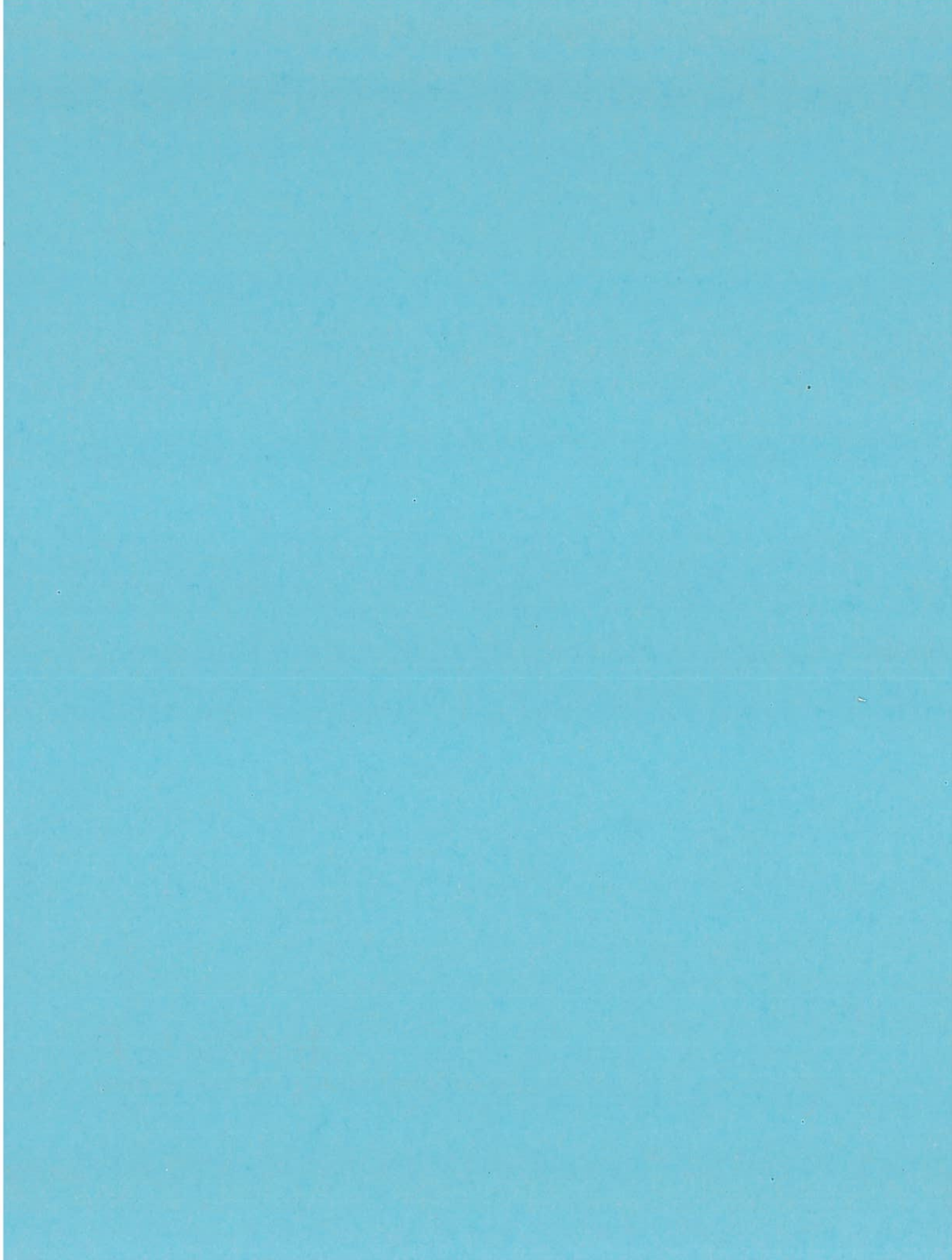


# *Appendix E*

Focused Survey Results for the LBV- Technical Letter





An Environmental Planning/Resource Management Corporation



August 1, 2005

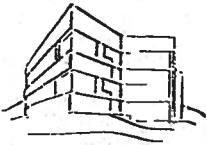
Mr. Daniel Marquez  
U.S. Fish and Wildlife Service  
6010 Hidden Valley Road  
Carlsbad, CA 92011



Subject: Results of the Least Bell's Vireo Surveys for the Approximately 27-acre Grijalva Park Extension at Santiago Creek, Orange County, California

Dear Mr. Marquez:

This letter report presents the results of focused surveys for the least Bell's vireo (*Vireo bellii pusillus*) performed by BonTerra Consulting at Grijalva Park, in the City of Orange, Orange County, California (hereafter referred to as the project site). The purpose of the surveys was to determine the presence or absence of the least Bell's vireo on the project site. The surveys were conducted according to guidelines established by the U.S. Fish and Wildlife Service (USFWS).



Although surveys were originally recommended for the southwestern willow flycatcher (*Empidonax traillii extimus*) in the biological constraints report, when the ornithologist conducted the first survey, it was determined that the habitat was not suitable for this species. The suitability of the habitat was discussed with Senior Biologist Brian Daniels of BonTerra Consulting and the decision was made that surveys for the southwestern willow flycatcher were not warranted. This was due to the limited cover of willows (*Salix* spp.), lack of understory, and distance from known locations of breeding southwestern willow flycatchers.

**PROJECT LOCATION**

The Grijalva Park project site is bound by Santiago Creek to the west, Walnut Street to the north, Grijalva Park and Prospect Avenue to the east, and Spring Street to the south. The property is currently vacant and contains some natural vegetation. An asphalt batch plant and aggregate mining operation previously existed on the project site. The regional location and local vicinity map are shown on Exhibits 1 and 2, respectively.

Vegetation on and adjacent to the project site consists of disturbed willow scrub, disturbed alluvial scrub, disturbed mule fat scrub, planted riparian vegetation, oak tree, ruderal, and ornamental. Open wash and disturbed and developed areas also occur on the project site. Exhibit 3 shows the distribution of the vegetation types on and adjacent to the project site. Riparian vegetation types are described below.



151 Kolmus Drive

Suite E-200

Costa Mesa

California 92626

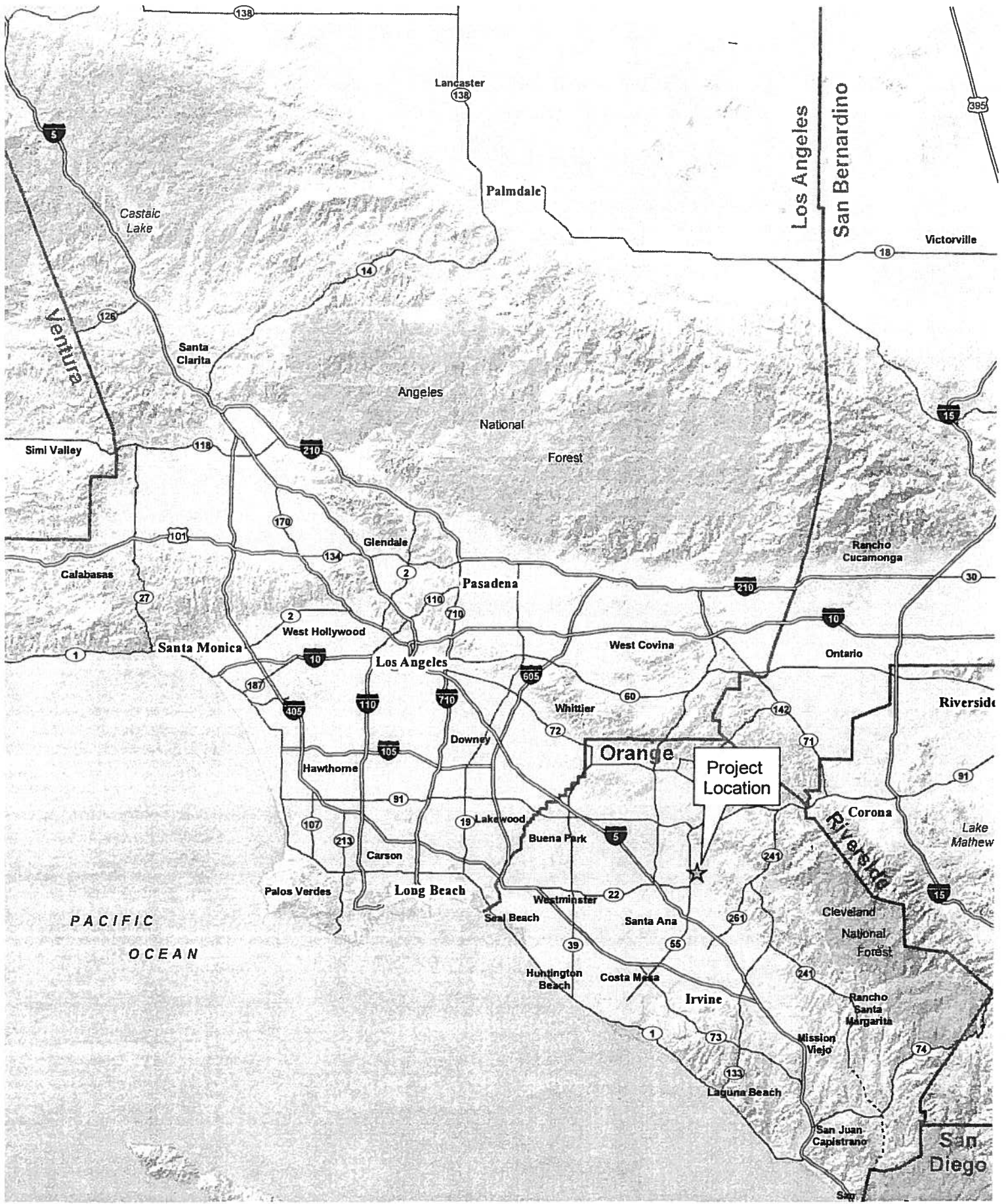
(714) 444-9199

(714) 444-9599 fax

www.bonterraconsulting.com







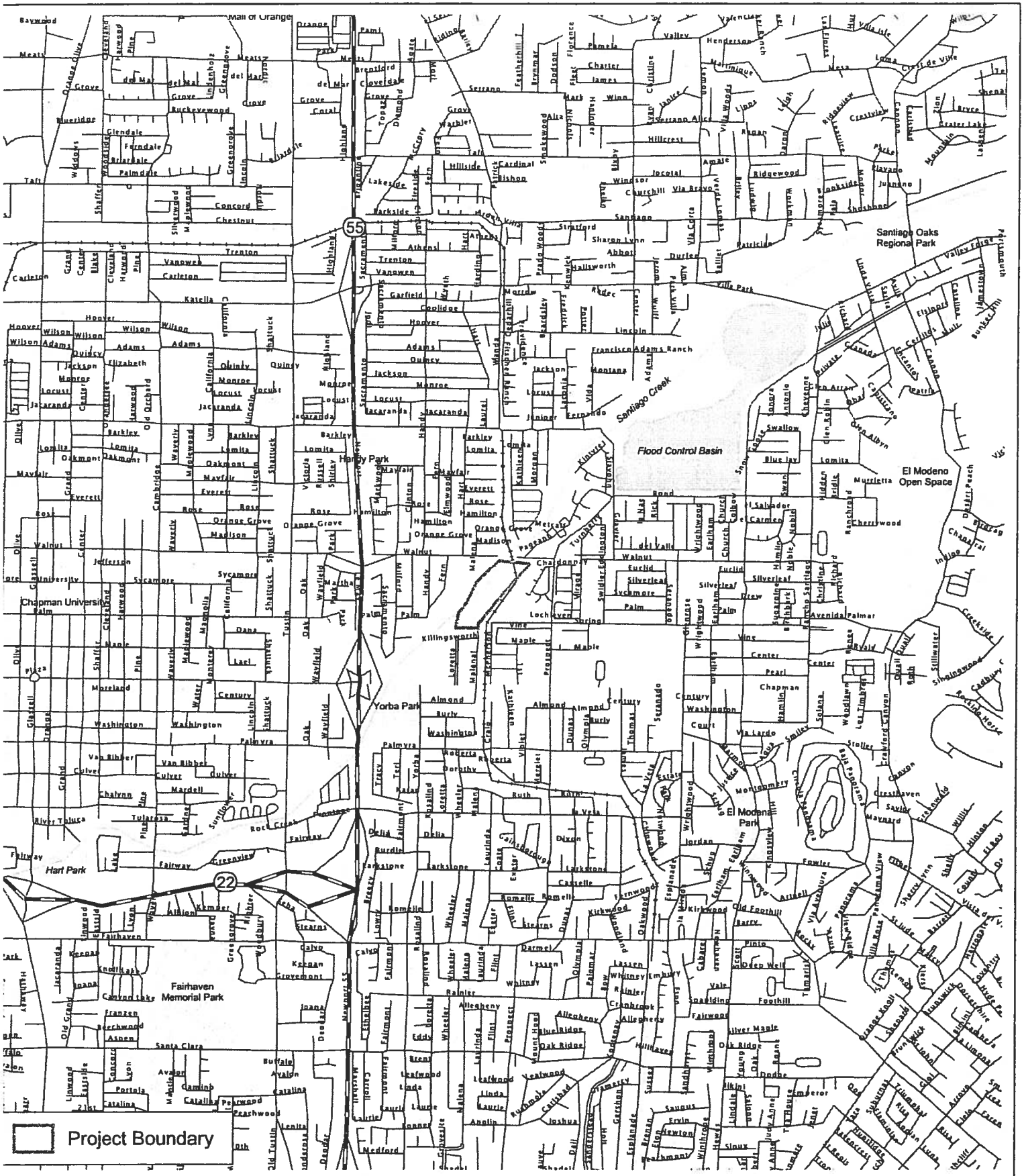
**Regional Location**

**Exhibit 1**

Grijalva Park Project







**Local Vicinity**  
**Grijalva Park Project**

**Exhibit 2**

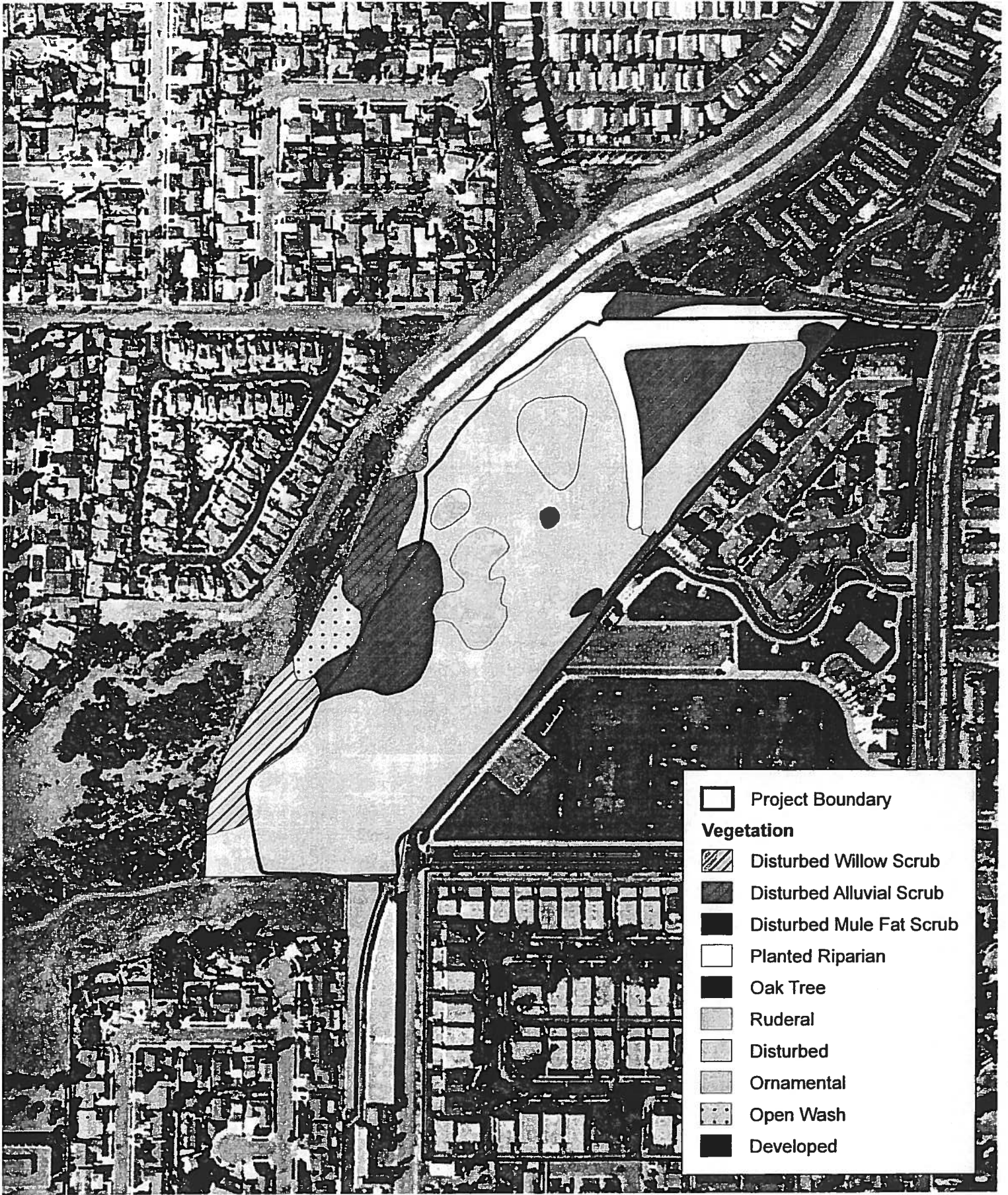


**Bonterra**  
 CONSULTING

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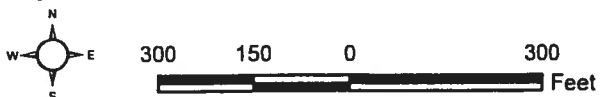




Existing Vegetation

Exhibit 3

Grijalva Park Project





Disturbed willow scrub is dominated by black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and mule fat (*Baccharis salicifolia*). Disturbed mule fat scrub consists of a near monoculture of mule fat on the upper bench above the disturbed willow scrub. This area is heavily disturbed and contains the invasive castor bean (*Ricinus communis*) occurring at a lower density. All areas of the project site have a large number of non-native species distributed amongst the native species.

Planted riparian vegetation occurs in the northern portion of the project site at the western edge of Walnut Avenue. This area has apparently been replanted with numerous native species including western sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), toyon (*Heteromeles arbutifolia*), wild rose (*Rosa californica*), black sage (*Salvia mellifera*), and California sagebrush (*Artemisia californica*).

## BACKGROUND

Least Bell's vireo is a neotropical migrant that breeds in central and southwestern North America from northern Mexico to southern California, Nevada, and Utah, and east to Louisiana, and north to North Dakota, Wisconsin, and Indiana in the central U.S. (A.O.U. 1998). The winter range of this vireo, although not well known, is believed to be the west coast of Central America from southern Sonora south to northwest Nicaragua, including the cape region of Baja California (Brown 1993). Of the four Bell's vireo subspecies, only two breed in California; the least Bell's vireo and the Arizona Bell's vireo (*V. b. arizonae*), which occurs in the Colorado River valley (Garrett and Dunn 1981, Rosenberg et al. 1991). The least Bell's vireo formerly was considered a common breeder in riparian habitats throughout the Central Valley and other low elevation riverine systems in California and Baja California, Mexico (Franzreb 1989). Presently, the least Bell's vireo has been eliminated from much of its historical range (Franzreb 1989, Brown 1993).

Breeding habitat of least Bell's vireo is primarily riparian habitats dominated by willows with dense understory vegetation. Shrubs such as mule fat and California rose are often a component of the understory (Goldwasser 1981). The least Bell's vireo is often found in areas that include trees such as willow, sycamore, or cottonwood (*Populus* spp.), particularly where the canopy is within or immediately adjacent to an understory layer of vegetation (Salata 1983). The least Bell's vireo generally nests in early successional stages of riparian habitats, with vireo nest sites frequently located in willows that are between four and ten years of age (RECON 1988, Franzreb 1989). The most critical factor in habitat structure is the presence of a dense understory shrub layer from approximately two feet to ten feet above ground (Goldwasser 1981, Salata 1983, Franzreb 1989).

The least Bell's vireo was formerly a more common and widespread summer resident of southern California's lowland riparian woodlands (Grinnell and Miller 1944, Garrett and Dunn 1981). The substantial population declines of this avian species over the latter half of the twentieth century is attributable to the loss and degradation of riparian habitats and, perhaps more importantly, brood parasitism by the brown-headed cowbird (*Molothrus ater*). As a result, the least Bell's vireo was listed by the California Department of Fish and Game (CDFG) as Endangered on October 2, 1980, and by the USFWS as Endangered on May 2, 1986.

On February 2, 1994, the USFWS issued their final determination of critical habitat for the least Bell's vireo. Approximately 37,560 acres were identified as critical habitat in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego counties. The project site is not located within any of these areas designated as critical habitat for the least Bell's vireo.



Mr. Daniel Marquez  
July 26, 2005  
Page 3

## SURVEY METHODOLOGY

Surveys for the least Bell's vireo were conducted by BonTerra Consulting Ecologist Amber Oneal on May 4, 16, 26, June 6, 20, 30, July 11, and 21, 2005. These surveys followed the recommended USFWS guidelines. Updated guidelines for least Bell's vireo surveys were issued on April 8, 1999, and require that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. All suitable habitat was thoroughly surveyed during each site visit.

The surveys were conducted under optimal weather conditions, during the early morning hours when bird activity is at its peak. The habitats along Santiago Creek were systematically surveyed by walking slowly and methodically along their margins. All bird species detected were recorded in field notes, including notable observations of any special status species or other birds such as the brown-headed cowbird.

## SURVEY RESULTS

Although there are willows and mule fat along Santiago Creek, the vegetation cover is relatively open and there is little understory present. In addition, the creek is heavily invaded by non-native species, including many ornamental shrub and tree species. Therefore, the project site appeared to have only limited potentially suitable habitat. No least Bell's vireo were present during these surveys.

A list of the bird species observed on the project site during the surveys is included in Appendix A.

BonTerra Consulting has appreciated the opportunity to assist on this project. If you have any comments or questions, please call me at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING



Amber S. Oneal  
Project Manager/Ecologist

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



Amber S. Oneal  
Project Manager/Ecologist

Enclosures

cc: Richard Beck, RBF Consulting



**REFERENCES:**

- American Ornithologists' Union. 1998. *Check-list of North American Birds*, 7<sup>th</sup> ed. American Ornithologists' Union, Washington, D.C.
- Brown, B.T. 1993. Least Bell's Vireo. *In* The Birds of North America, No. 35 (A. Poole, P. Stettenheim and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.
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- Grinnell, J., and A.H. Miller. 1944. *The Distribution of the Bird's of California*. Cooper Ornithological Club, Pacific Coast Avifauna No. 27.
- RECON Regional Environmental Consultants, 1988. Draft Comprehensive Species Management Plan for the Least Bell's Vireo. Prepared for the San Diego Association of Governments.
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- Salata, L.R. 1983. Status of the Lest Bell's Vireo on Camp Pendleton, California: Report on Research Done in 1983. USFWS publication, Laguna Niguel, CA.
- U.S. Fish and Wildlife Service (USFWS). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Least Bell's Vireo. Federal Register Vol. 59, No. 22.

Bird Compendia for the Grijalva Park Project Site  
Spring/Summer 2005

<b>ANATIDAE - WATERFOWL</b>
<i>Anas platyrhynchos</i> mallard
<b>ARDEIDAE - HERONS</b>
<i>Ardea alba</i> great egret
<i>Egretta thula</i> snowy egret
<b>ACCIPITRIDAE - HAWKS</b>
<i>Accipiter cooperi</i> Cooper's hawk
<b>CHARADRIIDAE - PLOVERS</b>
<i>Charadrius vociferus</i> killdeer
<b>COLUMBIDAE - PIGEONS &amp; DOVES</b>
<i>Columba livia</i> rock pigeon
<i>Zenaida macroura</i> mourning dove
<b>TROCHILIDAE - HUMMINGBIRDS</b>
<i>Calypte anna</i> Anna's hummingbird
<b>PICIDAE - WOODPECKERS</b>
<i>Picoides nuttallii</i> Nuttall's woodpecker
<i>Picoides pubescens</i> downy woodpecker
<b>TYRANNIDAE - TYRANT FLYCATCHERS</b>
<i>Sayornis nigricans</i> black phoebe
<i>Myiarchus cinerascens</i> ash-thoated flycatcher
<i>Tyrannus verticalis</i> western kingbird
<b>VIREONIDAE - VIREOS</b>
<i>Vireo gilvus</i> warbling vireo
<b>CORVIDAE - JAYS &amp; CROWS</b>
<i>Aphelocoma californica</i> western scrub-jay
<i>Corvus brachyrhynchos</i> American crow
<b>HIRUNDINIDAE - SWALLOWS</b>
<i>Stelgidopteryx serripennis</i> northern rough-winged swallow
<i>Petrochelidon pyrrhonota</i> cliff swallow
<i>Hirundo rustica</i> barn swallow
<b>AEGITHALIDAE - BUSHTITS</b>
<i>Psaltriparus minimus</i> bushtit

**Bird Compendia for the Grijalva Park Project Site  
Spring/Summer 2005**

<b>TROGLODYTIDAE - WRENS</b>
<i>Thryomanes bewickii</i> Bewick's wren
<i>Troglodytes aedon</i> house wren
<b>MIMIDAE - THRASHERS</b>
<i>Mimus polyglottos</i> northern mockingbird
<b>STURNIDAE - STARLINGS</b>
<i>Sturnus vulgaris</i> European starling
<b>PARULIDAE - WARBLERS</b>
<i>Dendroica petechia</i> yellow warbler
<i>Geothlypis trichas</i> common yellowthroat
<i>Wilsonia pusilla</i> Wilson's warbler
<b>EMBERIZIDAE - SPARROWS &amp; JUNCOS</b>
<i>Pipilo maculatus</i> spotted towhee
<i>Pipilo crissalis</i> California towhee
<i>Melospiza melodia</i> song sparrow
<b>ICTERIDAE - BLACKBIRDS</b>
<i>Molothrus ater</i> brown-headed cowbird
<i>Icterus bullockii</i> Bullock's oriole
<b>FRINGILLIDAE - FINCHES</b>
<i>Carpodacus mexicanus</i> house finch
<i>Carduelis psaltria</i> lesser goldfinch
<b>PASSERIDAE - OLD WORLD SPARROWS</b>
<i>Passer domesticus</i> house sparrow
<b>PSITTACIDAE - PARROTS</b>
<i>Amazona viridigenalis</i> red-crowned parrot
<b>ESTRILDIDAE - EXOTIC FINCHES</b>
<i>Lonchura punctulata</i> Nutmeg mannikin