



APPENDIX G
Least Bell's Vireo Report

Least Bell's Vireo Report

San Pasqual Undergrounding Project

July 2016

Prepared for:
City of Escondido
Vista Irrigation District
Bureau of Indian Affairs

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Abbreviations

BIA	U.S. Bureau of Indian Affairs
CDFW	California Department of Fish and Wildlife
CNDDDB	California Natural Diversity Database
LBVI	Least Bell's vireo
MBTA	Migratory Bird Treat Act
MSCP	Multiple Species Conservation Plan
NCCP	Natural Community Conservation Planning
ROW	right-of-way
San Pasqual Band	San Pasqual Band of Mission Indians
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VID	Vista Irrigation District

1.0 Summary

Atkins conducted a least Bell's vireo (LBVI) (*vireo bellii pusillus*) protocol presence/absence survey in suitable riparian habitat within the San Pasqual Undergrounding Project study area (Figures 1 and 2). Atkins' qualified biologist, Melissa Tu, conducted eight protocol surveys between April 11 and June 24, 2016. No LBVI was observed within the study area. All surveys were in compliance with the United States (U.S.) Fish and Wildlife Service (USFWS) 2001 survey guidelines (USFWS 2001). The guidelines are provided in Appendix A.

2.0 Introduction

On behalf of the City of Escondido (Escondido), Vista Irrigation District (VID), and the U.S. Bureau of Indian Affairs (BIA), Atkins conducted a LBVI protocol presence/absence survey in suitable riparian habitat within the study area located in Valley Center and the San Pasqual Reservation in San Diego County (Figures 1 and 2).

2.1 Project Description

The proposed action is an integral component of the San Luis Rey Indian Water Rights Settlement Agreement (January 30, 2015) including the United States (acting through the Secretary of the Interior and the Attorney General of the United States); La Jolla, Rincon, San Pasqual, Pauma, and Pala Bands of Mission Indians; the San Luis Rey Indian Water Authority; Escondido; and VID. The Settlement is authorized by the Act of November 30, 1988, Public Law 100-675, as amended.

The proposed project would remove, relocate, and restore about 2 miles of the Escondido Canal that crosses the San Pasqual Reservation (Figure 2). The proposed pipeline



Canal with flowing water

would run generally from north to south within the existing Escondido Canal right of way (ROW) and along existing roads, primarily North Canal Road, South Canal Road, North Lake Wohlford Road, and Paradise Mountain Road, to the extent feasible. The proposed pipeline would begin at the desilting basin northeast of North Canal Road and continue in a southwesterly direction and connect to the existing underground pipeline at a location south of Paradise Mountain Road. The proposed pipeline would include a 100-foot construction corridor (50 feet on each side of pipeline alignment) for the entire 2.5-mile length.

A desilting basin and access road would be constructed at the intersection of the proposed alignment and the existing canal to remove sediment from the canal water prior to discharge into the new underground pipeline. Two desilting basin options are presented on Figure 2.

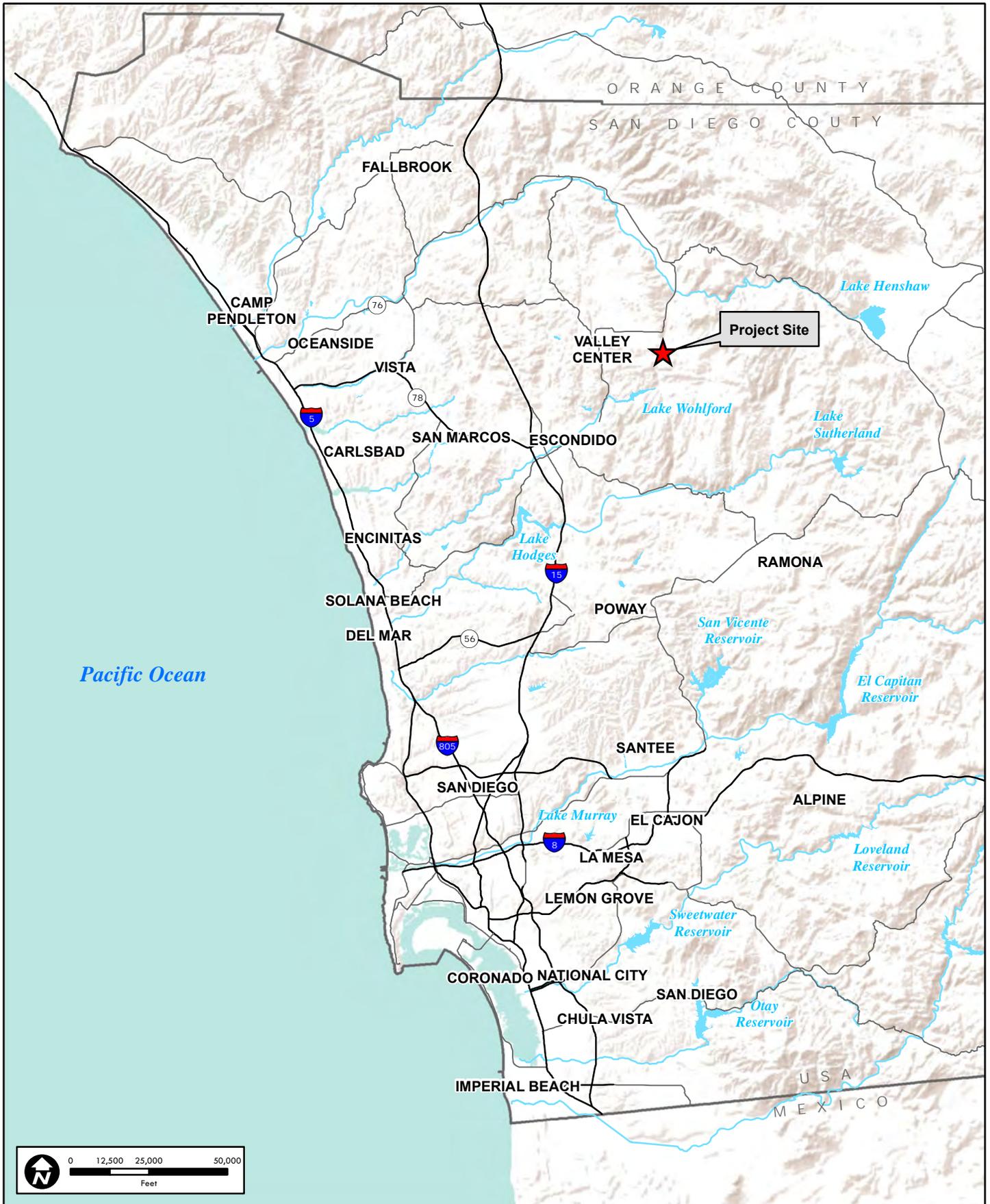


Figure 1
Regional Location



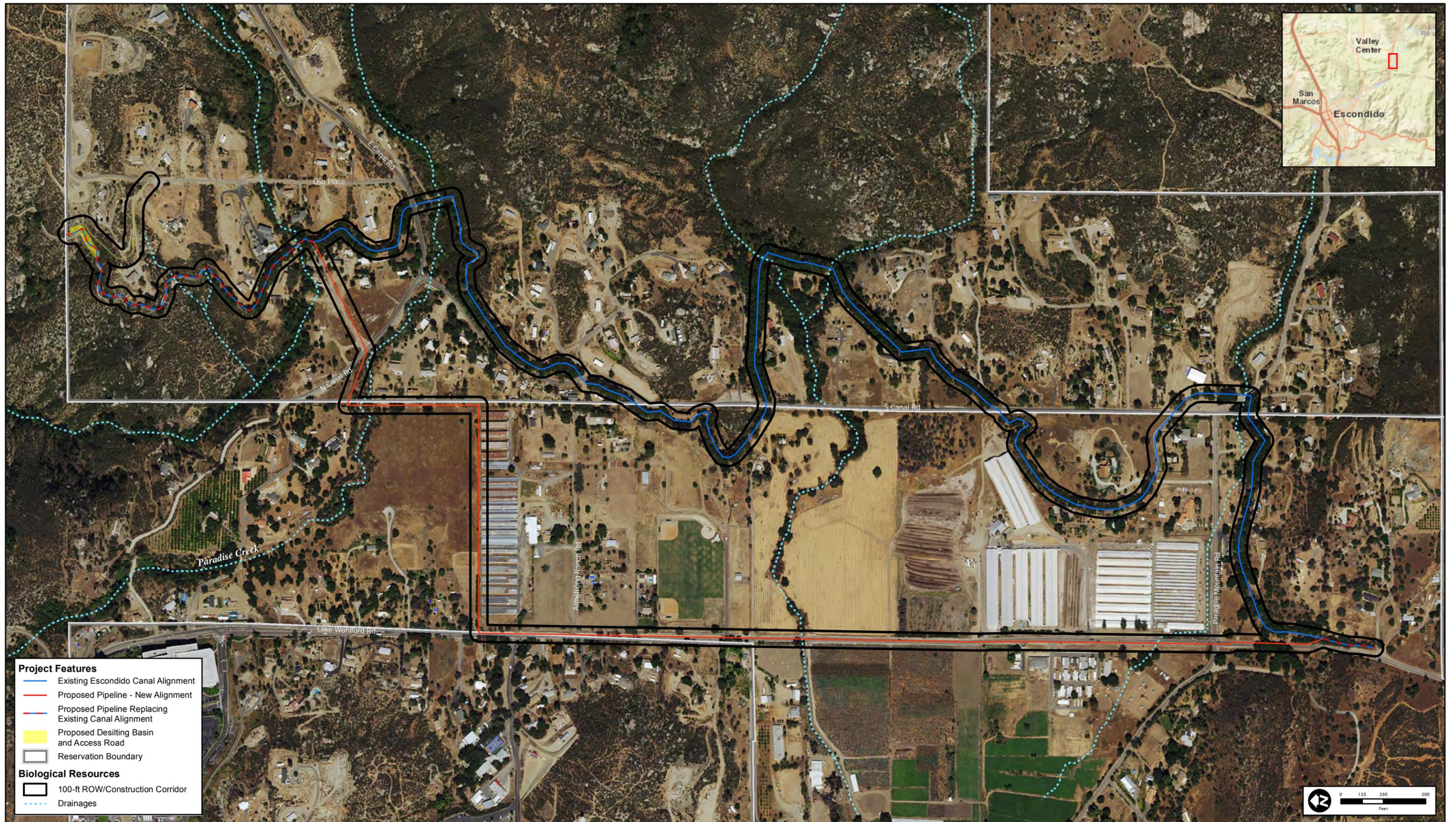


Figure 2
Overview of the Proposed Project
 100049195 2016 San Pasqual Undergrounding Project

The proposed action includes reclamation of the land occupied by the replaced canal by means of demolition, grading, restoration/revegetation, and any associated mitigation of environmental impacts that may be required.

2.2 Project Location

The study area is located on the San Pasqual Reservation and on San Diego County land in the community of Valley Center, approximately 5 miles northeast of Escondido (Figure 1). This location corresponds to Sections 15 and 22 in Township 11 South, Range 1 West of the Rodriguez Mountains U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles.

The study area is located within USGS Hydrological Unit Code 18070303 named San Luis Rey-Escondido watershed (EPA 2014).

3.0 Existing Conditions

The study area currently consists of North Lake Wohlford Road, South Canal Road, an unnamed dirt road, Escondido Canal, San Diego County and San Pasqual Reservation developed and undeveloped land, and San Diego North County Multiple Species Conservation Plan (MSCP) Preserve land (Hellhole Canyon). The Draft North County Plan is a stand-alone habitat conservation program for unincorporated lands under the County of San Diego's jurisdiction in the northwestern part of the county, from the coast eastward to Ramona and the western flanks of Palomar Mountain. It is intended to create a 107,000-acre regional preserve system in northern San Diego County. Included are general measures and recommendations for managing plant communities and specific habitats for over 60 species. Surrounding lands are a combination of residential and agricultural land. Surrounding lands are a combination of residential and agricultural land. This location corresponds to the South Coast Subregion of the California Floristic Province (Baldwin et al 2012).

Habitat occurring within the study area includes coast live oak woodland, southern willow scrub, coastal sage scrub, Engelmann oak woodland, southern mixed chaparral, eucalyptus woodland, non-native grassland, disturbed, agricultural, and ornamental (Oberbauer et al. 2008).

The elevation of the study area is approximately 1,600 to 1,700 feet above mean sea level. Topography in the vicinity of the study area is characterized as uplands and low hills. Local terrain within the study area consists of generally flat to slightly sloping upland.

San Diego County has a Mediterranean climate with cool, wet winters and warm, dry summers. The average total precipitation in Escondido is 14.98 inches. Rainfall is the heaviest between January and March with precipitation ranging 2.64 to 3.43 inches per month. Rain is infrequent during summer months, with precipitation ranging 0.08 – 0.20 inch.

The average annual temperature is approximately 65 degrees Fahrenheit for Escondido. Normal summer temperatures range from 58 to 89 degrees Fahrenheit and winter temperatures range 42 to 74 degrees Fahrenheit.

4.0 Background Information

4.1 Listing and Regulatory

The USFWS listed the LBVI as an endangered species on 2 May 2, 1986 (USFWS 1986). At the time of federal listing, the population had declined to an estimated 300 pairs, with the majority occurring in San Diego County, California. Restoration efforts and brown-headed cowbird (*Molothrus ater*) control have allowed populations to increase; in 1998 the population size was estimated at 2,000 (Kus 2002a). The USFWS adopted a draft recovery plan in 1998, and it was determined that the least Bell's vireo had less than a five percent chance of going extinct over the next 100 years as long as habitat size and quality remains the same or increase and brown-headed cowbird control continues. Critical habitat for the LBVI was designated in six southern California counties on February 2, 1994 (USFWS 1994).

No critical habitat occurs within the study area. The nearest critical habitat to the study area is presented on Figure 3 and is approximately 9 miles north of the study area along the San Luis Rey River.

4.2 Natural History

LBVI is a migratory song bird that breeds in the summer in riparian scrub. LBVI is largely associated with early successional cottonwood-willow and is known to nest in riparian woodlands dominated by willow (Kus et. al. 2010) and Fremont cottonwood (Kus 2002a). Suitable willow woodlands are typically dense with well-defined vegetative strata or layers. The most critical structural component of nesting habitat in California is a dense shrub layer two to ten feet above ground (Goldwasser 1981). LBVI is normally found along drainages or elsewhere near water, including ponded surface water or where moist soil conditions occur (Rosenberg et. al. 1991).

Individuals may forage in woodlands or scrub habitat near suitable nesting habitat, concentrated in lower to mid-canopy, especially when actively nesting (USFWS 1998). Preference has been shown for black willow; however, LBVI also forage in upland vegetation adjacent to riparian corridors particularly late in season. During the winter, LBVI use willow riparian habitat, arroyo scrub vegetation, and hedgerows in coastal drainages (Kus et. al. 2010).

The LBVI arrive in southern California as early as mid-March, begin nesting in early April, and remain on the breeding-grounds into early October before leaving for its wintering grounds in Baja California. Breeding season is March 15 through August 31 and pairs are monogamous during breeding season (Kus 2002b). Historically, reproduction has been severely affected by brown headed cowbird nest parasitism; however, increased trapping of the brown-headed cowbird has led to LBVI breeding success (USFWS 1998).

Both male and female brood nestlings; fledged young may be cared for by both parents, or, if the pair re-nests, primarily by the male. The fledging period lasts at least two weeks, during which time territorial boundaries are relaxed as family groups range over larger areas. Fledglings generally remain in the territory or its vicinity for most of the breeding season. Once territorial boundaries are relaxed near the end of the breeding season and during the post-breeding season molt, the male singing frequency declines substantially making it difficult to detect and locate the bird. LBVI typically begin breeding as first-year adults (Kus 2002a).

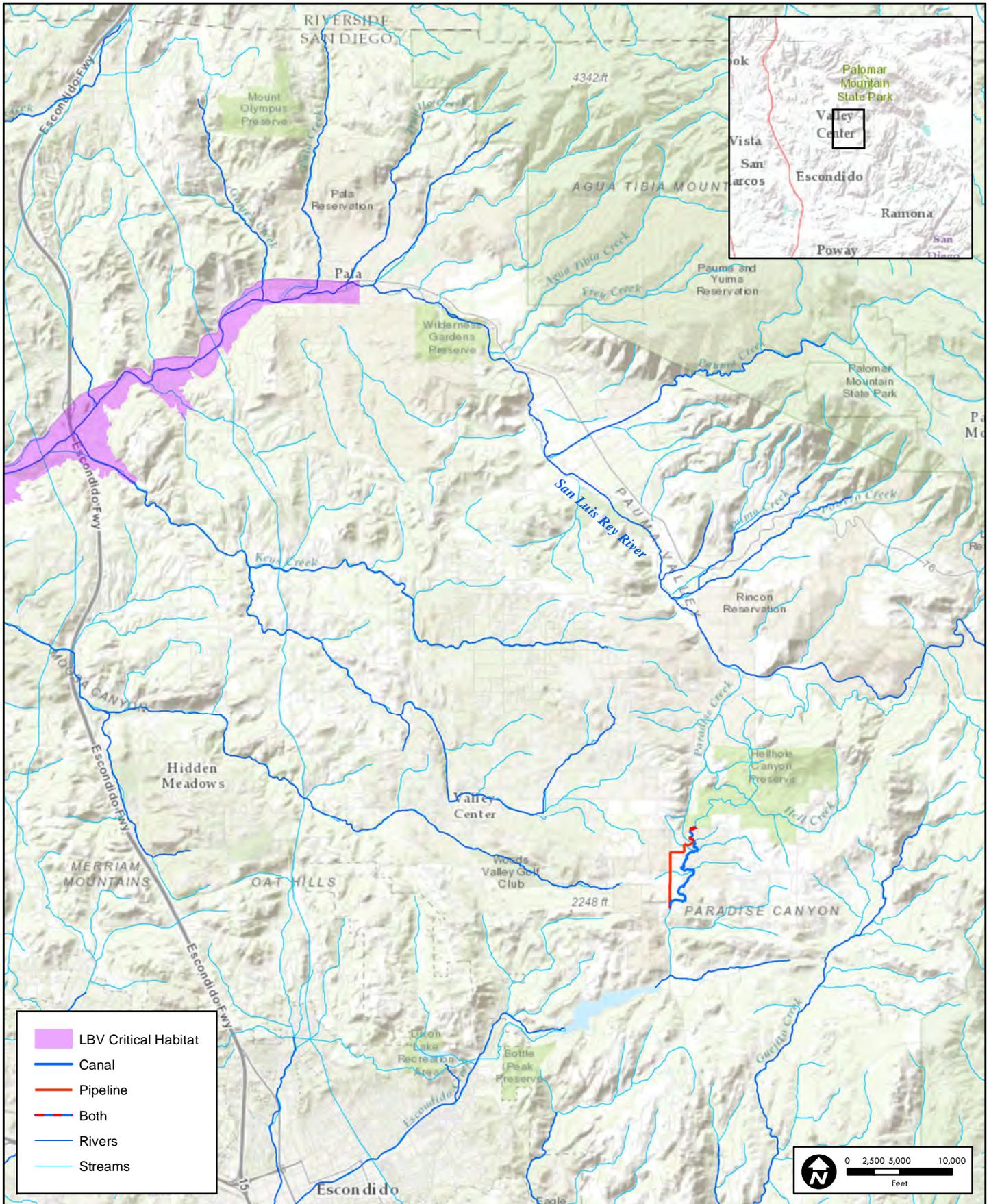


Figure 3
Least Bell's Vireo Critical Habitat

5.0 Methods

The LBVI surveys followed the 2001 USFWS LBVI Survey Guidelines (Appendix A) (USFWS 2001). Prior to surveys, Atkins biologists searched existing literature, websites, USFWS LBVI critical habitat maps (USFWS 1994), CDFW's California Natural Diversity Database (CNDDB) (CDFW 2016), and eBird (eBird 2016) for LBVI observations in or near the study area. Suitable LBVI habitat was evaluated and mapped during initial biological surveys and vegetation mapping in February 2016.

Eight surveys at least ten days apart were conducted within the protocol survey period, April 10 through July 31. Surveys were conducted between dawn and 11:00 a.m. Surveys avoided periods of excessive or abnormal heat, wind, rain, fog, or other inclement weather. Surveys were conducted by slowly walking survey routes through suitable habitat (USFWS 2001).

6.0 Results and Discussion

Habitat investigations were initiated in February 2016, to identify suitable LBVI riparian habitat in the study area. Suitable LBVI habitat in the form of willow dominated riparian habitat was found in three ephemeral drainages in the study area. Suitable LBVI habitat within the study, including a buffer extending 500 feet outside of the study area were surveyed for presence/absence of the LBVI. Figure tiles 1-4 in Appendix A present the survey areas.

Presence/absence surveys were conducted within suitable LBVI habitat by USFWS qualified biologist Melissa Tu and a field technician. Table 1 provides the survey dates and environmental conditions for the eight surveys conducted from April 11 to May 24, 2016.

Survey	Date	Start	Stop	Temperature	Cloud Cover (%)	Wind	Valid
1	4/11/2016	0830	1100	57-61	100-100	0-3	Yes
2	4/21/2016	0830	1030	66-73	25-45	0-3	Yes
3	5/2/2016	0745	1045	57-72	0-30	0-3	Yes
4	5/12/2016	0800	1100	61-75	0-0	0-3	Yes
5	5/24/2016	0830	1100	56-61	80-80	0-3	Yes
6	6/3/16	0830	1100	73-90	0-0	0	Yes
7	6/14/16	0930	1100	69-76	0	0-3	Yes
8	6/24/16	0800	1040	74-82	0	0-3	Yes

No LBVI was observed during the surveys. Table 2 provides a list of birds and other wildlife species observed in the project study area. Two nests were observed in the LBVI survey area, a blue-gray gnatcatcher (*Poliophtila caerulea*) nest and a Hutton's vireo (*Vireo huttoni*) nest. Both nests were located along dry ephemeral drainages six to eight feet high in sparsely leafed willows. Phainopepla (*Phainopepla nitens*), bushtit (*Psaltriparus minimus*), Northern mockingbird (*Mimus polyglottos*), and hooded oriole (*Icterus cucullatus*) family groups were also observed near a dry ephemeral drainage in the LBVI survey area. American crow (*Corvus brachyrhynchos*) and western scrub jay (*Aphelocoma californica*), nest predators, were common in the survey area.

Vegetation Constraints

On October 26, 2003 the Paradise Fire ignited in the Valley Center community of San Diego County, California. In total, the fire burned 56,700 acres. Before the fire's containment on November 6, 2003, 221 residences, 192 outbuildings, two commercial properties, and 75 vehicles were destroyed; ten buildings and five outbuildings were damaged. In addition, there were two civilian fatalities and 24 injuries. Vegetation in the study area has not fully recovered from the fire and regrowth is limited due to the current drought that San Diego is experiencing (CDF 2003).

Although the 2016 water year has experienced more than 100 percent of the annual total for precipitation, the region is experiencing an ongoing and prolonged drought. The lack of natural water resources in the study area has led to slow recovery of vegetation in areas burned by the Paradise Fire.

Table 2 Animal Species Observed	
Scientific Name	Common Name
AMPHIBIANS	
Hylidae <i>Pseudacris hypochondriaca</i>	Treefrogs Baja California chorus frog
REPTILES	
Teiidae <i>Aspidozelis hyperythra beldingi</i>	Whiptails and Racerunners Orange-throated whiptail (SSC)
Phrynosomatidae <i>Sceloporus occidentalis longipes</i> <i>Uta stansburiana elegans</i>	Lizards Great Basin fence lizard California side-blotched lizard
Viperidae <i>Crotalus oreganus helleri</i>	Vipers Southern Pacific rattlesnake
BIRDS	
Ardeidae <i>Bubulcus ibis</i>	Hérons Cattle egret
Accipitridae <i>Accipiter cooperii</i> <i>Buteo jamaicensis</i> <i>Buteo lineatus</i>	Hawks Coopers' hawk red-tailed hawk red-shouldered hawk
Falconidae <i>Falco sparverius</i>	Falcons American kestrel
Cathartidae <i>Cathartes aura</i>	Buzzards Turkey vulture
Apodidae <i>Aeronautes saxatalis</i>	Swallows white-throated swift
Columbidae <i>Streptopelia decaocto</i> <i>Zenaida macroura</i>	Pigeons Eurasian collared dove mourning dove
Corvidae <i>Aphelocoma californica</i> <i>Corvus brachyrhynchos</i> <i>Corvus corax</i>	Jays and Crows western scrub-jay American crow common raven
Bombycillidae <i>Bombycilla cedrorum</i>	Waxwings cedar waxwing
Ptiliogonatidae <i>Phainopepla nitens</i>	Silky Flycatchers Phainopepla
Turdidae <i>Sialia mexicana</i> <i>Turdus migratorius</i>	Thrushes western bluebird American robin

Table 2 Animal Species Observed	
Scientific Name	Common Name
Parulidae <i>Dendroica coronata</i>	New World Warblers yellow-rumped warbler
Cardinalidae <i>Pheucticus melanocephalus</i> <i>Piranga ludoviciana</i>	Cardinals black-headed grosbeak Western tanager
Icteridae <i>Euphagus cyanocephalus</i> <i>Icterus bullockii</i> <i>Icterus cucullatus</i> <i>Molothrus ater</i>	Orioles, Blackbirds, and Cowbirds Brewer's blackbird Bullock's oriole Hooded oriole brown-headed cowbird
Fringillidae <i>Carduelis psaltria</i> <i>Carpodacus mexicanus</i>	Finches lesser goldfinch house finch
Emberizidae <i>Chondestes grammacus</i> <i>Junco hyemalis</i> <i>Melospiza melodia</i> <i>Pipilo crissalis</i> <i>Pipilo maculatus</i> <i>Zonotrichia leucophrys</i>	Passerines lark sparrow dark-eyed junco song sparrow California towhee spotted towhee white-crowned sparrow
Mimidae <i>Mimus polyglottos</i> <i>Toxostoma redivivum</i>	Mockingbirds and Thrashers Northern mockingbird California thrasher
Paridae <i>Baeolophus inornatus</i>	Tits, Chickadees, and Titmice oak titmouse
Sylviidae <i>Chamaea fasciata</i>	Old World Warblers wren
Passeridae <i>Passer domesticus</i>	Old World Sparrows house sparrow*
Poliophtilidae <i>Poliophtila caerulea</i>	Gnatcatchers blue-gray gnatcatcher
Aegithalidae <i>Psaltriparus minimus</i>	Bushtits bushtit
Regulidae <i>Regulus calendula</i>	Kinglets ruby-crowned kinglet
Sittidae <i>Sitta carolinensis</i>	Nuthatches white-breasted nuthatch
Troglodytidae <i>Thryomanes bewickii</i>	Wrens Bewick's wren
Odontophoridae <i>Callipepla californica</i>	Quails California quail
Picidae <i>Colaptes auratus</i> <i>Melanerpes formicivorus</i> <i>Picoides nuttallii</i>	Woodpeckers Northern flicker acorn woodpecker Nuttall's woodpecker
Sturnidae <i>Sturnus vulgaris</i>	Starlings European starling*
Trochilidae <i>Calypte anna</i> <i>Calypte costae</i>	Hummingbirds Anna's hummingbird Costa's hummingbird

Table 2 Animal Species Observed	
Scientific Name	Common Name
Tyrannidae	Tyrant Flycatchers
<i>Myiarchus cinerascens</i>	ash-throated flycatcher
<i>Sayornis nigricans</i>	black phoebe
<i>Sayornis saya</i>	Say's phoebe
<i>Tyrannus verticalis</i>	western kingbird
<i>Tyrannus vociferans</i>	Cassin's kingbird
Vireonidae	Vireos
<i>Vireo huttoni</i>	Hutton's vireo
MAMMALS	
Cervidae	Hoofed
<i>Odocoileus hemionus fuliginata</i>	southern mule deer
Canidae	Dogs
<i>Canis latrans</i>	coyote
Felidae	Cats
<i>Felis rufus</i>	bobcat
Procyonidae	Raccoons
<i>Procyon lotor psora</i>	raccoon
Leporidae	Hares and Rabbits
<i>Sylvilagus audubonii</i>	desert (Audubon) cottontail
Muridae	Mice and Rats
<i>Neotoma sp.</i>	woodrat
Sciuridae	Squirrels
<i>Otospermophilus beecheyi nudipes</i>	California ground squirrel

*Non-native species

7.0 Conclusion and Recommendations

Surveys conducted from April 11 through June 24, 2016 were negative; therefore, there are currently no limitations within the study area for the LBVI. These results are valid for approximately one year. Since results are valid for one year, no further LBVI surveys should be required prior to June 2017. If construction occurs after June 2017, a LBVI presence/absence should be conducted.

Construction also needs to be in compliance with the Migratory Bird Treaty Act (MBTA). A qualified avian nest monitor would need to survey for MBTA protected nests prior to any construction activities conducted during the avian breeding season (most bird species in San Diego are protected by the MBTA). Three surveys seven days prior to construction are recommended prior to construction.

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APPENDIX A
USFWS 2001 Protocol
Least Bell's Vireo Suitable Habitat

USFWS 2001 Protocol



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008



LEAST BELL'S VIREO SURVEY GUIDELINES

JAN 19 2001

The following suggested guidelines are provided to facilitate accurate assessments of the presence/absence of the State and federally endangered least Bell's vireo (*Vireo bellii pusillus*, vireo), to provide the Fish and Wildlife Service with sufficient information to adequately respond to requests for applicable Federal permits and licenses, and to fulfill our mandate to conserve and recover the species. Currently, a recovery permit pursuant to section 10(a)(1)(A) of the Endangered Species Act is not required to conduct presence/absence surveys for the vireo, as long as this protocol is utilized and vocalization tapes are not used. These guidelines include minor modifications to our February 1992 guidelines and provide clarification of what we have been verbally recommending.

1. Under normal circumstances, all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual survey are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly "non vocal" birds of both sexes, and nesting pairs.
2. Although the period from April 10 to July 31 encompasses the period during which most vireo nesting activity occurs, eight surveys are generally sufficient to detect most (if not all) vireo adults in occupied habitats. Precise vireo censuses and estimations of home range likely will not be possible unless surveys are conducted outside of this time window. Although focused surveys conducted in accordance with these guidelines substantially reduce the risk of an unauthorized take* that could potentially occur as a result of land development or other projects, individual project proponents may wish to conduct surveys that are more rigorous than those that would otherwise result from strict adherence to these survey guidelines. If additional information (e.g., extent of occupied habitat, total numbers of adult and juvenile vireos in study area) is desired or necessary, surveys should be extended to August 31 and conducted in such a manner as to collect the data necessary to prepare reports that reflect the methods and standards established in the current scientific literature on this subject. In particular, information collected after July

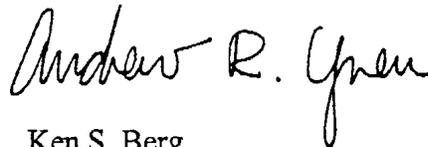
15 will reflect a broader extent to the riparian habitat and other adjacent habitat types that the vireo typically utilizes during the latter phase of the breeding season, especially when the young become independent of the adults.

3. Surveys should be conducted by a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos. These skills are essential to maximize the probability of detecting vireos and to avoid potentially harassing the species in occupied habitats.
4. Surveys should be conducted between dawn and 11:00 a.m. Surveys should not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection.
5. Surveyors should not survey more than 3 linear kilometers or more than 50 hectares of habitat on any given survey day. Although surveyors should generally station themselves in the best possible locations to hear or see vireos, care should be taken not to disturb potential or actual vireo habitats and nests or the habitat of any sensitive or listed riparian species.
6. All vireo detections (e.g., vocalization points, areas used for foraging, etc.) should be recorded and subsequently plotted to estimate the location and extent of habitats utilized. These data should be mapped on the appropriate USGS quadrangle map.
7. Data pertaining to vireo status and distribution (e.g., numbers and locations of paired or unpaired territorial males, ages and sexes of all birds encountered) should be noted and recorded during each survey. In addition, surveyors should look for leg bands on vireo adults and juveniles if, in fact, it is possible to do so without disturbing or harassing the birds. If leg bands or other markers are observed, then surveyors should record and report the detection and associated circumstances to us by telephone, facsimile, or electronic mail as soon as possible. Reports should include the colors and relative locations of any and all bands detected, the age and sex of the marked bird, and the precise location of the detection.
8. The numbers and locations of all brown-headed cowbirds (*Molothrus ater*) detected within vireo territories should be recorded during each survey and subsequently reported to us. In addition, all detections of the State and federally endangered southwestern willow flycatcher (*Empidonax trillii extimus*, flycatcher) and State endangered yellow-billed cuckoo (*Coccyzus americanus*, cuckoo) should be recorded and reported. Any and all cuckoo and flycatcher adults, young, or nests should not be approached, and taped vocalizations of these species should not be used unless authorized in advance by scientific permits to take* issued by us (if appropriate) and the California Department of Fish and Game. Flycatcher presence/absence surveys require a recovery permit issued by us per section 10(a)(1)(A) of the Endangered Species Act.

9. To avoid the potential harassment of vireos, flycatchers, and cuckoos resulting from vireo surveys, other riparian species survey efforts, or multiple surveys within a given riparian habitat patch, detections of these three species should be reported to us as soon possible by telephone, facsimile, or electronic mail.
10. A final report (including maps) should be prepared that depicts survey dates and times and includes descriptions or accounts of the methods, locations, data and information identified in preceding sections.
11. This final report should be provided to us (at the letterhead address) and to the local office of the Department of Fish and Game within 45 calendar days following the completion of the survey effort. Additionally, a summary of all vireo survey efforts conducted during the calendar year should be submitted to each of the above offices by January 31 of the following year.

Should you have data or information to report, or have any questions regarding these survey guidelines, please contact Christine Moen (christine_moen@fws.gov), or Loren Hays (loren_hays@fws.gov) of my staff at (760) 431-9440 (facsimile 760-431-9624), or John Gustafson (jgustafs@hq.dfg.ca.gov) with the Department of Fish and Game at (916) 654-4260 (facsimile 916-653-1019).

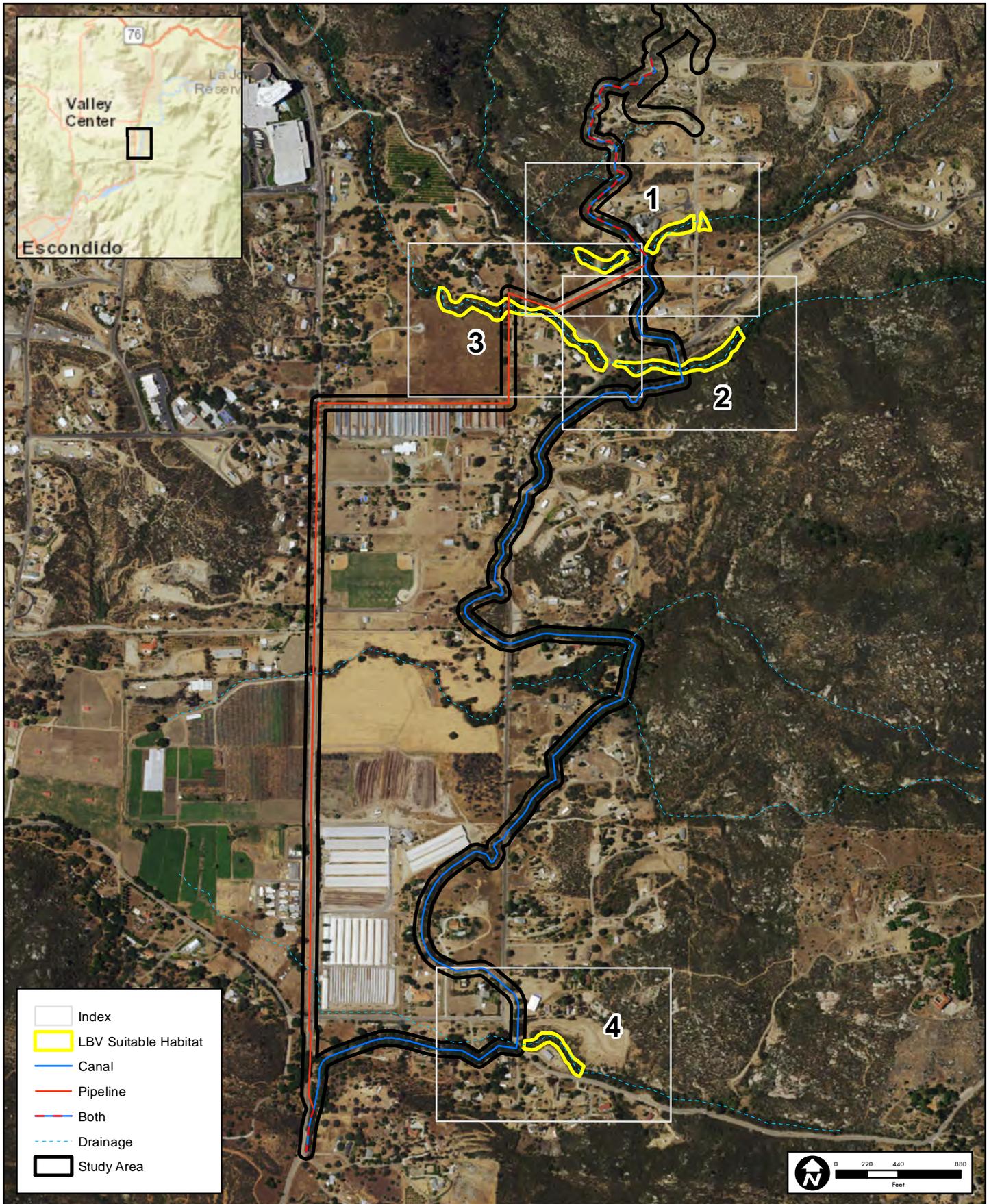
Sincerely,



Ken S. Berg
Acting Field Supervisor

* The term "take," as defined in Section 3, paragraph 18 of the Endangered Species Act of 1973 as amended (Act), means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. "Take" (specifically "harass") is further defined to mean "an act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding, and sheltering" "Take" (specifically "harm") is further defined as an "act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding feeding or sheltering" (50 CFR 17.3). Please be advised that the take of the vireo and other listed species is prohibited by section 9 of the Act unless authorized by permits issued pursuant to section 7 or section 10 to the Act.

Least Bell's Vireo Suitable Habitat





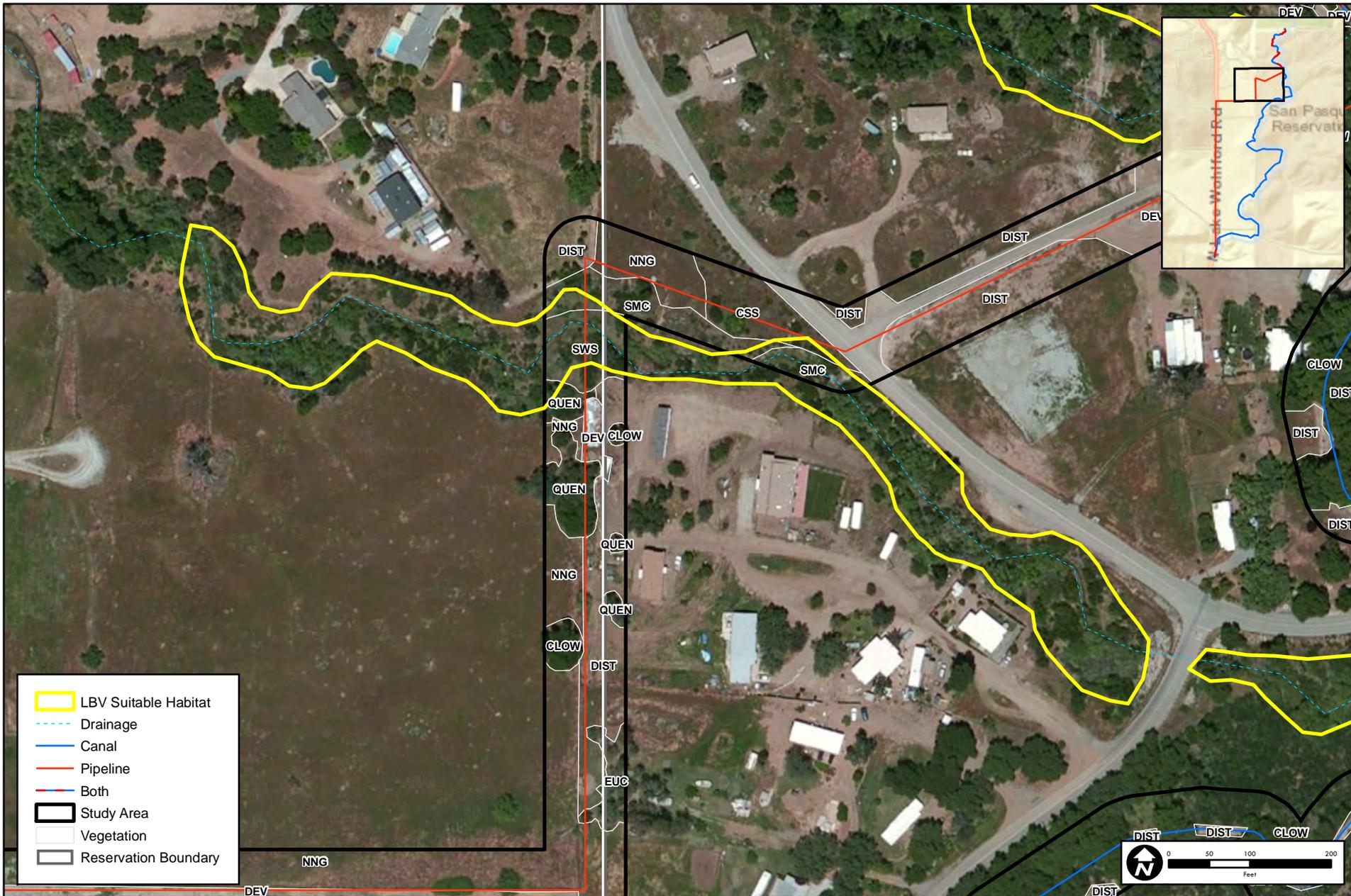


Tile 2
Least Bell's Vireo Suitable Habitat
 100049195 2016 San Pasqual Undergrounding Project



Sources: Esri 2016, Atkins 2016

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Tile 3 Least Bell's Vireo Suitable Habitat

100049195 2016 San Pasqual Undergrounding Project

Sources: Esri 2016, Atkins 2016

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Tile 4
Least Bell's Vireo Suitable Habitat
 100049195 2016 San Pasqual Undergrounding Project



Sources: Esri 2016, Atkins 2016

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