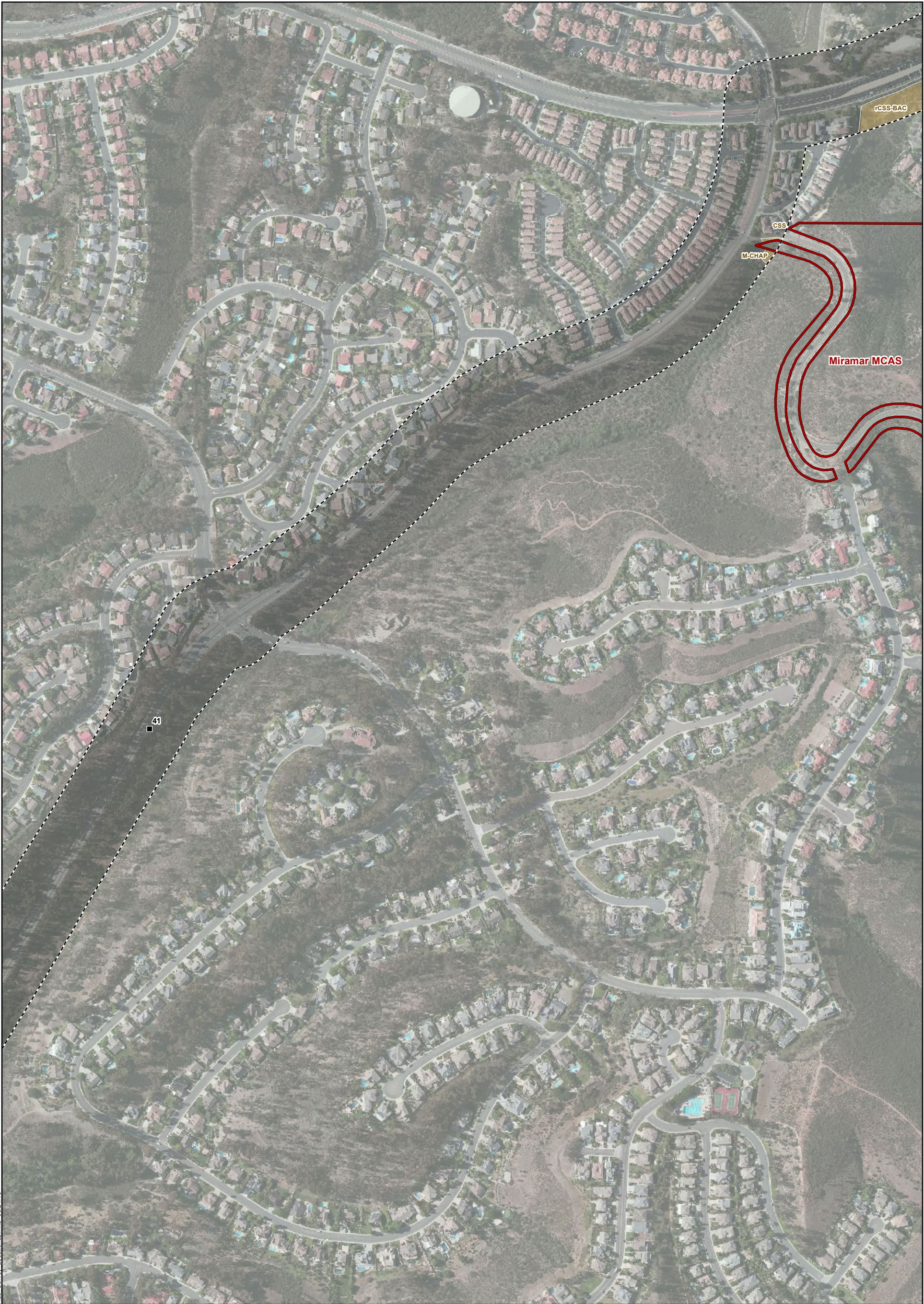


Figure 2: 2015 CAGN Survey Area and Sightings Map 29 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

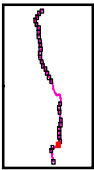
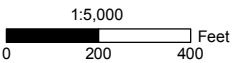
**CAGN Suitable Vegetation Code**

CSS - Diegan Coastal Sage Scrub

M-CHAP - Southern Mixed Chaparral

rCSS-BAC - Diegan Coastal Sage Scrub: Baccharis-dominated (restored)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





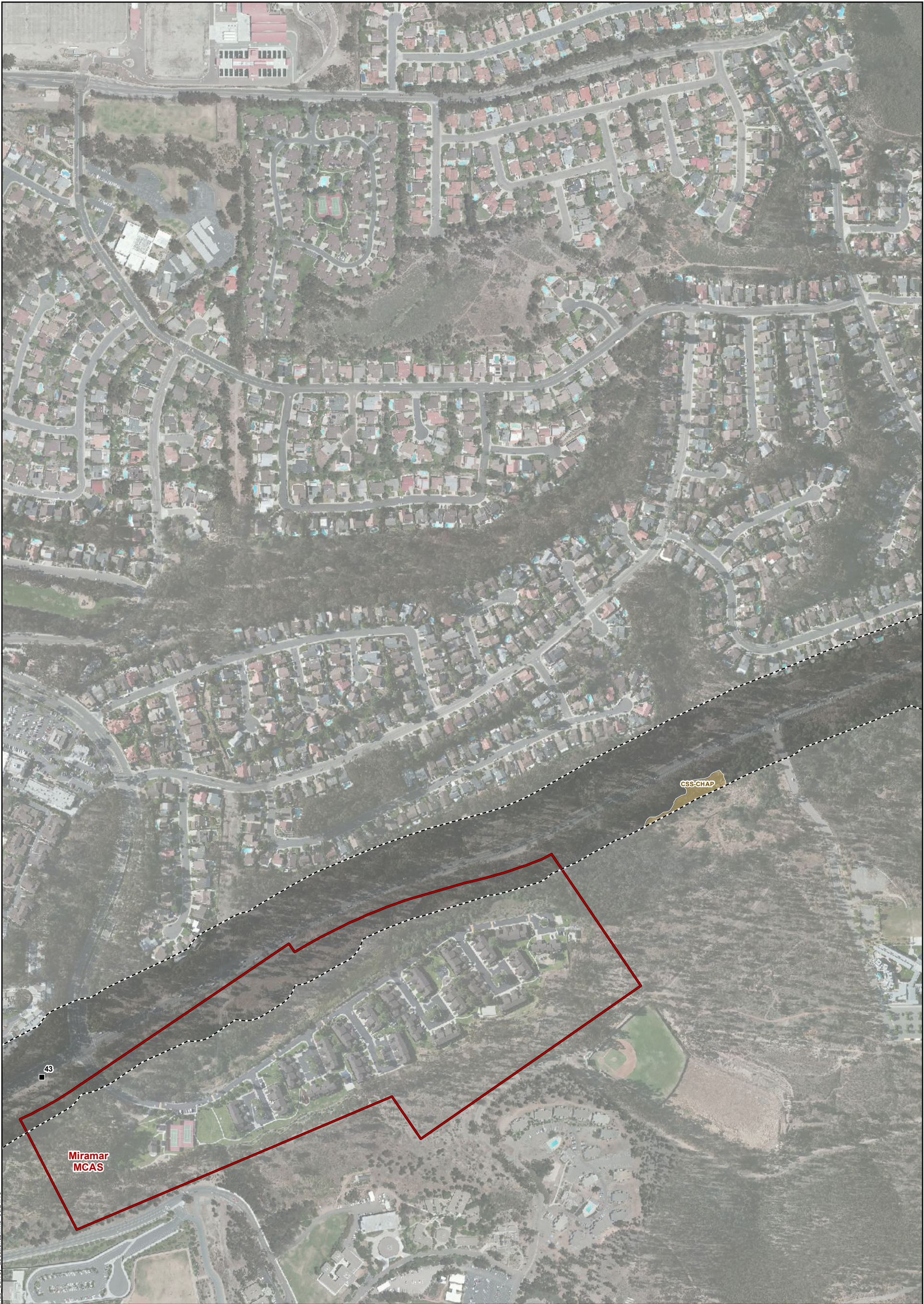


Figure 2: 2015 CAGN Survey Area and Sightings Map 30 of 32

Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

■ Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

CAGN Suitable Vegetation Code

CSS-CHAP - Coastal Sage-Chaparral Transition
- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys
- 
- 
- 
- 
- 
-



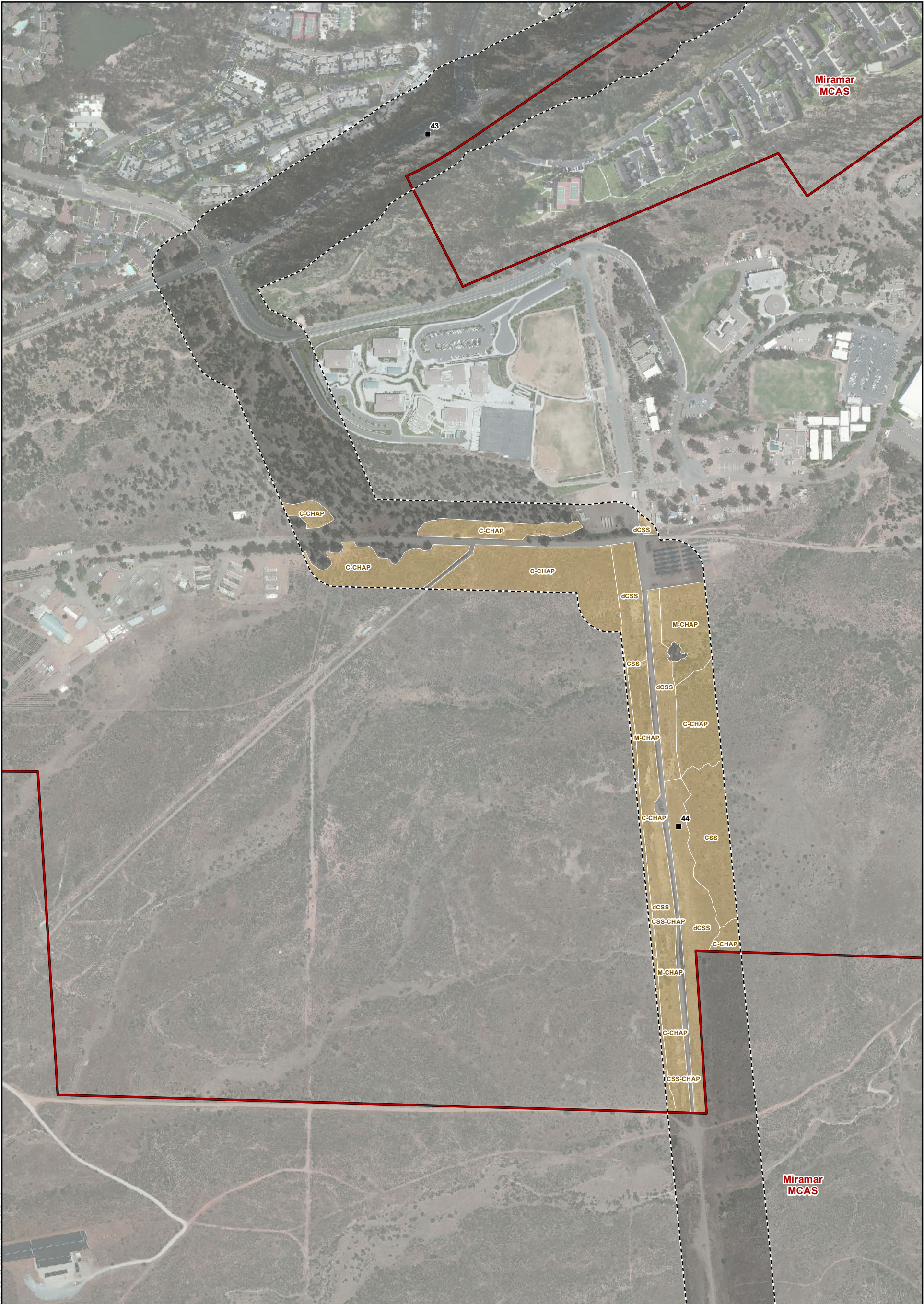


Figure 2: 2015 CAGN Survey Area and Sightings Map 31 of 32 Pipeline Safety & Reliability Project

- Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**

C-CHAP - Chamise Chaparral

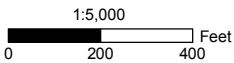
CSS - Diegan Coastal Sage Scrub

CSS-CHAP - Coastal Sage-Chaparral Transition

M-CHAP - Southern Mixed Chaparral

dCSS - Diegan Coastal Sage Scrub (disturbed)

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys





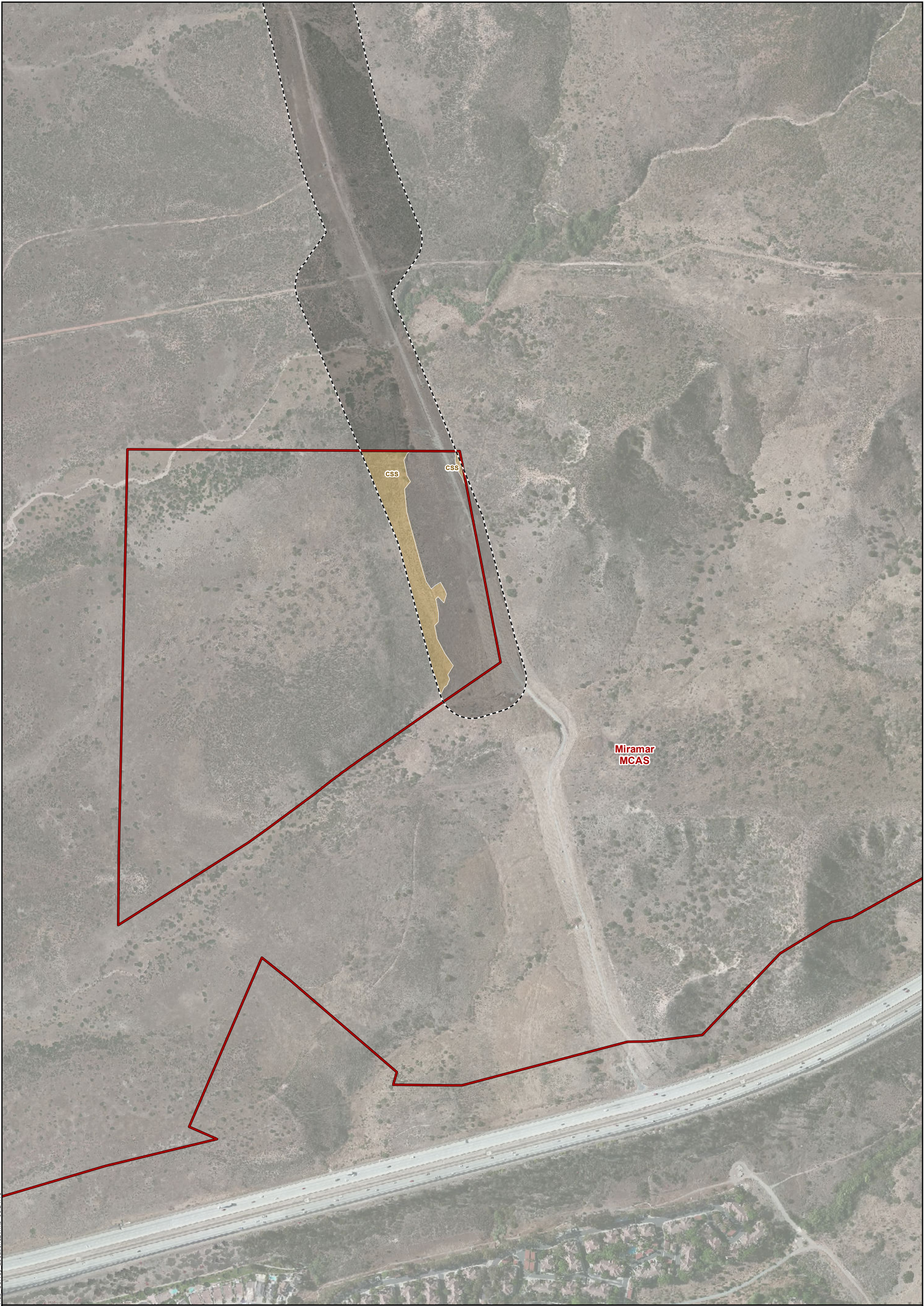


Figure 2: 2015 CAGN Survey Area and Sightings Map 32 of 32

Pipeline Safety & Reliability Project

■ Milepost

■ MCAS Miramar

--- Biological Resource Survey Area

■ CAGN Survey Area

■ Excluded from CAGN Survey Area

● CAGN individual

● CAGN pair

■ USFWS designated CAGN critical habitat

**CAGN Suitable Vegetation Code**  
C-CHAP - Chamise Chaparral  
CSS - Diegan Coastal Sage Scrub  
CSS-CHAP - Coastal Sage-Chaparral Transition  
CSS-O - Diegan Coastal Sage Scrub (open)  
M-CHAP - Southern Mixed Chaparral

**dCSS - Diegan Coastal Sage Scrub (disturbed)**

- Please note survey route not shown due to large map scale, meandering transects were walked within suitable habitat during protocol surveys

SoCalGas

SDGE

INSGNIA



**Attachment A. Bird Species Observed During Coastal California Gnatcatcher Protocol Surveys at  
the Pipeline Safety & Reliability Project, San Diego County, California**

Common Name	Scientific Name	Status
acorn woodpecker	<i>Melanerpes formicivorus</i>	
American crow	<i>Corvus brachyrhynchos</i>	
Anna's hummingbird	<i>Calypte anna</i>	
ash-throated flycatcher	<i>Myiarchus cinerascens</i>	
Bewick's wren	<i>Thryomanes bewickii</i>	
black phoebe	<i>Sayornis nigricans</i>	
black-crowned night heron	<i>Nycticorax nycticorax</i>	
black-headed grosbeak	<i>Pheucticus melanocephalus</i>	
blue-gray gnatcatcher	<i>Polioptila caerulea</i>	
blue grosbeak	<i>Passerina caerulea</i>	
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	
brown-headed cowbird*	<i>Molothrus ater</i>	
Bullock's oriole	<i>Icterus bullockii</i>	
bushtit	<i>Psaltiriparus minimus</i>	
California gnatcatcher	<i>Polioptila californica</i>	FT
California quail	<i>Callipepla californica</i>	
California towhee	<i>Melospiza crissalis</i>	
California thrasher	<i>Toxostoma redivivum</i>	
Cassin's kingbird	<i>Tyrannus vociferans</i>	
cedar waxwing	<i>Bombicilla cedrorum</i>	
cliff swallow	<i>Petrochelidon pyrrhonota</i>	
common raven	<i>Corvus corax</i>	
common yellowthroat	<i>Geothlypis trichas</i>	
Cooper's hawk	<i>Accipiter cooperii</i>	
Costa's hummingbird	<i>Calypte costae</i>	
Eurasian collared-dove*	<i>Streptopelia decaocto</i>	
European starling*	<i>Sturnus vulgaris</i>	
grasshopper sparrow	<i>Ammodramus savannarum</i>	
great egret	<i>Ardea alba</i>	
hooded oriole	<i>Icterus cucullatus</i>	
horned lark	<i>Eremophila alpestris</i>	
house finch	<i>Carpodacus mexicanus</i>	
house sparrow*	<i>Passer domesticus</i>	
house wren	<i>Troglodytes aedon</i>	
killdeer	<i>Charadrius vociferus</i>	
lark sparrow	<i>Chondestes grammacus</i>	



least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, SE
lesser goldfinch	<i>Spinus psaltria</i>	
mallard	<i>Anas platyrhynchos</i>	
mourning dove	<i>Zenaida macroura</i>	
northern flicker	<i>Colaptes auratus</i>	
northern mockingbird	<i>Mimus polyglottos</i>	
northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	
Nuttall's woodpecker	<i>Picoides nuttallii</i>	
orange-crowned warbler	<i>Oreothlypis celata</i>	
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	
phainopepla	<i>Phainopepla nitens</i>	
red-shouldered hawk	<i>Buteo lineatus</i>	
red-tailed hawk	<i>Buteo jamaicensis</i>	
red-winged blackbird	<i>Agelaius phoeniceus</i>	
rock pigeon*	<i>Columba livia</i>	
rufous-crowned sparrow	<i>Aimophila ruficeps</i>	
(Bell's) sage sparrow	<i>Amphispiza belli</i>	
Say's phoebe	<i>Sayornis saya</i>	
scaly-breasted munia (formerly nutmeg manikin)*	<i>Lonchura punctulata</i>	
song sparrow	<i>Melospiza melodia</i>	
spotted towhee	<i>Pipilo maculatus</i>	
turkey vulture	<i>Cathartes aura</i>	
violet-green swallow	<i>Tachycineta thalassina</i>	
warbling vireo	<i>Vireo gilvus</i>	
western bluebird	<i>Sialia mexicana</i>	
western kingbird	<i>Tyrannus verticalis</i>	
western meadowlark	<i>Sturnella neglecta</i>	
western scrub-jay	<i>Aphelocoma californica</i>	
western tanager	<i>Piranga ludoviciana</i>	
white-throated swift	<i>Aeronautes saxatalis</i>	
Wilson's warbler	<i>Cardellina pusilla</i>	
wrentit	<i>Chamaea fasciata</i>	
yellow warbler	<i>Setophaga petechia</i>	SSC
yellow-breasted chat	<i>Icteria virens</i>	SSC
FE: Listed as Endangered by USFWS FT: Listed as Threatened by USFWS SE: Listed as Endangered by California Department of Fish and Wildlife SSC: California Department of Fish and Wildlife Species of Special Concern *Introduced Species		



**Attachment B:**

**All Surveyor Field Notes**







General Habitat Description:

COASTAL SAGE SCRUBS



Project Name: #A 3602

Surveyor Name: GARRETT HUFFMAN

Date: 4/14/15

Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	60°	100	Ø
End	1200	76°	Ø	2-5

Wildlife Species Observed:

AVIAN SPECIES: GUST, BUSH, SOSE,  
EUCO, WEST, SATO, CATO, WTSU,  
NRSW, BEWR, UGO, COBA, HOF,  
HOWR, WREN, KIL, RTRA, ANTH.

SIDE-BUSTED LIZARD

CAGN observations and notes:

NO CAGN OBSERVED DURING  
SURVEYS IN ALL SUITABLE  
CSS HABITAT LOCATED ON  
MAR STEGS #1-6.  
METHODOLOGY IMPLEMENTED  
FROM SURVEY PROTOCOL  
SUGGESTIONS.



General Habitat Description:

CSS, rCSS, CLOW-0



Project Name: 3602 CAGN surveys

Surveyor Name: Shannon Walsh

Date: 4/16/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	43°	0%	0-2
End	1200	75°	0%	0-1

CAGN observations and notes:

At the north east corner of Canoita Dr. & old hwy 395, while playing the call a <sup>male</sup> CAGN flew in close. I displayed by bending forward & fluttering his wings. About 5 min. later we began to call

Wildlife Species Observed:

MOD0, CALT, BUSH, SOSD, NEWS,  
LEG0, NUW0, RCSP, RTHA, CORA,  
ANTIV, SPT0, AMUR, WEBU, CAGN  
WREN, BEWR, WSGA, ACW0, TVUV  
COYE, CAKI, CAGN



General Habitat Description:

CSS, RCSS, CLOW-0



Project Name: 3002 CAGN surveys

Surveyor Name: Shannon walsh

Date: 4/17/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	45°	0%	1-4
End	1040	73°	0%	0-1

CAGN observations and notes:

In the small triangle habitat patch north of Dulin Rd I observed one male CAGN moving about in the buckwheat. He did not respond vocally to call playback but popped up briefly.

Wildlife Species Observed:

CALT, AMCR, LEGO, BEWR, SOSP, BLPH, HOFI, WREN, CAKI, NOMO, ANHU, COYE, SPTO, WODO, QTHA, WSJA, BUSH, EUST, NEWS, CAGN



General Habitat Description:

CSS, rcss, cLOW-O



Project Name: 3602 CAGN surveys

Surveyor Name: Shannon Walsh

Date: 4/18/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	55°	0%	0-3
End	1200	77°	0%	0-1

CAGN observations and notes:

In habitat 518 both male & female CAGN flew in very close in response to the tape. Both responded vocally and moved about in the adjacent sage checking out the area. After several minutes, both moved back south, and male scolded several times. As I continued south, I encountered the pair again. The male was constantly calling and carrying a large unknown food item. Male + female both seemed tied to several bushes in the area. Point in collection is at possible nest location.

Wildlife Species Observed:

RWBL, NRWS, TVUV, CALT, SPFO, BEWR, ~~THOR~~ THOR, NOMO, LEGO, SOSP, AMCE, WEST, CORA, WREN, CAKI, HOFI, CATH, CAGN, BUSH, CAGU, ANHU, RTHA, MALL, EUST, WEBL, MODO, NUWO, WTSW



General Habitat Description:

CSS, RCSS, CLOW-O



Project Name: 3602 CAGN surveys

Surveyor Name: Shannon Welsh

Date: 4/19/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	54°	0%	0-2
End	0830	60°	0%	0-1

CAGN observations and notes:

NO CAGN detected

Wildlife Species Observed:

MODO, BEWR, WSJA, CALT, HOFI,  
LEGO, AMUR, BUSH, SPTD, WEBL,  
SOSP, CAKI, EUST, COHA, CORA,  
WREN, LATH, BGGN, RWBL,  
RTHA, ANHV



General Habitat Description:

CSS, mixed chap, ornamental, clow



Project Name: 3602 CAGN

Surveyor Name: B. Lohstved

Date: 4/23/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	610	55	100	0-1
End	1145	57	100	3-5

CAGN observations and notes:

No CAGN observed. surveyed map sheet 28 (lower 2/3) → 34.  
Some areas indicated on maps as survey polys for CAGN not suitable habitat.

Wildlife Species Observed:

CALT	BFWR	SOSP	<u>mammals</u>
HTOFI	CEWA	AMGR	SYAU
LEGO	WREN		SPBE
AWND	RSHA		
HOOR	ACWD		
RTHA	NOFL		
BUSH	ATFL		
HOWR	BGAW		
ANHU	WTSW		
<del>BHCO</del>	<del>map 28</del>		
CORA	NRWS		
MOJO	WIWA		
SCJA	EUST		
NOMO	GRPO		



General Habitat Description:

DISTURBED CSS, COASTAL SALIC-CHAPARRAL SCRUBS



Project Name: 3602 CAGN

Surveyor Name: MELANIE DICUS

Date: 04-23-2015 Survey # 1

CAGN observations and notes:

NO CAGN OBSERVED

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	59	100	0-2
End	1200	66	100	0-1

Wildlife Species Observed:	
BENICK'S WREN	COMMON TAIL
CALIFORNIA TOWHEE	CALIFORNIA-QUAIL
HOUSE FINCH	COOPER'S HAWK
WRENTIT	BLACK-HEADED Grosbeak
LESSER GOLDFINCH	RUFOUS-CROWNED SPARROW
MOURNING DOVE	COSTA'S HUMMINGBIRD
WILSON'S WARBLER	CASSIN'S HUMMINGBIRD
AMERICAN CROW	WESTERN SCRUB-JAY
AINA'S HUMMINGBIRD	CALIFORNIA-THRASHER
BLUE-GRAY Gnatcatcher	COMMON RAVEN
SPOTTED TOWHEE	SONG SPARROW
BUSHTIT	WESTERN KINGBIRD
RED-TAILED HAWK	YELLOW WARBLER
HOUSE WREN	WESTERN BLUEBIRD
WESTERN Tanager	EUROPEAN STARLING
	BLUE LOCK'S ORIOLE



General Habitat Description: Coastal Sage Scrub  
 Adolphia-dominated CSS, low, ornamental



Project Name: 3602 CAGN

Surveyor Name: B. Lohstroff

Date: 4/24/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0610	57	100	0-1
End	1130	57	100	1-5

CAGN observations and notes: occasional light rain.

- male CAGN responded to recorded vocalization (RV), ♀ not observed. male not very vocal after initial detection, observed foraging. (Hillside @ Casa Arroyo) Poly ~~1190~~ 1190
- male CAGN in large habitat patch south of Ted Williams Pkwy + Pomarado Rd. ♀ not observed, male using CSS up hill and along edge of habitat Poly 1198.
- juvenile CAGN observed @ north end of Poly 1198. Making atypical, higher-pitched call in response to RV. fully-feathered and did not associate directly with nearby male.

Wildlife Species Observed:

HOWR	CDRA	NRWS
YWAR	SAPH	KILL
BLGR	BLPH	EUST
BUSH	MODO	LEGO
BHCO (map35)	GREG	SPTD
HOPI	CALT	SCJA
SOSP	BCNH	CAGN (3)
YBCH	NUMA	ATFL
ANTH	MALL	COHA (pair)
RTHA	AMGR	
DCWA	HOOR	
BHGR	WINA	
	BEWR	

Mammals  
 SYAN



General Habitat Description:

CSS, rcss, CLOW-O



Project Name: 3602 CAGN SURVEYS

Surveyor Name: Shannon Walsh

Date: 4/25/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	53°	100%	0-2
End	1130	63°	100%	2-5

CAGN observations and notes:

NO CAGN observed

Map pages 1-6

Wildlife Species Observed:

MODO, HOFI, SPTD, RTHA, CORA,  
<sup>HOOB</sup>  
~~HOOB~~, HDSP, WEBL, WSJA, SOSP,  
 EUST, ANHU, LEGO, AMUR, NOME,  
 UALT, COHA, BUSH, RSHA, WTSW,  
 NRWS, TUVU, MAU



General Habitat Description:

CASUAL SAGE SUEWG  
CHAMISE CHAPARRAL

CAGN observations and notes:

NO VOCALIZATIONS OR  
OBSERVATIONS OF CAGN  
DURING PASSIVE SURVEY &  
PHYSICAL TRANSECT METHODOLOGY

MAP 49 + 53.



Project Name: 3002 - MILANAO

Surveyor Name: CAROL HUGHMAN, SHAWSON WASH

Date: 4/26/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0900	60	50	0-2
End	1130	76	30	1-3

Wildlife Species Observed:

AVIAN SPECIES: WREME, GREESE, MODO,  
SAGS, CAXI, SPJO, HOLA, ANHU,  
LEGO, HOFI, BGLN, CATO, BUSH,  
WAA, WREN, CAGU

SIDE-BUSTED LIZARD  
MULE DEER



General Habitat Description: Open chamise chap  
w/occ. Eri. fac, Cneoridium dumosum



Project Name: 3602 CAGN

Surveyor Name: B. Lokstodt

Date: 4/29/15 Survey # 1

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0820	70	0	0-1
End	1000	82	0	0-3

CAGN observations and notes:

no CAGN observed  
surveyed Elliot Reserve Area only

Wildlife Species Observed:

ATFL	LASP
HOFI	SAGS (Bells)
NUND	CALT
LEGO	WREN
MOPO	HOCK
ANHU	CORA
CAKI	SPTO
BUSH	EUST
SAPH	WIWA
BEGU	
BEWR	
HOWR	



General Habitat Description:

CSS, r-css, COW-O



Project Name: 3602 CAGN

Surveyor Name: Shannon Walsh

Date: 5/11/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	68°	10%	0-2
End	1020	81°	20%	0-2

CAGN observations and notes:

0725 heard one CAGN calling distantly  
location noted in collector  
heard from a point where a  
male CAGN was observed on  
Survey 1

Wildlife Species Observed:

RCSP	ANHU	side blotched lizard
CALT	CAGN	western fence lizard
MODS	NUWO	Aucobon's cottontail
CAM	ATFL	CA ground squirrel
NOMD	RTHA	
HOFI	ACWO	
CDPA	PHAI	
SPTD	SOSP	
LEGO	COYE	
PSHA	WSJA	
WTSW		



General Habitat Description:

CSS, rCSS, CLOW-O, CSS(burned), CLOW (burned)



Project Name: 3602 CAGN SURVEYS

Surveyor Name: Shannon Walsh

Date: 5/3/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0615	61°	100%	0-1
End	1115	70°	40%	1-3

CAGN observations and notes:

- 0655 observed one male CAGN moving around silently in the lowbush, re-veg off the side of the road where one CAGN was observed on survey 1.
- 0943 male CAGN flew in in response to call playback. Began calling & hopping around in the sage picking his tail.
- Male flew in to playback. called then perched on a baccharis. Shortly after, female flew in. Both foraging silently.
- 1023 heard CAGN calling near where a pair was seen on survey 1. Observed male & female & at least one fledgling. male & female both calling, fledgling was begging. a male was bringing it food.

Wildlife Species Observed:

SPTO	BUSH	LEGO	PHAI
CALT	ANHU	WIWA	HOFI
NEWS	BEWK	CEWA	GRRO
CLSW	CAGN	ROSP	
YEWA	ATFL	MODO	
SOSP	NOMO	NUTM	scatzy-
COYE	ROPI	munia	lovestee
WREN	ATHA	CATH	(SBMU)
WBJA	BHGR	CORA	



General Habitat Description:

COASTAL SAGE SCRUB



ROCKS  
BIOLOGICAL CONSULTING

Project Name: 3602

Surveyor Name: Garrett Huffman

Date: 5/3/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1130	74	40	3-7
End	1200	75	30	3-6

Wildlife Species Observed:

AVIAN SPECIES: CWSW, WENC,  
BUSH, MODO, GEX, RUSP, WENO,  
CORA

CAGN observations and notes:

NO CAGN DETECTED DURING  
SURVEY. METHODOLOGY  
INCURRED PHYSICAL &  
PASSIVE TRANSECTS  
UTILIZING PLAYBACK &  
THE AID OF BINOCULARS.



General Habitat Description:

CSS, VCSS, CLOW-D



Project Name: ~~3602~~ 3602 CAGN surveys

Surveyor Name: Shannon Walsh

Date: 5/4/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	1015	62°	100%	0-2
End	1200	75°	80%	1-3

CAGN observations and notes:

NO CAGN detected

Wildlife Species Observed:

LEGO	SOSP	CAL
BUSH	SPTD	HOP
CALT	RTHA	
ATPL	WSJA	
RSHA	BENR	Whiptail
ACWO	HDWR	SKNK
AMCR	EUST	
MODD	KILL	



General Habitat Description:

CASUAL STAGE SCRUB  
RIPARIAN SCRUB



ROCKS  
BIOLOGICAL CONSULTING

Project Name: 3602

Surveyor Name: GARETT HUFMAN

Date: 5/4/15 Survey #: 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	61	100	1-4
End	1200	75	80	1-3

CAGN observations and notes:

NO CAGN OBSERVED OR  
DETECTING DURING SURVEYS.  
SURVEY METHOD DO NOT  
INCLUDE ~~ACTIVE~~ PHYSICAL  
PASSIVE SURVEYING WITH THE  
AID OF PLAYBACK & BROADCASTS

Wildlife Species Observed:

AVIAN SPECIES:  
HOFI, EUSI, GECO, TUNN, RSLIA,  
RTHA, RBOO, WEST, CATO, SOTO,  
HOWE, BEUR, BUST, BHEA, YUAR,  
KILL, MODO, COAT, AMUR, ATFL,  
PHA, SOSE, ACWD,  
CA GABARD SQUAW



General Habitat Description:

CSS, rCSS, cLOW-6



Project Name: 3602 CAGN

Surveyor Name: Shannon Walsh-Barrett Hoffman

Date: 5/5/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	68°	100%	0-3
End	1206	66°	80%	1-4

CAGN observations and notes:

NO CAGN detected.

Wildlife Species Observed:

California Kingsnake

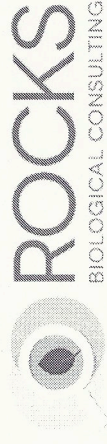
SPTO	WSJA	HOOR	CLSW
LEGO	CALT	CORA	VGSW
NUWO	AMCR	RSHA	WEKI
BUSH	NO MO	ATHA	ACWD
BLGR	HOP1	COYE	GREG
MODO	ANHU	SOSP	HOWR
WREN	MALL	BHCO	BHGR
NRWS	RCSP		NOFL
BAGN	PSFL		

CA ground Squirrel



General Habitat Description:

CSS, rCSS, ornamental, chapparral



Project Name: 3602 CAGN

Surveyor Name: Shannon Walsh

Date: 5/17/15 Survey # 2

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	64°	100%	0-1
End	1145	65°	90%	3-6

CAGN observations and notes:

- ① male CAGN flew into call playback and started calling.
- ② male flew into playback. likely same indiv, as observed. #1
- ③ one individual called and scolded in response to playback. outside survey area but adjacent to suitable habitat in survey area.

Wildlife Species Observed:

ANHU	SPTD	Audobon's
MDDO	BUSH	cottontail
LEGO	NOMO	
WSTA	COPA	coyote
AMCR	HOFI	
RTHA	CAGN	CA ground squirrel
HOLA	WEBL	
BGIN	NUNO	
CAGU	WREN	
BEWR	BSHA	
CARI	WINA	
CAT		



General Habitat Description:

CSS, rCSS, CLOW-O, NNG, ~~CAAG~~



Project Name: 3602 CAGN

Surveyor Name: Shannon Walsh

Date: 5/13/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	56°	100%	0-2
End	1200	80°	60%	1-3

CAGN observations and notes:

① observed both male and female, CAGN male calling

Wildlife Species Observed:

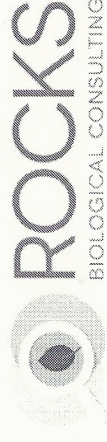
ANHU WEST  
 WTSW RTHA  
 LEGO NOMO  
 CALJ TUVU  
 SPJO WEBL  
 MODO RCSP  
 BEWR HOOR  
 NRWS CAGN  
 HOFI ECDO  
 SOS AGWO  
 CAKI BUSH  
 PHAI NUWO

Audobon's Cottontail  
 CA ground squirrel



General Habitat Description:

Chaparral, CSS, rCSS, crow-D



Project Name: 3602 CAGN

Surveyor Name: Shannon walsh

Date: 5/17/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0610	59°	100%	1-5
End	1200	70°	5%	0-2

CAGN observations and notes:

① male flew in to call playback perched briefly on CA sagebrush & flew around the area. Flew south & started calling. Further south I heard a second CAGN calling other than the male, this 2nd individual was not observed.

Wildlife Species Observed:

CAQU	WREN	BGGN	ACWO
CALT	CAKI	BUSH	RTHA
SPTO	HOFI	AMCR	MALL
HOLA	WEME	BLPH	RSHA
CATH	GRSP	COHA	
EUST	MODO	NOMO	
BEUR	NUWO	WEST	
SOSP	LEGO	CLSW	
CORA	ANHU		
RCS P			



General Habitat Description:

COASTAL SAVANNA  
RIPARIAN SCRUB

CAGN observations and notes:

ONE FAMILY UNIT OBSERVED.  
A PAIR OBSERVED FEEDING  
TWO FLEDGLINGS.



ROCKS  
BIOLOGICAL CONSULTING

Project Name: 3602

Surveyor Name: CARROLL HURMAN

Date: 5/17/15 Survey # 3 11-14

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	60	100	1-3
End	1200	70	20	2-5

Wildlife Species Observed:

AUSTRALIAN SPECIES: HOFI, CATO, BUSH, NUNO,  
BHCO, CLSW, NRWS, SPTO, CARI, RUSP,  
MORU, EUCO, RTHA, RSHA, THUM, BEUR,  
ITOUR, COYE, OLWA, YELWA, ANHU, PHAI,  
BHGR, CAGN, JOSP, WEST,  
CA Ground SQUIRREL  
SIDE BOUTHERN LIZARD



General Habitat Description:

CSS, RIMMIAN SLAND



ROCKS  
BIOLOGICAL CONSULTING

Project Name: 3602 17-22

Surveyor Name: GARRETT HURMAN

Date: 5/24/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	57	100	1-4
End	1200	66	100	2-4

CAGN observations and notes:

OBSERVED 4 JUVENILES FORAGING, AND REPRODUCING CALLING, WITHIN CLOSE PROXIMITY OF EACH OTHER.

DETECTED PAIR NESTING. CURRENTLY INCUBATING WITH 3 EGGS.

Wildlife Species Observed:

AVIAN SPECIES: NOMO, HOE, HOWE, CATO, BHAI, LEO, BUSH, CATH, SOTO, COAT, WREN, CUSU, MODO, WESS, ANTA, SOP, EUUD, CABO, BUSH, RUS, BEWR, HOOR, ESTH, BATH, PSFL, BRBL, CA GRUND SQUERL



General Habitat Description:

CSS



Project Name: 31002

Surveyor Name: Cassin Hufman

Date: 5/25/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0600	55	100	1-3
End	1200	66	100	3-5

Wildlife Species Observed:

AVIAN SPECIES: RSNA, CATO, BUSH,  
SOSE, CLSW, RTHA, VEGO, HOWE,  
WEST, WINT, CORA, BEWE, HOOR,  
BAGG, SATO, ACUD, NORM, BHCO,  
HOPI, OCWA, MODO, ANHU

SIDE - BLUEISH LIZARD

CAGN observations and notes:

A COMBINATION OF  
PASSIVE SURVEYING &  
PHYSICAL TRANSECTS WITH  
THE AID OF BINOCULARS  
& PUPYPACK WAS UTILIZED.  
NO CAGN OBSERVED.



General Habitat Description:

DCSS, CLOW-O, disturbed/re-veg DCSS

CAGN observations and notes:

NO CAGN detected



Project Name: 3602 CAGN

Surveyor Name: Shannon Walsh

Date: 6/1/15 Survey # 3

	Time	Temp (°F)	Cloud Cover (%)	Wind Speed (avg. mph)
Start	0545	62°	100%	0-1
End	1200	75°	20%	2-4

Wildlife Species Observed:

HOFI	ROPI	NUWO	Audobon's cottontail
MALL	AMUR	SAPH	CA ground squirrel
BEUR	WREN	BLGR	Western fence lizard
SOSP	AMKE	YBCH	Granite spiny lizard
CAM	MODO	LBVI	Whiptail
COYG	BUSH	NRWS	
CALT	SPTD	COHA	
EUST	GHGR	YWAR	
WESJ	WEME	BLPH	
RTHA	HOOE	KILL	
NOMO	WTSW		
CLSW	<del>SCOB</del>		
LEGO	ANTH		