Appendix I  Focused Riparian Bird Survey
Report 2006 Western Portion
August 21, 2006

Dan Marquez  
Recovery Permit Coordinator  
U. S. Fish and Wildlife Service  
6010 Hidden Valley Road  
Carlsbad, California 92009

**Subject:** 2006 Focused Southwestern Willow Flycatcher and Least Bell’s Vireo Survey Report for the Mid-County Parkway Project, County of Riverside, California. Permit Number TE813545-5.

Dear Mr. Marquez:

This report documents the results of eight focused biological surveys for the presence of the federally-listed endangered least Bell's vireo (*Vireo bellii pusillus*; LBVI) and six focused surveys for the federally-listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*; WIFL). All surveys were conducted by Dudek & Associates, Inc. (Dudek) wildlife biologists Brock A. Ortega (TE-813545-5. BAO) and Rebekah M. Krebs (RMK) within the Mid-County Parkway Project area, located in the County of Riverside, California (*Figure 1*).

The LBVI and WIFL are closely associated with riparian habitats, especially densely-vegetated willow scrub and riparian forest vegetation. These species are threatened primarily by loss, degradation, and fragmentation of riparian habitats and are impacted by brown-headed cowbird (*Molothrus ater*) nest parasitism.

**LOCATION AND EXISTING CONDITIONS**

The Mid-County Parkway Project is located in northwestern Riverside County parallel to the existing Cajalco Road between California Interstates 15 (I-15) and 215 (I-215) and the Ramona Expressway east of I-215 to State Route 79 (SR-79) (*Figure 1*). The overall project study area extends from west to east, approximately 1 to 4 miles in width and 32 miles in length, beginning within the U.S. Geological Survey 7.5 minute Corona South quadrangle and spanning east through the Lake Mathews, Steele Peak, Perris, and Lakeview quadrangles respectively, and ending in the San Jacinto quadrangle. Dudek conducted focused surveys for LBVI and WIFL in over thirteen polygons within the western portion of the project area. Dudek’s polygons were
located between the projects western terminus and Gavilan Road (*Figures 2 and 3*). The project vicinity is situated in an area of northwestern Riverside County which is currently undergoing substantial development, population, and employment growth.

The soils, topography, and vegetation of the project site are heterogeneous. Project site elevations for this portion of the project range from approximately 950 feet above mean sea level (AMSL) near I-15 to approximately 1,800 feet AMSL near Gavilan Road. Currently, the project area supports sporadic residences, agricultural crop fields, and dairy farms within the eastern region of the study area; and primarily rolling hills of open space in the western region of the project area. The study area includes a complex system of dirt roads and trails, many of which receive use from off-road vehicle traffic and also provide necessary access to power transmission towers.

Throughout the project site soil consistency is primarily non-alkaline clays, with scattered areas of non-alkaline sands and loams. According to the U.S. Department of Agriculture (USDA) Western Riverside County Soil Survey, the study area possesses six different soil composition associations (USDA 1971). These include: Cajalco-Temescal-Las Posas which are well-drained upland soils developed from decomposing gabbro or other igneous rocks on 2 to 50 percent slopes, Cieneba-Rock land-Fallbrook which are excessively drained upland soils typically observed on 2 to 75 percent slopes and formed in coarse-grained igneous rock with granite boulders outcrops that cover 35 to over 60 percent of ground surface, and the Hanford-Tujunga-Greenfield composition are well to excessively drained soils developed in alluvial fans or terraces from granitic materials and typically present on 0 to 35 percent slopes. Furthermore onsite are the well-drained Monsereate-Arlington-Exeter soils observed on 0 to 20 percent sloped terraces or alluvial fans and formed in alluvium of granitic materials, the San Emigdioo-Grangevill-Metz composition are well-drained soils on 0 to 15 percent slopes within alluvial fans and formed from weakly consolidated sedimentary formations or calcareous sandstone, and the Traver-Domino-Willows are moderately well drained soils on 0 to 4 percent sloped valley plains or basins and developed in alluvium of granitic materials.

**VEGETATION COMMUNITIES**

Based on species composition and general physiognomy, multiple vegetation types and land covers are present throughout the project area.
Riparian Forest

As mapped for this project, this category includes riparian communities with four or more trees (3.0 inches [7.6 cm] or more DBH) of western cottonwood (*Populus fremontii*), tree willows (*Salix* spp.) or western sycamore (*Platanus racemosa*) with combined vegetative cover of at least 20 percent.

Riparian Scrub

This community includes riparian areas dominated by shrubby willows, mule fat (*Baccharis salicifolia*) or broom baccharis (*Baccharis sarothroides*), as well as some areas that would be expected to support these species but that are temporarily non-vegetated due to scouring by floods or to mechanized removal of vegetation from a channel.

METHODS

The site was surveyed for LBVI on eight occasions and WIFL on six occasions by Dudek biologists BAO and RMK according to the schedule shown in Table 2. Dudek biologist BAO conducted all surveys for WIFL and did so concurrently with the LBVI surveys. Dudek biologist RMK conducted surveys only for LBVI. After conducting the first survey, RMK also visited a number of other marginal areas to determine if they were appropriate for LBVI or WIFL. It was determined that they could not support LBVI or WIFL. This assessment was later confirmed by BAO. The surveys consisted of slowly walking a systematic, meandering transect within all WIFL/LBVI suitable habitats onsite (*Figures 4A-4I*) within the planned potential impact areas and alternative segments plus appropriate buffer. A vegetation map (scale 1"=500') and aerial photograph (Aerials Express, 2005) of the survey area was available to record any detected WIFL or LBVI. Binoculars (8x35) were used to aid in detecting and identifying wildlife species.

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<th>Date</th>
<th>Staff</th>
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<th>Temperature (Degrees Fahrenheit)</th>
<th>Wind (mph)</th>
<th>Cloud Cover (%)</th>
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<td>LBVI</td>
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<td>0-3</td>
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<td>LBVI/WIFL</td>
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<td>100-50</td>
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<tr>
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<tr>
<td>6/6/06</td>
<td>BAO</td>
<td>LBVI/WIFL</td>
<td>0430-1100</td>
<td>60-80</td>
<td>&lt;1</td>
<td>100-20</td>
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</tbody>
</table>
The surveys conducted for WIFL followed the currently accepted protocol (Sogge et al., 1997 in conjunction with the 2000 Southwestern Willow Flycatcher Protocol Revision issued by the U.S. Fish and Wildlife Service) which states that a minimum of five survey visits are needed to evaluate project effects on flycatchers. It is recommended that one survey is made during the period from May 15 to 31, one survey is made from June 1 to 21 and three surveys are made between June 22 and July 17. A tape of recorded WIFL vocalizations was used approximately every 50-100 feet within suitable habitat to induce WIFL responses. When WIFL were detected, playing of the tape ceased to avoid harassment.

A Section 10(a)(1)(A) permit is not required to conduct presence/absence surveys for LBVI. The surveys for LBVI followed the currently accepted protocol (U.S. Fish and Wildlife Service, Least Bell’s Vireo Survey Guidelines) which states that a minimum of eight survey visits should be conducted to all riparian areas and any other potential vireo habitats during the period from April 10 to July 31. The site visits are required to be conducted at least 10 days apart to maximize the detection of early and late arrivals, females, non-vocal birds and nesting pairs. Taped playback of vireo vocalizations are not used during the surveys to avoid undue harassment. Surveys were generally conducted between pre-dawn and 1100 and were not conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather.

Time of year, time of day and weather conditions were appropriate for the detection of WIFL and LBVI (see Table 2) during this 2006 survey of the Mid-County Parkway area.

**RESULTS**

Focused surveys for LBVI and WIFL were positive. Two LBVI pairs and one lone male LBVI were detected during the survey. In addition, 3 migratory WIFL were detected (Figures 4B, 4E,
Sixty-nine species of wildlife were detected during the surveys, including four reptiles, 53 birds, eight mammals and four invertebrates. Additional notable species detected include: California gnatcatcher (*Polioptila californica*), white-tailed kite (*Elanus caeruleus*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), Cooper's hawk (*Accipiter cooperii*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferus*), and brown-headed cowbird (*Molothrus ater*). All wildlife species detected are presented in *APPENDIX A*. WIFL survey and detection forms are included as *APPENDIX B*. Figure 2 presents WIFL and LBVI data points on a USGS base. Survey routes are presented on figures 4A through 4I.

Please feel free to call me at (760) 942-5147 if you have any questions regarding the contents of this letter. I certify that the information in this report and attached exhibits fully and accurately represent my work.

Very truly yours,

DUDEK

Brock A. Ortega
TE813545-5
Senior Wildlife Biologist

*att:* Literature Cited
*Figures 1-4I*
*Appendix A - Faunal Compendium*
*Appendix B - Willow Flycatcher Survey and Detection Forms*

*cc:* Cathy Bechtel, Riverside County Transportation Commission
Rebekah Krebs, Dudek.
Yvonne Moore, California Department of Fish and Game – Region 6
LITERATURE CITED

U.S. Department of Agriculture. 1971. Soil Survey of Western Riverside County, California. United States Department of Agriculture Soil Conservation Service and United States Department of Interior Bureau of Indian Affairs, in cooperation with University of California Agricultural Experiment Station.


REFERENCES FOR LATIN AND COMMON NAMES


FIGURE 1
Mid County Parkway - 2006 Riparian Bird Survey Report
Regional Map
Composite Rights-of-Way (Survey Area)

Vireo & Flycatcher Observations (Dates Observed, Biologist):
- least Bell's vireo male, 6/6/06, 7/2/07, 7/7/06, Brock Ortega
- least Bell's vireo pair, 5/17/06, 6/6/06, 7/7/06, Brock Ortega
- least Bell's vireo, 6/6/06, 6/27/06, 7/2/06, 7/7/06, Brock Ortega
- southwestern willow flycatcher, 5/17/06, Brock Ortega

SOURCE: USGS 7.5 Minute Series, Lake Mathews and Steele Peak Quadrangles
Suitable Habitat, Survey Routes & LBW/WIFL Observations Map - Page 34

Vireo & Flycatcher Observations (Dates Observed, Biologist):
- least Bell's vireo male, 6/6/06, 7/2/07, 7/7/06, Brock Ortega
- least Bell's vireo pair, 5/17/06, 6/6/06, 7/7/06, Brock Ortega
- least Bell's vireo, 6/6/06, 6/27/06, 7/2/06, 7/7/06, Brock Ortega
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- least Bell's vireo, 6/6/06, 6/27/06, 7/2/06, 7/7/06, Brock Ortega
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- least Bell's vireo pair, 5/17/06, 6/6/06, 7/7/06, Brock Ortega
- least Bell's vireo, 6/6/06, 6/27/06, 7/2/06, 7/7/06, Brock Ortega
- southwestern willow flycatcher, 5/17/06, Brock Ortega
Suitable Habitat, Survey Routes & LBM/WIFL Observations Map - Page 59

Composite Rights-of-Way (Survey Area)

Suitable Habitat

Survey Route

Vireo & Flycatcher Observations (Dates Observed, Biologist):
- least Bell's vireo male, 6/6/06, 7/2/07, 7/7/06, Brock Ortega
- least Bell's vireo pair, 5/17/06, 6/6/06, 7/7/06, Brock Ortega
- least Bell's vireo, 6/6/06, 6/27/06, 7/2/06, 7/7/06, Brock Ortega
- southwestern willow flycatcher, 5/17/06, Brock Ortega
APPENDIX A
FAUNAL COMPENDIUM

WILDLIFE SPECIES - VERTEBRATES

REPTILES

IGUANIDAE - IGUANID LIZARDS
    *Sceloporus orcutti* - granite spiny lizard

TEIIDAE - WHIPTAIL LIZARDS
    *Cnemidophorus hyperythrus* - orange-throated whiptail

COLUMBRIDAE - COLUBRID SNAKES
    *Masticophis flagellum piceus* – red racer / red coachwhip

VIPERIDAE - VIPERS
    *Crotalus ruber* - red-diamond rattlesnake

BIRDS

ARDEIDAE - HERONS
    *Ardea alba* - great egret

ACCIPITRIDAE - HAWKS
    *Accipiter cooperii* - Cooper's hawk
    *Aquila chrysaetos* - golden eagle
    *Buteo jamaicensis* - red-tailed hawk
    *Elanus leucurus* - white-tailed kite

FALCONIDAE - FALCONS
    *Falco sparverius* - American kestrel

PHASIANIDAE - PHEASANTS & QUAILS
    *Callipepla californica* - California quail

CHARADRIIDAE - PLOVERS
    *Charadrius vociferus* - killdeer
APPENDIX A
FAUNAL COMPENDIUM

COLUMBIDAE - PIGEONS & DOVES
    Zenaida macroura - mourning dove

CUCULIDAE - CUCKOOS & ROADRUNNERS
    Geococcyx californianus - greater roadrunner

TYTONIDAE - BARN OWLS
    Tyto alba - barn owl

CAPRIMULGIDAE - GOATSUCKERS
    Chordeiles minor - common nighthawk

APODIDAE - SWIFTS
    Aeronautes saxatalis - white-throated swift

TROCHILIDAE - HUMMINGBIRDS
    Archilochus alexandri - black-chinned hummingbird
    Calypte anna - Anna's hummingbird

PICIDAE - WOODPECKERS
    Colaptes auratus - northern flicker
    Melanerpes formicivorus - acorn woodpecker
    Picoides nuttallii - Nuttall's woodpecker

TYRANNIDAE – TYRANT FLYCATCHERS
    Empidonax difficilis - Pacific-slope flycatcher
    Empidonax traillii - willow flycatcher
    Sayornis nigricans - black phoebe
    Tyrannus vociferans - Cassin's kingbird

HIRUNDINIDAE - SWALLOWS
    Petrochelidon pyrrhonota - cliff swallow

CORVIDAE - JAYS & CROWS
    Aphelocoma californica - western scrub-jay
    Corvus corax - common raven
APPENDIX A
FAUNAL COMPENDIUM

PARIDAE - TITMICE
   Baeolophus inornatus - oak titmouse

AEGITHALIDAE - BUSHTITS
   Psaltriparus minimus - bushtit

TROGLODYTIDAE - WRENS
   Catherpes mexicanus - canyon wren
   Thryomanes bewickii - Bewick's wren
   Troglodytes aedon - house wren

SYLVIIDAE - GNATCATCHERS
   Polioptila californica - California gnatcatcher

MIMIDAE - THRASHERS
   Mimus polyglottos - northern mockingbird
   Toxostoma redivivum - California thrasher

PTILOGONATIDAE - SILKY-FLYCATCHERS
   Phainopepla nitens - phainopepla

LANIIDAE - SHRIKES
   Lanius ludovicianus - Loggerhead shrike

VIREONIDAE - VIREOS
   Vireo bellii - Bell's vireo

PARULIDAE - WOOD WARBLERS
   Dendroica coronata - yellow-rumped warbler
      Geothlypis trichas - common yellowthroat
   Icteria virens - yellow-breasted chat

EMBERIZIDAE - BUNGINGS & SPARROWS
   Ammodramus savannarum - grasshopper sparrow
   Melospiza melodia - song sparrow
   Pipilo crissalis - California towhee
   Spizella atrogularis - black-chinned sparrow
APPENDIX A
FAUNAL COMPENDIUM

CARDINALIDAE - CARDINALS AND GROSBEAKS

- *Passerina caerulea* - blue grosbeak
- *Pheucticus melanocephalus* - black-headed grosbeak

ICTERIDAE - BLACKBIRDS & ORIOLES

- *Agelaius phoeniceus* - red-winged blackbird
- *Euphagus cyanocephalus* - Brewer's blackbird
- *Icterus cucullatus* - hooded oriole
- *Molothrus ater* - brown-headed cowbird
- *Sturnella neglecta* - western meadowlark

FRINGILLIDAE - FINCHES

- *Carpodacus mexicanus* - house finch
- *Carduelis psaltria* - lesser goldfinch
- *Carduelis tristis* - American goldfinch

* signifies introduced (non-native) species
APPENDIX B

Willow Flycatcher Survey & Detection Forms
Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name: Mid County Parkman

Was site surveyed in previous year? Yes □ No

If yes, what site name was used? Yes

County: Riverside

State: CA

USGS Quad Name: See report

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? □ Yes □ No

Site Coordinates: Start: N 46°10'00" E 37°41'08"

Stop: N 46°27'37" E 37°41'04"

UTM Zone: 11

Elevation: 400 feet / meters (circle one)

** Fill in additional site information on back of this page **

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<th>Date (m/d/y)</th>
<th>Number of WIFLS Found</th>
<th>Estimated Number of Pairs</th>
<th>Estimated Number of Territories</th>
<th>Nest(s) Found? (Y or N)</th>
<th>Cowbirds Detected? (Y or N)</th>
<th>Presence of Livestock, Recent sign (Y or N)</th>
<th>Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledge seen, potential threats)</th>
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Name of Reporting Individual: Breck Artya

Date Report Completed: 9/1/2006

Submit the original of this form. Retain a copy for your records.
Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual: Brinch Orteya
Phone # 760 942-5147

Affiliation: Dudch and Assoc.
Email: bortega @ dudch.com

Site Name: Mid-county Parkway

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest): Riverside County

Length of area surveyed: 9.075' (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes No If no, summarize in comments below.

N/A

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)
- Mixed native and exotic plants (mostly native)
- Mixed native and exotic plants (mostly exotic)
- Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: willow, mulberry, sagebrush, cottonwood

Average height of canopy: 20 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 3 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below.

dried out mostly

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WiFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): see report