



# GLENN LUKOS ASSOCIATES



Regulatory Services

October 14, 2005

Daniel Marquez U.S. Fish and Wildlife Service Carlsbad Field Office 6010 Hidden Valley Road Carlsbad, California 92011

SUBJECT: Submittal Requirements of Coastal California Gnatcatcher Surveys for the

approximately 70-Acre Homecoming at Lake Forest Property, Lake Forest,

Orange County, California

Dear Mr. Marquez:

This letter report summarizes the methodology and findings of surveys for the federally-listed threatened coastal California gnatcatcher (*Polioptila californica californica*) conducted by Glenn Lukos Associates, Inc. (GLA) in Orange County, California. GLA was retained by Lewis Operating Corporation to determine the presence or absence of the coastal California gnatcatcher on the approximately 70-acre project site.

#### **SURVEY LOCATION**

The Homecoming at Lake Forest project site encompasses approximately 70-acres and is located at the Baker Filtration plant site operated by the Irvine Ranch Water District (IRWD) within the City of Lake Forest in Orange County (Exhibit 1). The project site is located south of Commerce Centre Drive, west of Serrano Creek, north of existing Irvine Ranch Water District property, east of Peachtree road (Exhibit 1, Regional Map and Exhibit 2, Vicinity Map). The property lies within Non-Reserve Lands in the Central Sub Area of the Orange County Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP).

#### SITE DESCRIPTION

The project occurs on the U.S. Geological Survey (USGS) 7.5 minute El Toro topographic map, California (dated 1968 and photorevised 1982). The project covers an area of approximately 70-acres and elevation on site ranges from approximately 520 to 700 feet above sea level.

The Homecoming at Lake Forest site supports communities including: coastal sage scrub (CSS), scrub oak/chaparral, willow riparian, non-native grassland, disturbed/ruderal, and developed plant communities. All areas of suitable habitat including coastal sage scrub and chaparral on the project site were surveyed for the California gnatcatcher.

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The CSS on site is dominated by California sage brush (Artemisia californica), California buckwheat (Eriogonum fasciculatum), purple sage (Salvia leucophylla), black sage (Salvia mellifera), deer weed (Lotus scoparius), white sage (Salvia apiana), bush monkey flower (Mimulus aurantiacus), coastal prickly pear (Opuntia litoralis), California everlasting (Gnaphalium californica), horehound (Marrubium vulgare), coast goldenbush (Isocoma menziesii), coastal cholla (Opuntia prolifera), bush mallow (Malacothamnus fasciculatus), California encelia (Encelia californica), and croton (Croton californicus).

The scrub oak/chaparral on site is dominated by scrub oak (Quercus berberidifolia), coyote bush (Baccharis pilularis), laurel sumac (Malosma laurina), Mexican elderberry (Sambucus mexicanus), lemonade berry (Rhus integrifolia), toyon (Heteromeles arbutifolia), and sugar bush (Rhus ovata).

The willow riparian areas on site are dominated by arroyo willow (Salix lasiolepis), mule fat (Baccharis salicifolia), black willow (Salix goodingii), poison oak (Toxicodendron diversilobum), and rabbit foot grass (Polypogon monspielensis), with scattered coast live oak (Quercus agrifolia).

The non-native grassland on site is dominated by red brome (*Bromus rubens ssp. madritensis*), ripgut brome (*Bromus diandrus*), black mustard (*Brassica nigra*), tree tobacco (*Nicotiana glauca*), and common barely (*Hordeum vulgare*).

The disturbed/ruderal areas on site are dominated by unvegetated areas, Canadian horseweed (Conyza canadensis), tocolote (Centaurea melitensis), shortpod mustard (Hirschfeldia incana), jimsonweed (Dautura wrighti), telegraph weed (Heterotheca grandiflora), Douglas nightshade (Solanum douglasii), annual bursage (Ambrosia acanthicarpa), castor bean (Ricinus communis), and Russian thistle (Salsola tragus).

Developed areas on site include paved roads, structures and facilities associated with the Raker Filtration Plant. Ornamental plants and trees are located in close proximity to these structures. In addition, a Eucalyptus (*Eucalyptus sp.*) windrow is located immediately east of two underground water tanks located on site.

### **METHODOLOGY**

The Homecoming at Lake Forest site is located within the approved Central/Coastal NCCP Subregion. GLA conducted three protocol surveys following the guidelines (1997) issued by the U.S. Fish and Wildlife Service. These guidelines stipulate that three visits be conducted within suitable habitat for areas occurring within the NCCP with at least a seven day interval between site visits. Field surveys were performed by GLA biologist Jeff Ahrens (TE-052159-1), David Moskovitz (TE-084606-0), and Jim Luttrell (sub-permit on Pete Bloom's TE-787376-9 permit).

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Based upon a review of aerial photographs and site reconnaissance, the site supports less than 30 acres of suitable CSS, and required one "survey-day" per week (no more than 100 acres per day per biologist). Protocol surveys were conducted on August 16, 23, and 30, 2005. The surveys covered all areas of coastal sage scrub and associated suitable habitat within the project site. All areas were covered by foot by walking slowly and methodically along pre-determined transect routes. The location of each transect was based on vegetation and topographic conditions. The presence of coastal California gnatcatchers was determined by identifying all birds by sight and call, then using a combination of taped California gnatcatcher vocalizations and "pishing" sounds. Taped vocalizations were played at intervals of approximately 200 feet or as needed, depending on the vegetation and topography in each area. Sensitive species were recorded and mapped.

Weather conditions during the surveys were conducive to a high level of bird activity. Surveys were conducted between 6:00 a.m. to 12:00 p.m. Weather data was recorded using a Kestrel 2000 wind and temperature gauge. Temperatures ranged from approximately 68 degrees Fahrenheit to 83 degrees Fahrenheit. Wind speeds ranged from 0-2 miles per hour during the surveys, averaging 1 mile per hour over the survey period. Summaries of survey dates and weather recorded are provided for in Table 1.

Table 1. Surveys dates and weather data for Polygon 1.

Date	Survey Time	Temperature	Cloud Cover	Wind Speed	Observers*
		(° F)		(Mph)	
August 16, 2005	0730 – 10:10	68 - 83	Overcast	0 - 1	JA & DM
August 23, 2005	0620 – 1030	71 - 82	Clear	0 - 1	JA & JL
August 30, 2005	0830 – 11:40	72 - 82	Clear	1 – 2	DM

<sup>\*</sup>JA refers to Jeff Ahrens, DM refers to David Moskovitz, and JL refers to Jim Luttrell.

#### RESULTS

Three California gnatcatcher pairs were observed during all three protocol surveys. All three gnatcatcher pairs were observed with juveniles within the CSS on site. The areas associated with highest California gnatcatcher use included those areas dominated by California sagebrush and California buckwheat. Exhibit 3 depicts areas on the site where California gnatcatchers were observed, not all of which constitutes coastal sage scrub.

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Birds commonly observed during the focused surveys included California towhee (*Pipilo crissalis*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), Bewick's wren (*Thryomanes bewickii*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Carduelis psaltria*), bushtit (*Psaltriparus minimus*), wrentit (*Chamaea fasciata*), and northern mockingbird (*Mimus polyglottos*). No brown-headed cowbirds (*Molothrus ater*) were identified on the site. Please refer to Appendix A for a complete list of all birds observed on site.

Should you have any questions regarding the methodology or findings of this report, please do not hesitate to call me at (949) 837-0404.

Sincerely,

PW Ahrens

Jeff Ahrens Biologist

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### APPENDIX A

## **AVIAN COMPENDIUM**

The avian compendium lists bird species identified on the project site.

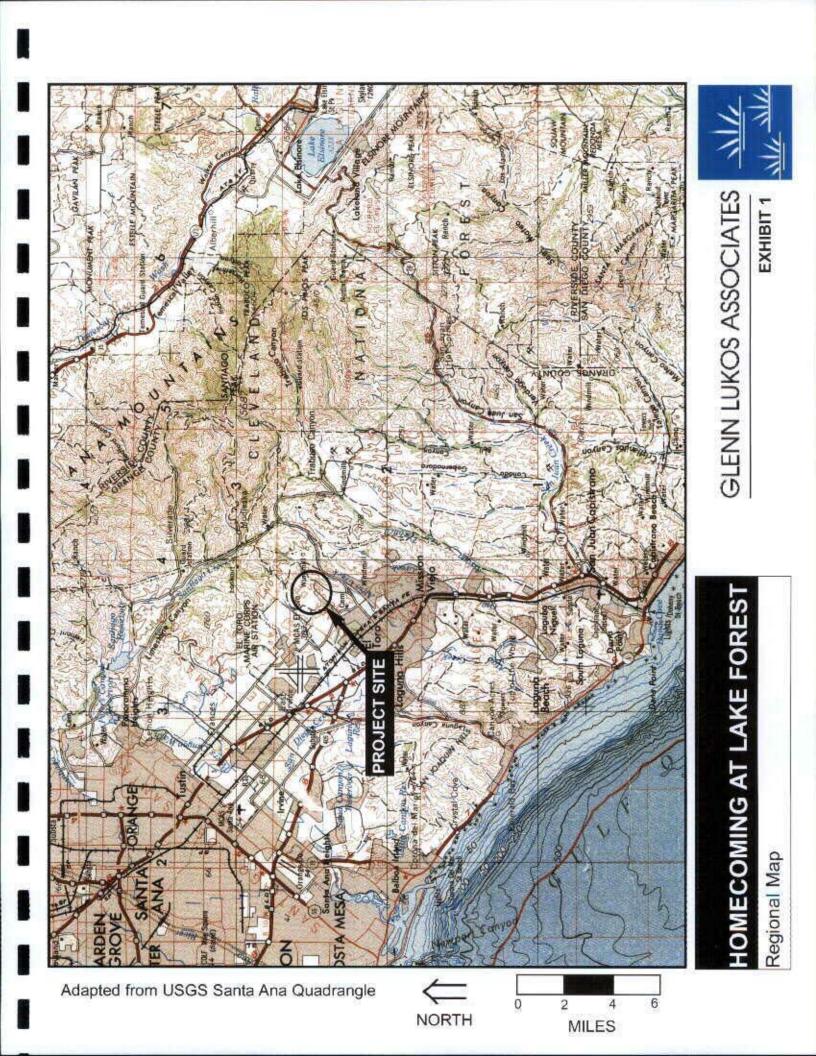
\* = non-native species

Birds	
CATHARTIDAE	NEW WORLD VULTURES
Cathartes aura	turkey vulture
ACCIPITRIDAE	HAWKS
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	Red-tailed hawk
Buteo lineatus	Red-shouldered hawk
FALCONIDAE	FALCONS
Falco sparverius	American kestrel
ODOTOPHORIDAE	QUAILS
Callipepla californica	California quail
COLUMBIDAE	PIGEONS AND DOVES
Zenaida macroura	mourning dove
*Columbia livia	rock dove

TYTONIDAE	BARN OWLS
Tyto alba	barn owl
VIREONIDAE	VIREOS
Vireo huttoni	Hutton's vireo
CORVIDAE	JAYS AND CROWS
Aphelocoma californica	western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven
PICIDAE	WOODPECKERS
Picoides nuttallii	Nuttall's woodpecker
Melanerpes formicivorus	Acorn woodpecker
TYRANNIDAE	TYRANT FLYCATCHERS
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Myiarchus cinerascens	ash-throated flycatcher
Tyrannus verticalis	western kingbird
Tyrannus vociferans	Cassin's kingbird
TROCHILIDAE	HUMMINGBIRDS
Calypte anna	Anna's hummingbird
Selasphorus sasin	Allen's hummingbird

SYLVIIDAE	OLD WORLD WARBLERS, GNATCATCHERS	
Polioptila californica	California gnatcatcher	
MUSCICAPIDAE	WRENTITS	
Chamaea fasciata	wrentit	
AEGITHALIDAE	BUSHTITS	
Psaltriparus minimus	bushtit	
TROGLODYTIDAE	WRENS	
Thryomanes bewickii	Bewick's wren	
	house wren	
MIMIDAE	THRASHERS	
Mimus polyglottos	northern mockingbird	
Toxostoma redivivum	California thrasher	
EMBERIZIDAE	EMBERIZIDS	
Pipilo maculatus	spotted towhee	
Pipilo crissalis	California towhee	
Melospiza melodia	song sparrow	
Chondestes grammacus	lark sparrow	
PTILOGONATIDAE	SILKY FLYCATCHERS	
Phainopepla nitens	phainopepla	

ICTERIDAE	BLACKBIRDS, ORIOLES
Icterus cucullatus	hooded oriole
PARULIDAE	WOOD WARBLERS
Geothlypis trichas	common yellowthroat
CARDINALIDAE	CARDINALS
Pheucticus melanocephalus	black-headed grosbeak
Passerina amoena	lazuli bunting
HIRUNDINIDAE	SWALLOWS
Hirundo rustica	barn swallow
FRINGILLIDAE	FINCHES
Carpodacus mexicanus	house finch
Carduelis psaltria	lesser goldfinch



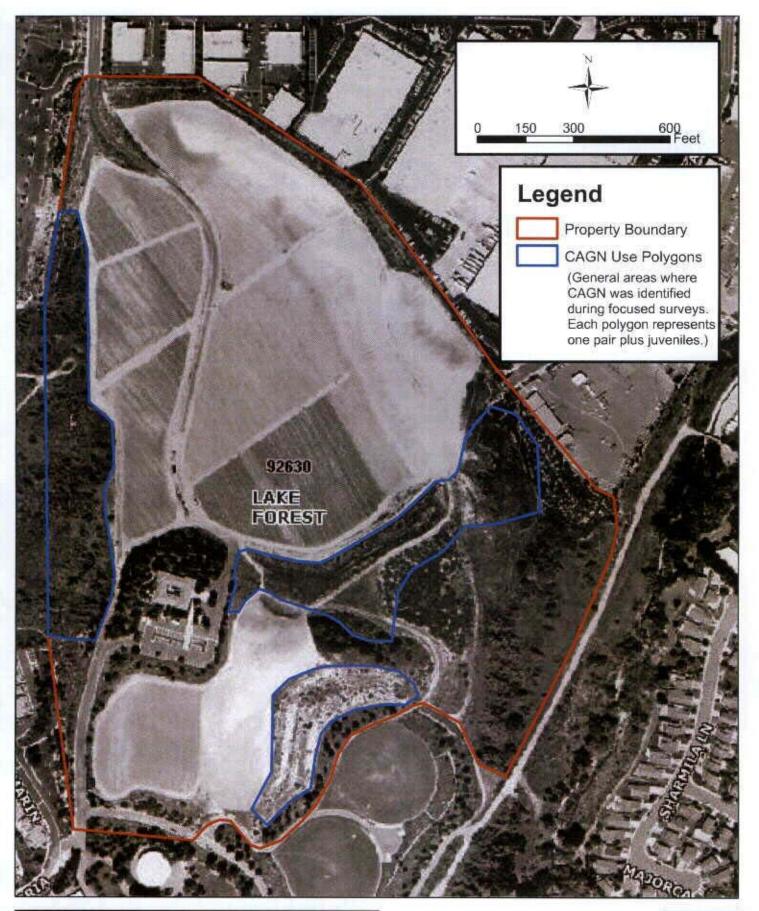
Vicinity Map

Adapted from USGS El Toro Quadrangle

PROJECT SITE

NORTH

1000 2000 3000 FEET



HOMECOMING AT LAKE FOREST

California Gnatcatcher Location Map

**GLENN LUKOS ASSOCIATES** 

**EXHIBIT 3** 

