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November 7, 2006

Mr. Chris Dellith
Fish and Wildlife Biologist
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

RE: 45-day Summary Report of Focused Presence/Absence Surveys for the Coastal California Gnatcatcher (*Polioptila californica californica*) for the Golden Valley Road Bridge, Santa Clarita, Los Angeles County, California

Dear Mr. Dellith:

In compliance with the Special Terms and Conditions for Endangered and Threatened Wildlife Species Permit TE-820658-3, EDAW, Inc. (EDAW) is submitting this letter report summarizing the results of focused surveys for the federally listed threatened coastal California gnatcatcher (CAGN; *Polioptila californica californica*), on behalf of City of Santa Clarita (City) for the Golden Valley Road bridge project. The proposed project is located in Santa Clarita, approximately 35 miles northeast of Los Angeles (Figure 1). EDAW currently holds an Endangered and Threatened Species Permit issued by the U.S. Fish and Wildlife Service (USFWS) under Section 10(a) of the Federal Endangered Species Act. This permit, TE-820658, authorizes EDAW to conduct presence/absence surveys for the coastal California gnatcatcher, among other species. Any potential harassment or take of the CAGN resulting from the responsible application of survey methods following the approved USFWS protocol, such as using taped vocalizations, would be allowable under this permit.

Project Description

The City is proposing to construct the Golden Valley Road bridge, a 1,100-foot long bridge over the Santa Clara River. The proposed typical section of the bridge would include a six-lane roadway with a 14-foot median island and pedestrian and bicycle lanes. The total curb-to-curb width would be approximately 90 feet with a total right-of-way width of approximately 120 feet.

The bridge will connect Soledad Canyon Road and the newly extended Newhall Ranch Road. The northern terminus of the proposed project would therefore be the easternmost extent of Newhall Ranch Road, which is currently under construction to the northwest of the project site. Grading for the majority of Newhall Ranch Road is complete and construction is anticipated to be completed between October 2007 and April 2008. The southern terminus of the proposed project would lie at the northernmost extent of the Golden Valley Road/Soledad Canyon Ranch Interchange, which was recently completed and was opened for public access in late 2005.

The proposed Golden Valley Road Bridge Project would result in impacts to biological resources within a 4.48-acre area of effect (Figure 2). Potential impacts to CAGNs were analyzed as part of a Natural Environmental Study Report within a biological study area, characterized by the limits of the proposed project footprint (area of effect) plus a 500-foot survey buffer on each side of the centerline (Figure 2).

Site Description

The biological study area encompasses a marine terrace on the north side of the Santa Clara River and the river bed where the proposed extension of Newhall Ranch Road will cross the river. The river bed supports a seasonal stream during and immediately after storm events. The study area is surrounded by Riversidian coastal sage

Mr. Chris Dellith
Ventura Fish and Wildlife Office
November 7, 2006
Page 2

scrub and hollyleaf scrub to the north, waters of the U.S. to the east and west, and ruderal and developed areas to the south. The biological study area is largely nonwetland waters of the U.S. (33%), southern riparian scrub (27%), and ruderal (25%), with smaller areas of Riversidian coastal sage scrub (8%), hollyleaf scrub (4%), big sagebrush scrub (2%), and disturbed habitat (2%) (Figure 3).

Background Information

The CAGN, a subspecies of the California gnatcatcher (*Poliophtila californica*), is a federally listed threatened species and is considered a California state species of special concern. The CAGN is a local and uncommon year-round resident of southern California. This species is declining proportionately with the continued loss of coastal sage scrub habitat in the six southern California counties (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside) located within the coastal plain.

The primary cause of this species' decline is the cumulative loss of coastal sage scrub vegetation to urban and agricultural development. Little of this species habitat is formally protected or managed. Initial studies suggest that the CAGN may be highly sensitive to the effects of habitat fragmentation and development activity (Atwood 1990; ERCE 1990). The USFWS has estimated that coastal sage scrub habitat has been reduced by 70 to 90 percent of its historical extent (USFWS 1991) and little of what remains is protected in natural open space.

CAGN generally inhabit Diegan coastal sage scrub and Riversidian coastal sage scrub dominated by California sagebrush and flat-topped buckwheat generally below 1,500 feet in elevation along the coastal slope. When nesting, this species typically avoids slopes greater than 25 percent with dense, tall vegetation. CAGN pairs will attempt several nests each year, each placed in a different location inside their breeding territory, but most nest attempts are unsuccessful due to depredation by a variety of species. Clutch size ranges from one to five eggs, with three to four eggs most common. CAGN will remain paired through the nonbreeding season and will generally expand their home range when not breeding.

The closest USFWS-designated critical habitat for the CAGN occurs approximately 0.5 mile to the northeast of the site. The closest known occurrence of the species is approximately 2.2 miles to the northeast of the project area in Plum Canyon (USFWS 2000).

Survey Methodology

Prior to 2006 focused CAGN surveys being conducted, the following surveys were completed by qualified EDAW biologists within the biological study area in 2002-2003 as part of the Cross Valley Connector East Project: vegetation mapping, rare plant, wetland delineation, general wildlife, protocol arroyo toad, and protocol CAGN surveys. Additionally, a general wildlife survey was completed during spring 2006 prior to conducting protocol CAGN surveys. All of these survey results mapped vegetation communities and determined areas of suitable CAGN habitat within and adjacent to the project area. Approximately 4.4 acres of habitat were considered suitable for CAGN within the survey area, none of which fell within the project footprint.

Focused, protocol-level CAGN surveys occurred between April 24 and July 7, 2006, within the survey area. To the extent feasible, these surveys followed the current USFWS survey protocol for the species, dated February 28, 1997 (and as amended July 28, 1997). The protocol calls for six surveys to be conducted because the area is not within an approved Natural Communities Conservation Planning (NCCP) program subarea, namely the Coastal Central NCCP area for Orange County. The sixth survey, while conducted after June 30th (the end of the CAGN breeding season), was still in adherence with the USFWS protocol as it was conducted within a calendar week of June 30th (on July 6th).

The survey activity consisted of walking meandering transects through marginal habitat for the species, including all scrub associations, as well as upland and wetland habitats adjacent to areas of scrub. EDAW wildlife biologists Lyndon Quon and Erin Riley conducted the surveys under the current Endangered Species Permit TE-820658-3. Mr. Quon and Ms. Riley conducted passive surveillance (i.e., listening and visually looking for the species) in all habitat with marginal potential to support CAGN. If an observation was not made after approximately 5 to 10 minutes of passive survey activity, a taped vocalization of the CAGN was played for approximately 5 to 10 seconds (i.e., active survey activity), followed by another period of passive observation.

Results

All protocol-level surveys were conducted on foot according to the schedule in Table 1 below. Weather conditions during the surveys were primarily warm, with temperatures ranging from 60 to 80 degrees Fahrenheit (°F) and winds typically ranging from 0 to 2 miles per hour. Details on the date, time, conditions, and surveyors are provided in Table 1, below, and in Appendix A (Field Notes).

**Table 1
 Coastal California Gnatcatcher Focused Protocol Surveys
 Dates, Personnel, Weather Conditions, and Observations**

Date	Time	Weather Conditions	Field Biologist	CAGN Observations
4/24/2006	1045-1145	Start: 62°F, wind moderate, 10% cover End: 66°F, wind moderate, 10% cover	Erin Riley ¹ , Mason Ryan	No CAGN observed
5/4/2006	0925-1015	Start: 59°F, wind moderate, 15% cover End: 71°F, wind calm, 35% cover	Erin Riley ¹ , Mason Ryan	No CAGN observed
5/17/2006	0610-0700	Start: 62°F, wind calm, 100% cover, fog End: 60°F, wind calm, 100% cover, fog	Erin Riley ¹ , Barbra Calantas	No CAGN observed
5/30/2006	0710-0750	Start: 68°F, wind calm, 0% cover End: 68°F, wind calm, 0% cover	Erin Riley ¹ , Mason Ryan,	No CAGN observed
6/7/2006	0610-0640	Start: 66°F, wind calm, 100% cover End: 66°F, wind calm, 100% cover, mist	Lyndon Quon ¹ , Barbra Calantas	No CAGN observed
7/6/2006	0615-0645	Start: 69°F, wind calm, 0% cover End: 82°F, wind calm, 0% cover	Lyndon Quon ¹ , Oren Mizrahi	No CAGN observed

¹ Permitted biologist (TE-820658-3).

A list of all wildlife species observed or detected during 2006 biological surveys conducted by EDAW is included as Appendix B.

No CAGNs were observed during the focused, protocol-level presence/absence surveys within the original survey area. Five state species of special concern, western spadefoot toad (*Spea hammondi*), Cooper’s hawk (*Accipiter cooperii*), yellow-breasted chat (*Icteria virens*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and white-tailed kite (*Elanus leucurus*) were detected within the biological study area during 2006 surveys (Figure 4; Appendix B). The western spadefoot toad and rufous-crowned sparrow were confirmed to be breeding within the biological study area.

Discussion

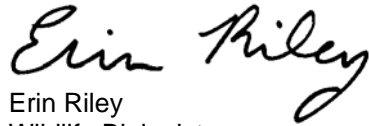
Although moderately suitable habitat for the CAGN is present within the biological study area, protocol surveys conducted in 2003 and 2006 confirmed the current absence of this species onsite. Based on the habitat characteristics present within the scrub communities of the biological study area, the connection of the project site to larger intact high-quality CAGN occupied habitat to the north, and the historical regional data of known CAGN

Mr. Chris Dellith
Ventura Fish and Wildlife Office
November 7, 2006
Page 4

occurrences within 2.2 miles, there is a moderate potential for the CAGN to breed onsite. The biological study area is moderately suitable for CAGN but currently unoccupied by the species.

If you have any questions or comments regarding this letter report, please contact me at the address above, or call me at (619) 233-1454.

Sincerely,



Erin Riley
Wildlife Biologist

Attachments: Figure 1 – Regional Location Map
Figure 2 – Biological Study Area
Figure 3 – Vegetation Communities
Figure 4 – Sensitive Species
Appendix A – Field Notes
Appendix B – Wildlife Species Observed during 2006 Focused Coastal California Gnatcatcher Surveys

02080053 Golden Valley 45-Day CAGN Rpt Nov 2006

Mr. Chris Dellith
Ventura Fish and Wildlife Office
November 7, 2006
Page 5

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Atwood, J.L.

1990 Status review of the California gnatcatcher (*Polioptila californica*). Manomet Bird Observatory, Manomet, Massachusetts. 79 pp.

ERC Environmental and Energy Services Co. (ERCE)

1990 Phase 1 report Amber Ridge California gnatcatcher study. Prepared for Weingarten, Siegel, Fletcher Group, Inc. April. 30 pp.

U.S. Fish and Wildlife Service (USFWS)

1991 Summary of the proposed rule to list the coastal California gnatcatcher (*Polioptila californica*) as endangered in California and Baja, Mexico. September. 114 pp.

2000 Endangered and Threatened Wildlife and Plants; Proposed Determination of Critical Habitat for the Coastal California Gnatcatcher; Proposed Rule. Federal Register 50 CFR Part 17, Vol. 65, No. 25. February 7.

APPENDIX A

FIELD NOTES

FIELD JOURNAL

Job Name Cross Valley / Golden Valley Rd Bridge Job # _____
 Observer EMR Add'l Persons MR
 Date 04-24-06 Start Time 1010pm End Time _____
 Location Santa Clarita River

Habitat Description disturbed, river wash, upland - sage scrub, tamarisk

Purpose of Visit ADG + CAGN Surveys (#1)

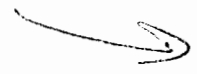
Start Weather: Temp 56.6°F Wind Sp/Dir From 0-2mph %Clds 30 Pcp Ø

Describe Surrounding Land Uses and Discuss Wildlife Movement Corridors and Habitat Linkages.

Night

Obs. No.	Time	Notes
		Night Survey
		Pac. Chorus Frogs
		KILL
		West. Toads - eggs (many)
		↳ breeding adults, not calling
		End 1055 52.2°F, Ø clds, 0-2mph
		Day Survey 04.25-06
		Start 1015 - 1030 10% clds, 0-4mph, Ø pcp.
		gusts to 12mph
		62.3°F
		✓ coyote scat
		✓ ATFL ✓ WAVZ
		✓ MODO ✓ LEGO
		CA grand squirrel ✓ RCSP
		✓ HOPI ✓ cottontail
		HOPI Cabbage white
		✓ YBCH dragonflies
		✓ west. fence lizard ✓ VASW
		✓ AMCR
		✓ CAQU
		✓ RTHA
		✓ LEGO
		✓ HOWR
		✓ west. whiptail
		✓ BUSH
		✓ BAOW
		✓ NAWA
		✓ WTKI
		✓ WESTJ
		✓ WTSW
		✓ WETA

Current Weather: Temp _____ Wind Sp/Dir From _____ %Clds _____ Pcp _____



CAGN Survey Start 1045-1145am 4/25/06

species observed: same as ARTO species on Pg. 1.

tape played: 1050
1100
1105
1120
1135 } no response

CAGN-suitable habitat species: Sage sp.
erigonum
sambucus
lotus
lupine
mustard
Chamise
goldfields
scrub oaks
prickly pear
popcorn flower
blue dicks
artem. californica

End 11:45

66°F, 0-4mph, 10% clds

FIELD JOURNAL

Job Name Cross Valley / Golden Valley Rd Bridge Job # _____
 Observer EMR Add'l Persons MR
 Date 05-04-06 Start Time 1030 End Time 1100
 Location Santa Clarita River + associated slopes
 Habitat Description disturbed, river wash, upland sage scrub + amaranisk
 Purpose of Visit ARTO + CAGN Surveys (#2)
 Start Weather: Temp 57.2°F Wind Sp/Dir From 0-2 mph %Clds 70 Pcp 0
 Describe Surrounding Land Uses and Discuss Wildlife Movement Corridors and Habitat Linkages.

Obs. No.	Time	Notes
		Night Survey - ARTO
		- Western Spadefoot heard calling upon approach
		- Pacific chorus frogs calling
		- Western toad tadpoles (many)
		✓ Killdeer
		CA ground squirrel
		Day Survey - ARTO 05-05-05
		59.1°F, 0-4 mph, 15% clds, 0 pcp 0900 - 0920
		✓ HOFI ✓ SPTO
		WESP EUSP House Sparrow ✓ NOMO
		✓ CA ground squirrel ✓ WCSP
		✓ WETA ✓ SOSF
		✓ west. toad tadpoles ✓ CALT
		✓ BLPH ✓ BEWR
		✓ ATFL ✓ Coyote scat
		✓ WEST ✓ COHA
		✓ CORA ✓ RCSP
		✓ LEGO ✓ MOGO
		✓ BUSH ✓ WREN
		✓ COHU ✓ WEKI
		✓ CLSW ✓ cottontail
		SASP Sage cabbage white
		LABU Lazuli
		✓ HOWR
		✓ CAQU

(Night End cond's) Current Weather: Temp 56.4°F Wind Sp/Dir From 0-2 mph %Clds 80 Pcp 0

CAGN Survey
Cross Valley

05-05-06
WLMR

0925 - 1015 End: 71.0°F, 0-2mph, 352 clds

Species observed: same as pg. 1 Day Survey

0925 played tape twice, no response

0935 " " " "

0950 " " " "

FIELD JOURNAL

Job Name Cross Valley / Golden Valley Rd Bridge Job # _____
 Observer EMR Add'l Persons BC
 Date 051706 Start Time _____ End Time _____
 Location Santa Clarita River Valley
 Habitat Description _____

Purpose of Visit ARTO/CAGN (#3)
 Start Weather: Temp _____ Wind Sp/Dir From _____ %Clds _____ Pcp _____

Describe Surrounding Land Uses and Discuss Wildlife Movement Corridors and Habitat Linkages.

Obs. No.	Time	Notes
		<u>Night - ARTO</u> 0950pm, 70% clds, 73.1°F, 0-3 mph
		crickets
		west toad observed (non-breeding male?) smaller adult, - 2nd west toad not calling observed
		far chorus frogs calling, very active
		<u>*MANY</u> → tadpoles of far chorus frogs west. spadefoot
		small snails
		some west. toad tadpoles observed
		KILL
		bloodworms
		End 10:40pm 0-3 mph, 60% clds, 74.1°F
		<u>Day - ARTO</u> 05-18-06 61.9°F, 100% clds / fog 0 prep, 0-2 mph 0540.
		✓ HOFI
		✓ NOMO
		✓ ATFL
		✓ MODO
		✓ BUSH
		✓ cottontail
		✓ KILL
		✓ CALT
		✓ AMCR
		✓ BEWR
		✓ SOSP
		✓ CA grand squirrel
		✓ RCSP, ♂ calling, ♀ observed
		✓ LEGO
		✓ ANHU
		✓ CAQU
		✓ RSHA
		✓ SPTD
		✓ BLPH
		✓ RODO
		✓ WEKI
		End 0610am

Current Weather: Temp _____ Wind Sp/Dir From _____ %Clds _____ Pcp _____

CAGN Survey

05/18/06

Start 0610 → End 0700

59.9°F, fog.
100% clds, 0-2m

- same species observed as ARTODay (Pg. 1)
- played tape: 0615 }
0630 } no response.
0645 }

FIELD JOURNAL

Job Name Cross Valley / Golden Valley Rd Bridge Job # _____
 Observer EMR Add'l Persons MR
 Date 053006 Start Time _____ End Time _____
 Location Santa Clarita River Valley
 Habitat Description river wash, tamarisk, upland -

Purpose of Visit ARTO + GAGN (#4)
 Start Weather: Temp 66.4°F Wind Sp/Dir From 0-2mph %Clds Pcp

Describe Surrounding Land Uses and Discuss Wildlife Movement Corridors and Habitat Linkages.

Obs. No.	Time	Notes
		<u>ARTO - Night - 10:00-5pm</u> <input checked="" type="checkbox"/> clds, 0-2mph, 66.4°F
		✓ KILL
		Pac. chorus frogs - calling
		West. toads - 6 adults observed
		- no tadpoles
		→ Appears site experienced heavy scouring since hard rain (~5/21/06)
		→ clean flow, less trash + debris, no blood worm, no tadpoles, channel patterns changed some places
		End 65°F, 0-2mph, <input checked="" type="checkbox"/> clds 10:45pm
		<u>ARTO - Day 5/31/06</u>
		0650 - 0710am <input checked="" type="checkbox"/> clds, 0-2mph, 61.7°F
		✓ WEST
		✓ AMGO
		✓ WEKE
		✓ CALT
		LABU LwM ^{li}
		✓ RCSP
		✓ AMCR
		✓ CLSW
		✓ HOFI
		✓ woodrat sp.
		✓ BUSH
		✓ NOMO ✓ CA gund sq l
		✓ CAQU dom. dog
		✓ BEWR ✓ cottontail
		✓ SOSP ✓ SPID
		✓ BHGB ✓ KILL
		✓ ANHU ✓ WREN

Current Weather: Temp _____ Wind Sp/Dir From _____ %Clds _____ Pcp _____

05/31/06 CAGN Survey

0710-0750 68.0°F, 0-2mph, Ø clds

- same species observed as ARTO Day (Pg. 1)
- mud pool @ top of slope in upland cntns
toad trks

- played tape 0715
0730
0745
0750 } no response

End Ø clds, 0-2mph, 0750, 68.0°F

APPENDIX B

WILDLIFE SPECIES OBSERVED DURING 2006 FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS

APPENDIX B

Wildlife Species Observed during 2006 Focused Coastal California Gnatcatcher Surveys for the Golden Valley Road Bridge Project

Scientific Names	Common Names
Amphibians	
Order Anura	Frogs and Toads
Family Pelobatidae	
<i>Spea hammondi</i>	western spadefoot ¹
Family Bufonidae	
<i>Anaxyrus (Bufo) borea</i>	western toad
Family Hylidae	
<i>Pseudacris regilla</i>	Pacific chorus frog
Reptiles	
Order Squamata	Lizards and Snakes
Family Phrysonomatidae	
<i>Cnemidophorus tigris</i>	western whiptail
Family Teiidae	
<i>Sceloporus occidentalis</i>	western fence lizard
Birds	
Order Galliformes	Megapodes, Curassows, Pheasants, Quail, and Relatives
Family Odontophoridae	
<i>Callipepla californica</i>	California quail
Order Falconiformes	Diurnal Birds of Prey
Family Accipitridae	
<i>Elanus leucurus</i>	white-tailed kite ²
<i>Accipiter cooperii</i>	Cooper's hawk ¹
<i>Buteo lineatus</i>	red-shouldered hawk
<i>Buteo jamaicensis</i>	red-tailed hawk
Order Charadriiformes	Shorebirds and Allies
Family Charadriidae	
<i>Charadrius vociferous</i>	killdeer
Order Columbiformes	Doves and Pigeons
Family Columbidae	
<i>Columba livia</i>	rock pigeon
<i>Zenaida macroura</i>	mourning dove
Order Strigiformes	Owls
Family Strigidae	
<i>Tyto alba</i>	barn owl
Order Apodiformes	Swifts and Hummingbirds
Family Apodidae	
<i>Chaetura vauxi</i>	Vaux's swift
<i>Aeronautes saxatalis</i>	white-throated swift
Family Trochilidae	
<i>Calypte anna</i>	Anna's hummingbird
<i>Calypte costae</i>	Costa's hummingbird
Order Passeriformes	Perching Birds
Family Tyrannidae	
<i>Sayornis nigricans</i>	black phoebe
<i>Myiarchus cinerascens</i>	ash-throated flycatcher
<i>Tyrannus verticalis</i>	western kingbird
Family Vireonidae	
<i>Vireo gilvus</i>	warbling vireo

Scientific Names	Common Names
Family Corvidae	
<i>Aphelocoma californica</i>	western scrub jay
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	common raven
Family Hirundinidae	
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
<i>Petrochelidon pyrrhonota</i>	cliff swallow
Family Aegithalidae	
<i>Psaltriparus minimus</i>	bushtit
Family Troglodytidae	
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Troglodytes aedon</i>	house wren
Family Timaliidae	
<i>Chamaea fasciata</i>	wrentit
Family Mimidae	
<i>Mimus polyglottos</i>	northern mockingbird
Family Sturnidae	
<i>Sturnus vulgaris</i>	European starling
Family Parulidae	
<i>Vermivora ruficapill</i>	Nashville warbler
<i>Icteria virens</i>	yellow-breasted chat ¹
Family Thraupidae	
<i>Piranga ludoviciana</i>	western tanager
Family Emberzidae	
<i>Pipilo maculatus</i>	spotted towhee
<i>Pipilo crissalis</i>	California towhee
<i>Aimophila ruficeps</i>	southern California rufous-crowned sparrow ¹
<i>Amphispiza belli</i>	sage sparrow
<i>Melospiza melodia</i>	song sparrow
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
Family Cardinalidae	
<i>Carduelis psaltria</i>	black-headed grosbeak
<i>Passerina amoena</i>	lazuli bunting
Family Fringillidae	
<i>Carpodacus mexicanus</i>	house finch
<i>Carduelis psaltria</i>	lesser goldfinch
<i>Carduelis tristis</i>	American goldfinch
Mammals	
Order Carnivora	Flesh-eaters
Family Canidae	
<i>Canis latrans</i>	coyote
Order Rodentia	Gnawing Mammals
Family Sciuridae	
<i>Citellus beecheyi</i>	California ground squirrel
Family Cricetidae	Mice, Rats, Lemmings, and Voles
<i>Neotoma sp.</i>	unidentified woodrat
Order Lagomorpha	Rabbits, Hares, and Pikas
Family Leporidae	
<i>Sylvilagus audubonii</i>	desert cottontail
<i>Sylvilagus bachmani</i>	brush rabbit

¹ California Department of Fish and Game state species of special concern.

² California Department of Fish and Game fully protected species.

FIGURES



Source: City of Santa Clara; ESRI

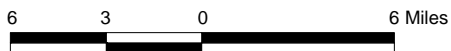


Figure 1
Regional Location Map



Source: City of Santa Clarita

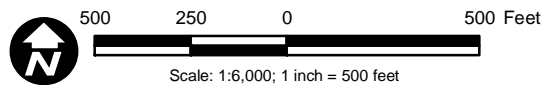


Figure 2
Golden Valley Road Bridge Project
Biological Study Area

Golden Valley Road Bridge Project Coastal California Gnatcatcher 45-Day Report

Path: P:\2002\2K053 Cross Valley\5GIS\MXD\CAGN Report\bsa.mxd, 10/25/06, LeeJ



LEGEND

- Area of Effect
- Biological Study Area
- Vegetation (2006)**
- Big Sagebrush Scrub
- Disturbed Habitat
- Hollyleaf Scrub
- Riversidian Coastal Sage Scrub-Disturbed
- Ruderal
- Southern Riparian Scrub
- Nonwetland Waters of the U.S.

Source: Stewart GeoTechnologies 2004

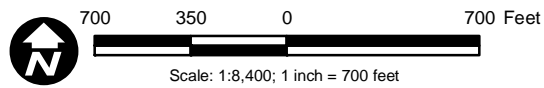
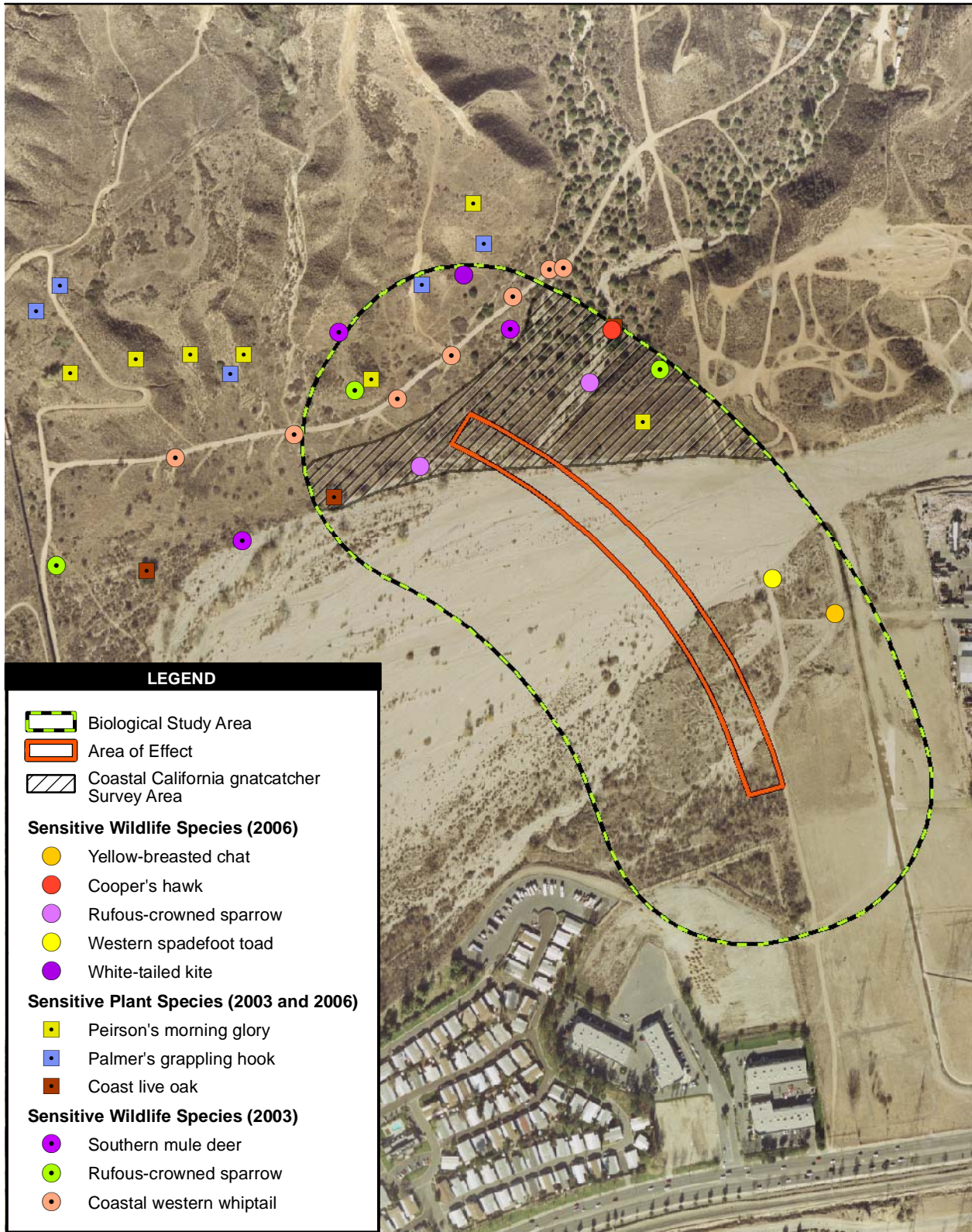


Figure 3
Vegetation Communities



Source: Stewart GeoTechnologies 2004; EDAW 2003, 2006

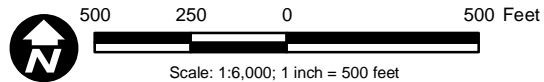


Figure 4
Sensitive Species

