Appendix C

Biological Resources Reports

BIOLOGY IMPACT STUDY
FOR THE PARKLANDS MASTER PLAN
CITY OF VENTURA, CALIFORNIA

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TABLE OF CONTENTS

Page

1.0 PROJECT DESCRIPTION 1

2.0 ENVIRONMENTAL SETTING 1
- 2.1 Vegetation 6
- 2.2 Wildlife 6
- 2.3 Wildlife Movement Corridors 7
- 2.4 Special-Status Plant Species 8
- 2.5 Special-Status Wildlife Species 9

3.0 WETLANDS AND WATERS OF THE U.S. 11
- 3.1 Introduction 11
- 3.2 Methodology 11
- 3.3 Survey Results 12

4.0 IMPACT ANALYSIS 13
- 4.1 Riparian Vegetation Losses 13
- 4.2 Wildlife Impacts 16
- 4.3 Special-Status Species Impacts 16
- 4.4 Wetlands 16
- 4.5 Changes in Habitat Quality 16
- 4.6 Beneficial Impacts 17

5.0 CITY OF VENTURA GENERAL PLAN POLICY CONSISTENCY 18
- 5.1 Policy 1B: Increase the Area of Open Space Protected from Development Impacts 18
- 5.2 Policy 1C: Improve Protection for Native Plants and Animals 18

6.0 MITIGATION MEASURES 20

7.0 REFERENCES 21

TABLES

Table **Page**

1. Definitions of Special-Status Plant Species 8
2. Special-Status Plant Species of the Project Area 8
3. Definitions of Special-Status Wildlife 9
4. Special-Status Wildlife Species of the Project Area 9
5. Summary of Wetlands Delineation 12

TABLE OF CONTENTS (CONTINUED)

FIGURES

Figure **Page**

1. Project Site Map 2
2. Vegetation Map 3
3. Site Photographs (1 of 2) 4
4. Site Photographs (2 of 2) 5

EXHIBITS

Exhibit **Page**

1. Barranca Preserve and Restoration Areas 14
2. Barranca Existing Vegetation Restoration Areas 15

APPENDICES

A Wetland Data Forms

1.0 PROJECT DESCRIPTION

The proposed Parklands Master Plan involves the development of a 66.73 acre site located immediately west of Wells Road and south of Telegraph Road, Ventura, California (see Figure 1). The development would consist of 326 single-family residences, 161 units of multi-family residences and 15,290 gross square feet of retail/commercial. This Biology Impact Study was prepared for submittal to the City of Ventura to facilitate assessment of environmental impacts.

The Master Plan area has been identified by the City as a potential expansion area in the Comprehensive Plan Update 2025. The project proposes to integrate the existing riparian corridor (Brown Barranca) into the project design to create a linear park in the northeast portion of the Master Plan area. Most of Brown Barranca would be preserved in its existing condition, while the downstream portion would be channelized into an underground reinforced concrete box culvert. Areas above the underground box culvert would be restored as a local storm drain to mimic a natural streambed (see Figure 1). The remainder of the Master Plan area is cultivated with row crops, which would be converted to residential uses in several phases.

2.0 ENVIRONMENTAL SETTING

The Master Plan area is relatively level and is located in the western portion of the Santa Clara River Valley. Brown Barranca is an intermittent drainage located within the northeast portion of the Master Plan area, with approximately 1,660 feet of the Barranca within the Master Plan area. Approximately 1,600 linear feet of Brown Barranca within the Master Plan area supports native riparian vegetation. Approximately 290 linear feet of this reach has been fortified on the north bank with concreted rock rip-rap, where the Barranca then drains into a concrete box culvert beneath Blackburn Road. Downstream of the Master Plan area, Brown Barranca is channelized into a concrete trapezoidal channel. Brown Barranca originates from Long Canyon, a 1,000-acre (approximate) sub-watershed that drains the south facing slopes above Ventura. Approximately 1 mile downstream of the Master Plan area, Brown Barranca drains into the Santa Clara River, which then drains to the Pacific Ocean.

A field survey of the Master Plan area was conducted on November 8, 2005 to document the biological resources of the Master Plan area. Due to the majority of the Master Plan area having been converted for agricultural uses, the field survey focused specifically on Brown Barranca. A separate wetland delineation survey was conducted on November 16, 2005. In addition to field surveys, literature research was conducted to determine the potential for sensitive plant and wildlife species to occur within the Master Plan area.

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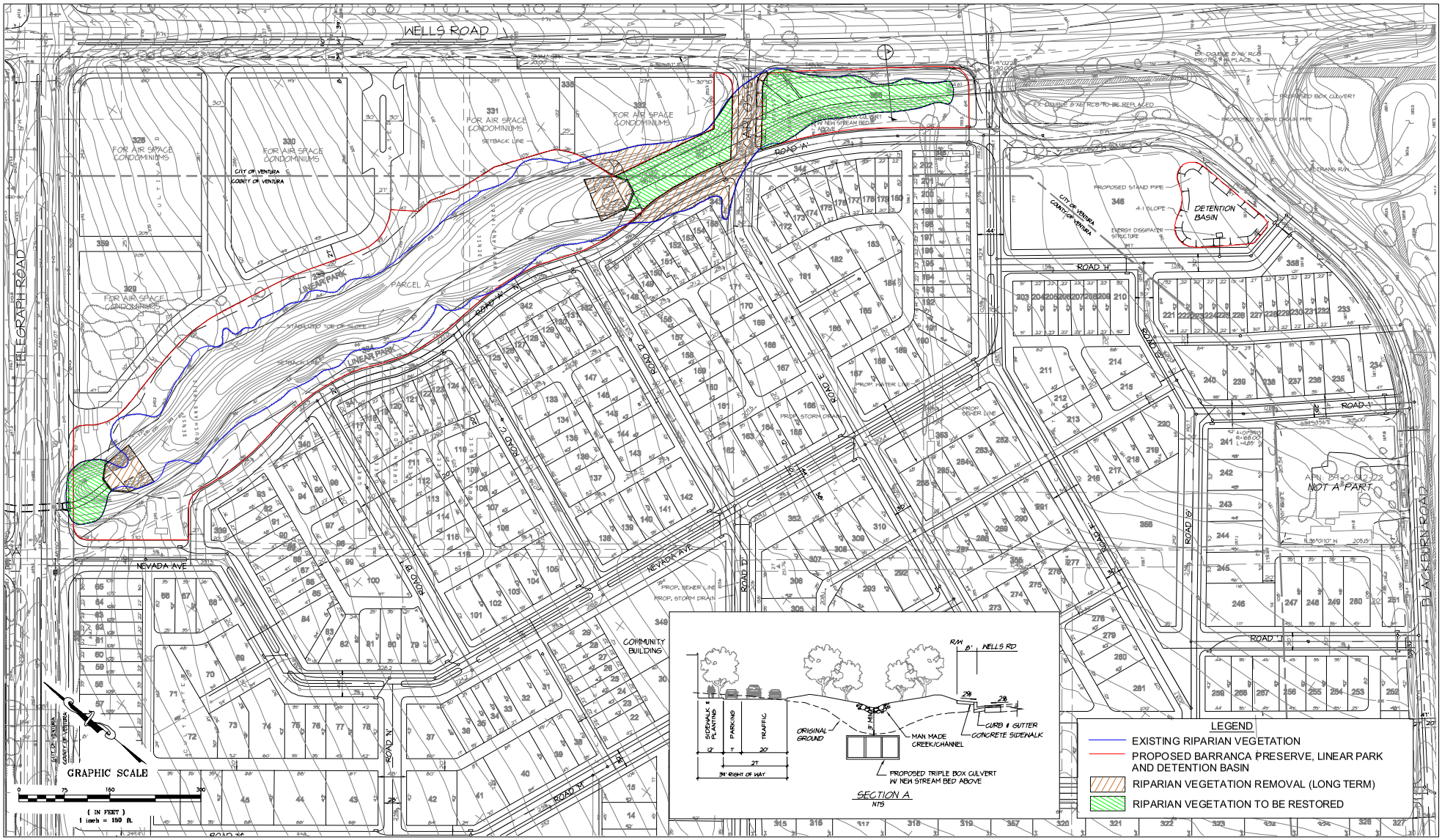

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PROJECT SITE MAP
FIGURE 1

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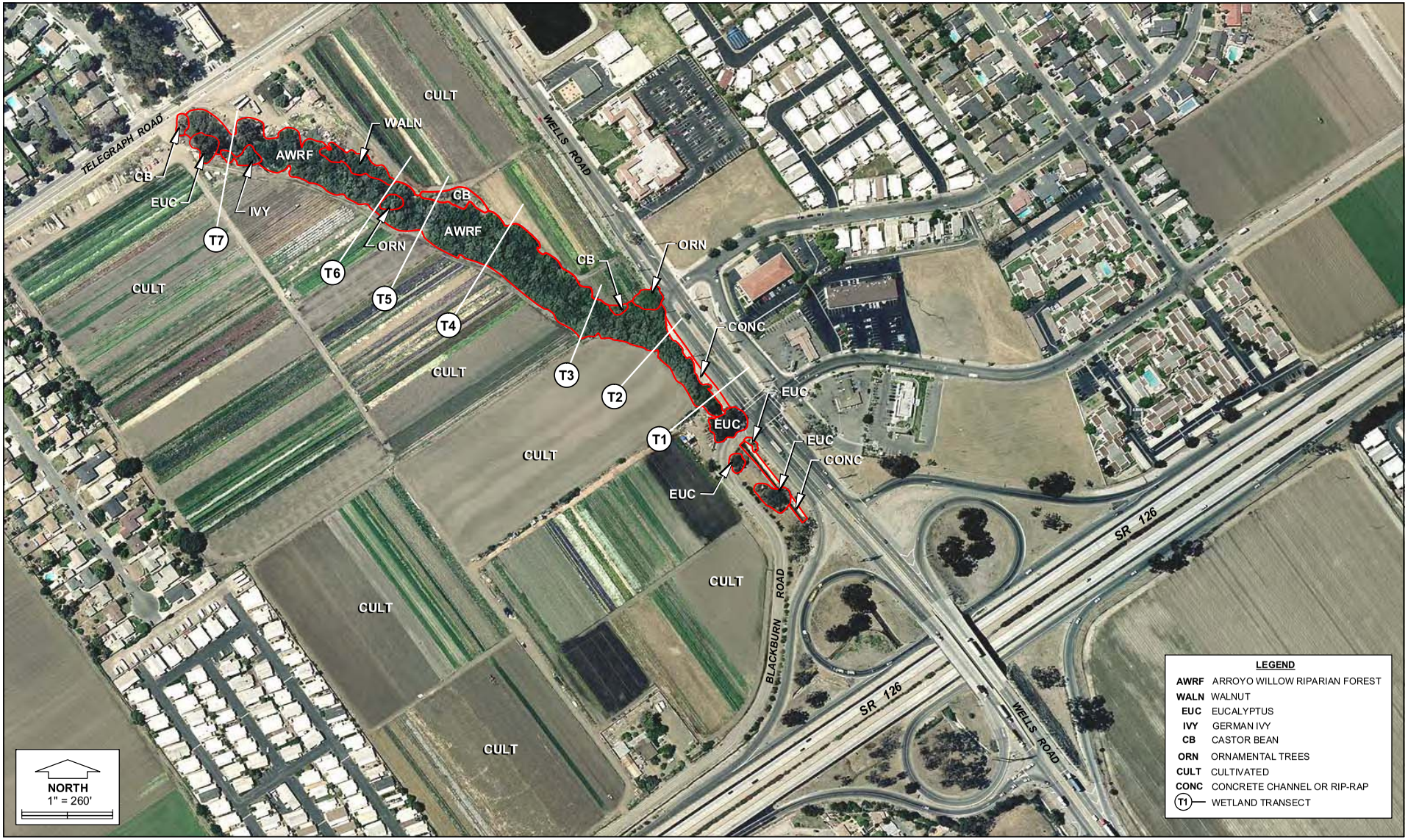

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Westwood Communities Parklands Development

VEGETATION MAP
FIGURE 2

Figure 3a. View of Brown Barranca and concreted rock rip-rap bank along Wells Road, immediately upstream of the Blackburn Road box culvert. Photograph is toward the northwest.

Figure 3b. View of Brown Barranca channel within arroyo willow riparian forest. Photograph is toward the west.

FIGURE 3
SITE PHOTOGRAPHS (1 of 2)

Figure 4a. View of agricultural field along north bank of Brown Barranca. Photograph is toward the west.

Figure 4b. View of Brown Barranca from Telegraph Road arched culvert outlet. Photograph is toward the east.

FIGURE 4
SITE PHOTOGRAPHS (2 of 2)

2.1 VEGETATION

The majority of the Master Plan area supports agricultural crops and does not support native vegetation. However, the portion of the Master Plan area within or directly adjacent to Brown Barranca does support native riparian vegetation, which is mainly composed of a dense overstory dominated by arroyo willow (*Salix lasiolepis*) (see Figure 2). California black walnut (*Juglans californica*) is also present at an upland location within the Master Plan area. Understory vegetation includes poison oak (*Toxicodendron diversilobum*), broad-leaved cattail (*Typha latifolia*), mulefat (*Baccharis salicifolia*), willow weed (*Polygonum lapathifolium*), and big saltbush (*Atriplex lentiformis*). Riparian vegetation within the Master Plan area is an isolated fragment as Brown Barranca has been converted to a linear park with eucalyptus plantings north of Telegraph Road, and is a concrete-lined culvert downstream of Blackburn Road.

Non-native vegetation within the Master Plan area includes blue gum trees (*Eucalyptus globulus*), castor bean (*Ricinus communis*), rabbit's foot grass (*Polypogon monspeliensis*), smilo grass (*Piptatherum miliaceum*), tree tobacco (*Nicotiana glauca*), garden nasturtium (*Tropaeolum majus*), German ivy (*Delairea odorata*), fan palm (*Washingtonia* sp.), summer mustard (*Hirschfeldia incana*) and garden blackberry (*Rubus ulmifolius*).

2.2 WILDLIFE

The riparian corridor of Brown Barranca may be considered suitable foraging habitat for riparian-dependent wildlife species. However, riparian vegetation within the Master Plan area consists of a small fragment surrounded by development and row crops. Many riparian-dependent species depend on upland foraging areas adjacent to riparian nesting areas, which is absent from the Master Plan area.

The dense willow overstory throughout the Barranca may provide nesting locations, refugia, and suitable foraging habitat for birds, mammals, reptiles and amphibians. Due to the intermittent flow regime of Brown Barranca and presence of instream barriers (concrete-lined channel for portions of the Barranca downstream of the Master Plan area, and at least two low-flow channel waterfalls with heights of at least 3 feet within the Master Plan area), the occurrence of fish species is unlikely.

Stream flow within Brown Barranca is highly intermittent and limited to short periods following storm events. However, run-off from adjacent irrigated agricultural fields and discharge from urban storm drains provide limited surface water during the dry season. No fish were observed in Brown Barranca during the field survey. However, western mosquitofish (*Gambusia affinis*) may occur as a result of planting for mosquito control.

No reptiles or amphibians were observed within the Master Plan area, but species common to the area may occur here, including pacific tree frog (*Hyla regilla*), western fence lizard (*Sceloporus occidentalis longipes*), side-blotched lizard (*Uta stansburiana elegans*), gopher snake (*Pituophis melanoleucus*), garter snake (*Thamnophis sirtalis*), Pacific rattlesnake (*Crotalus viridus helleri*), and common kingsnake (*Lampropeltis getulus*).

Birds observed during the November 2005 survey included yellow-rumped warbler (*Dendroica auduboni*), bushtit (*Psaltriparus minimus*), song sparrow (*Melospiza melodia cooperii*), mourning dove (*Zenaidura macroura*), American kestrel (*Falco sparverius*), Anna's hummingbird (*Calypte anna*), scrub jay (*Aphelocoma coerulescens*), and Bewick's wren (*Thryomanes bewickii*) mainly within the riparian corridor, and killdeer (*Charadrius vociferous*), red-winged blackbird (*Agelaius phoeniceus*), and American crow (*Corvus brachyrhynchos*) mainly in adjacent cultivated fields. Other bird species common to riparian corridors may occur in Brown Barranca including (but not limited to) black phoebe (*Sayornis nigricans*), California towhee (*Pipilo crissalis*), common yellowthroat (*Geothlypis trichas*), Cooper's hawk (*Accipiter cooperi*), Pacific-slope flycatcher (*Empidonax difficilis*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and Say's phoebe (*Sayornis saya*).

Due to the timing of the survey during November, no bird nesting activity was observed. Trees within the Master Plan area suitable for raptor nests were surveyed for inactive nests using binoculars, but none were found.

Mammals (by observation of tracks, scat, and/or nests) included raccoon (*Procyon lotor*), black rat (*Rattus rattus*), gray fox (*Urocyon cinereoargenteus*), domestic cat (*Felis catus*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and dusky-footed woodrat (*Neotoma fuscipes macrotis*).

2.3 WILDLIFE MOVEMENT CORRIDORS

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local such as between foraging and nesting or denning areas, or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. Habitat linkages provide cover and forage sufficient for temporary habitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional ecology of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

Brown Barranca was evaluated to determine whether it provides a suitable wildlife migration corridor between the Santa Clara River Valley and the largely undeveloped areas to the north within Long Canyon and adjacent sub-watersheds. Concrete arched and box culverts beneath road crossings at the up- and downstream ends of the subject reach of Brown Barranca would provide access for wildlife traversing the Master Plan area. However, the concrete-lined trapezoidal channel downstream of the Master Plan area extends for about 1,000 feet through the SR 126/Wells Road interchange. The lack of cover and difficult access associated with steep concrete banks may discourage use of Brown Barranca by wildlife moving between the Santa Clara River and Long Canyon. In addition, dense growth of willows within the Master Plan area limits passage by larger mammals. Therefore, Brown Barranca is not considered an important wildlife movement corridor.

2.4 SPECIAL-STATUS PLANT SPECIES

Special-status plant species are either listed as endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies, professional organizations (California Native Plant Society [CNPS]), and the scientific community. For the purposes of this project, special-status plant species are defined in Table 1.

The literature search and field surveys conducted for this impact analysis indicates that 5 special-status plant species have the potential to occur within the Master Plan area (see Table 2). Each of these species has been designated as List 4 by CNPS, meaning they have a limited distribution, but are not rare or declining.

Table 1. Definitions of Special-Status Plant Species

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 70, No. 90, pp. 24870-24934, May 11, 2005).
- Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines,* Section 15380).
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in CNPS, 2001).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in CNPS, 2001).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies or jurisdictions.
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range

Table 2. Special-Status Plant Species Reported in the Vicinity of the Project Site

Common Name (*Scientific Name*)	Status	Occurrence at the Project Site
Plummer's baccharis (*Baccharis plummerae ssp. plummerae*)	List 4	Not found during field surveys
Round-leaved boykinia (*Boykinia rotundifolia*)	List 4	Not found during field surveys
Ocellated Humboldt lily (*Lilium humboldtii ssp. ocellatum*)	List 4	Not found during field surveys
Fish's milkwort (*Polygala cornuta var. fishiae*)	List 4	Not found during field surveys
Southern California black walnut (*Juglans californica* var. *californica*)	List 4	Present within Brown Barranca

Only one species, southern California black walnut, was observed within the Master Plan area during the November 2005 survey. Plummer's baccharis is known to occur in Hall Canyon, approximately 6 miles to the northwest. Round-leaved boykinia, ocellated Humboldt lily and Fish's milkwort have not been found within 5 miles of the Master Plan area, but may be found in riparian corridors throughout the region.

2.5 SPECIAL-STATUS WILDLIFE SPECIES

For the purposes of this project, special-status wildlife species are defined in Table 3. Literature research and field surveys conducted for this impact analysis indicates that 23 special-status wildlife species may occur in the project vicinity. Information regarding regulatory status for each species and likelihood of occurrence within the Master Plan area is provided in Table 4.

Table 3. Definitions of Special-Status Wildlife Species

Special-Status Wildlife Species
➢ Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species). ➢ Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 70, No. 90, pp. 24870-24934, May 11, 2005). ➢ Animals that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). ➢ Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). ➢ Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals). ➢ Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]). ➢ Marine mammals protected under the Marine Mammal Protection Act (Public Law 103-238).

Table 4. Special-Status Wildlife Species Reported in the Vicinity of the Project Site

Common Name (*Scientific Name*)	Status	Likelihood of Occurrence within the Master Plan area
Fish		
Southern steelhead (*Oncorhynchus mykiss irideus*)	FE, CSC	None, reported from the Santa Clara River (NDDB 2005) but barriers exist downstream of the Master Plan area that would preclude access to Brown Barranca.
Santa Ana sucker (*Catostomus santaanae*)	FT, CSC	None, reported from the Santa Clara River (NDDB 2005) but barriers exist downstream of the Master Plan area that would preclude access to Brown Barranca.
Arroyo chub (*Gila orcuttii*)	CSC	None-Low, reported from the Santa Clara River (NDDB 2005) but surface water is rare within the Master Plan area.
Reptiles		
Southwestern pond turtle (*Actinemys marmorata pallida*)	CSC, P	None-Low, surface water is rare, no suitable pool habitat.
Two-striped garter snake (*Thamnophis hammondi*)	CSC, P	None-Low, prey base (small fish and amphibian larvae) is rare or absent.
San Diego mountain kingsnake (*Lampropeltis zonata pulchra*)	CSC	None-Low, prey base (lizards, snakes, bird eggs) is rare or absent due to surrounding development.

Table 4. Continued

Common Name (*Scientific Name*)	Status	Likelihood of Occurrence within the Master Plan area
Birds		
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FC, SE	None, rarely reported from the Santa Clara River (NDDB 2005), habitat within Master Plan area is not suitable.
Least Bell's vireo (*Vireo belli pusillus*)	FE, SE	None-Low, reported nesting in the Santa Clara River (NDDB 2005) in riparian habitats. Habitat within Master Plan area is too small, fragmented and lacks upland foraging areas.
Southwestern willow flycatcher (*Empidonax trailii extimus*)	SE, FE	None, rarely reported from the Santa Clara River (NDDB 2005), habitat within Master Plan area is not suitable.
Cooper's hawk (*Accipiter cooperi*)	CSC	Low-Moderate, common in the region (Ventura Audubon Society, 2003). May forage within Brown Barranca, no suitable nesting habitat.
Ferruginous hawk (*Buteo regalis*)	CSC	Low, an uncommon migrant (Ventura Audubon Society, 2003). Unlikely to forage within Brown Barranca.
Sharp-shinned hawk (*Accipiter striatus*)	CSC	Low, an uncommon migrant (Ventura Audubon Society, 2003). Unlikely to forage within Brown Barranca.
Northern harrier (*Circus cyaneus*)	CSC	Low, an uncommon migrant (Ventura Audubon Society, 2003). Unlikely to forage within Brown Barranca.
Golden eagle (*Aquila chrysaetos*)	CSC	Low, an uncommon migrant (Ventura Audubon Society, 2003). Unlikely to forage within Brown Barranca.
White-tailed kite (*Elanus caeruleus*)	SA, P	Low, uncommon in the region (Ventura Audubon Society, 2003). No suitable nesting habitat within the Master Plan area.
Prairie falcon (*Falco mexicanus*)	CSC	None-Low, rare in the region (Ventura Audubon Society, 2003). No suitable nesting habitat within the Master Plan area.
Long-eared owl (*Asio otus*)	CSC	None-Low, very rare in the region (Ventura Audubon Society, 2003). No suitable nesting habitat within the Master Plan area.
Yellow warbler (*Dendroica petechia brewsteri*)	CSC	Moderate, reported from the Santa Clara River, riparian vegetation within Master Plan area is considered marginal habitat as it is small, isolated and lacks upland foraging areas.
Yellow-breasted chat (*Icteria virens*)	CSC	Moderate-Low, uncommon in the region (Ventura Audubon Society, 2003). Riparian vegetation within Master Plan area is considered marginal habitat as it is small, isolated and lacks upland foraging areas.
Mammals		
Pallid bat (*Antrozous pallidus*)	CSC	None-Low, no roosting habitat (caves, crevices, buildings) present within Master Plan area. Prey base (large insects) limited by cultivation, unlikely to forage within Master Plan area.
California mastiff bat (*Eumops perotis californicus*)	CSC	None-Low, no roosting habitat (crevices) present within Master Plan area. Prey base (night-flying bees and wasps) limited by cultivation, unlikely to forage within Master Plan area.
Pale big-eared bat (*Plecotus townsendii pallescens*)	CSC	None-Low, no roosting habitat (caves, mines, buildings) present within Master Plan area. Prey base (small moths and beetles) limited by cultivation, unlikely to forage within Master Plan area.
Ringtail (*Bassariscus astutus octavus*)	P	Low, no documented sightings in the project area, but may forage in Brown Barranca.

Status Codes:
- FE Federal Endangered (USFWS)
- FT Federal Threatened (USFWS)
- FC Federal Candidate (USFWS)
- SE State Endangered (CDFG)
- CSC California Species of Special Concern (CDFG)
- P Protected under California Fish and Game Code
- SA Special animal (CDFG)

No special-status wildlife species were observed within the Master Plan area during the November 2005 survey. As listed in Table 4 above, species with at least a moderate likelihood to occur within the Master Plan area include Cooper's hawk, yellow warbler and yellow-breasted chat, due primarily to the presence of riparian woodland within Brown Barranca. A field survey during the breeding season (March-August) would be required to fully determine the status of these birds species at the project site.

3.0 WETLANDS AND WATERS OF THE U.S.

3.1 INTRODUCTION

The U.S. Army Corps of Engineers (Corps) has jurisdiction over waters of the United States (U.S.). The limit of jurisdiction in non-tidal waters extends to the ordinary high water mark and include all adjacent wetlands. Waters of the U.S. are defined as:

> "All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; including all interstate waters including interstate wetlands, all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce."

The Corps and U.S. Environmental Protection Agency define wetlands as:

> "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

3.2 METHODOLOGY

A preliminary wetland delineation was conducted to determine the area of jurisdiction of the Corps under Section 404 of the Clean Water Act. The delineation was performed in accordance with the routine procedures for areas greater than 5 acres detailed in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987). Wetlands subject to the Clean Water Act (jurisdictional wetlands) were determined to be present if evidence of all three Federal criteria were observed (hydrophytic vegetation, hydric soils, and wetland hydrology). Wetlands under the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) definition were determined to be present if one of the wetland criteria was evident.

Federal Jurisdiction Determination. The limit of Corps jurisdiction in non-tidal waters extends to the ordinary high water mark and includes all adjacent wetlands. The ordinary high water (OHW) mark was established along the banks of Brown Barranca within the Master Plan area, using drift lines and bank shelving patterns. Drift lines (organic materials deposited along the banks) are direct evidence of the highest water elevation of the most recent rain year. Bank shelving patterns (eroded benches) indicate long-term patterns in high water elevation. The width of waters of the U.S. (distance between OHW marks) was measured and wetlands data (vegetation, hydrology and soils) collected at 7 transect locations.

Hydrophytic Vegetation. The predominance of hydrophytic (water-loving) vegetation was established by identifying dominant species within a 30-foot radius circle (sample plot) at each of the transects and determining the hydrophytic class (i.e., facultative, facultative-wetland or obligate wetland species) listed in Reed (1988).

Hydric Soils. Soil pits were excavated at each of the 7 transect locations within the Master Plan area. Additional soil pits were excavated as needed to estimate the width of hydric soils at each transect. Soils of Brown Barranca have been mapped as Gullied Land (Edwards et al., 1970). This soil type is not considered hydric by the Natural Resources Conservation Service (1992).

Wetland Hydrology. Observations were conducted at each transect and sample plot to identify evidence of inundation or soil saturation, such as drift lines, sediment deposits, drainage patterns and oxidized roots.

Wetland Determination. Based on field observations, it is unclear if Brown Barranca is inundated for a sufficient duration (at least 5 percent of the growing season) to meet the wetland hydrology criterion of the Corps of Engineers Wetland Delineation Manual.

3.3 SURVEY RESULTS

Federal Jurisdictional Determination. A summary of the wetlands delineation is provided in Table 5. Approximately 0.99 acres) of waters of the U.S. occur within the master Plan area. Wetland data forms are provided as Appendix A.

Federal Wetland Determination. Jurisdictional wetlands were found in a portion of Brown Barranca, generally in areas affected by agricultural run-off. The area of jurisdictional wetlands is based on the area where wetland hydrology, hydric soils and hydrophytic vegetation co-occur. Approximately 0.11 acres of Corps-defined wetlands occurs in Brown Barranca (see Table 5).

CDFG Wetland Determination. The extent of CDFG-defined wetlands within the Master Plan area is based on the area that encompasses any of the three wetland criteria (hydrophytic vegetation, hydric soils, wetland hydrology). For the proposed project, this area is composed of the area exhibiting hydrophytic vegetation. Approximately 4.14 acres of CDFG-defined wetlands occurs in Brown Barranca (see Table 5).

Table 5. Summary of Wetlands Delineation

Transect no.	Length of Streambed (ft)	Jurisdictional Width (ft)	Hydrophytic Vegetation Width (ft)	Hydric Soil Width (ft)	Area of Corps Wetlands (ac)	Area of CDFG Wetlands (ac)
1	280	35	38	0	0.00	0.24
2	150	20	135	0	0.00	0.47
3	145	20	145	0	0.00	0.48
4	280	26	105	12	0.08	0.68
5	220	30	135	6	0.03	0.68
6	335	26	125	0	0.00	0.96
7	250	20	110	0	0.00	0.63
Total	1,660				0.11	4.14

4.0 IMPACT ANALYSIS

As stated above, the project proposes to construct a 67-acre housing development, which integrates Brown Barranca into the landscape architecture of the development. As such, approximately 860 linear feet of Brown Barranca and much of its riparian woodland corridor would be preserved in its existing condition. The remainder of Brown Barranca (totaling approximately 725 linear feet) would be modified by the construction of underground reinforced concrete culverts upstream and downstream of the preserved portion of the Barranca, and subsequent placement of fill on top of the culverts and creation of a landscaped streambed.

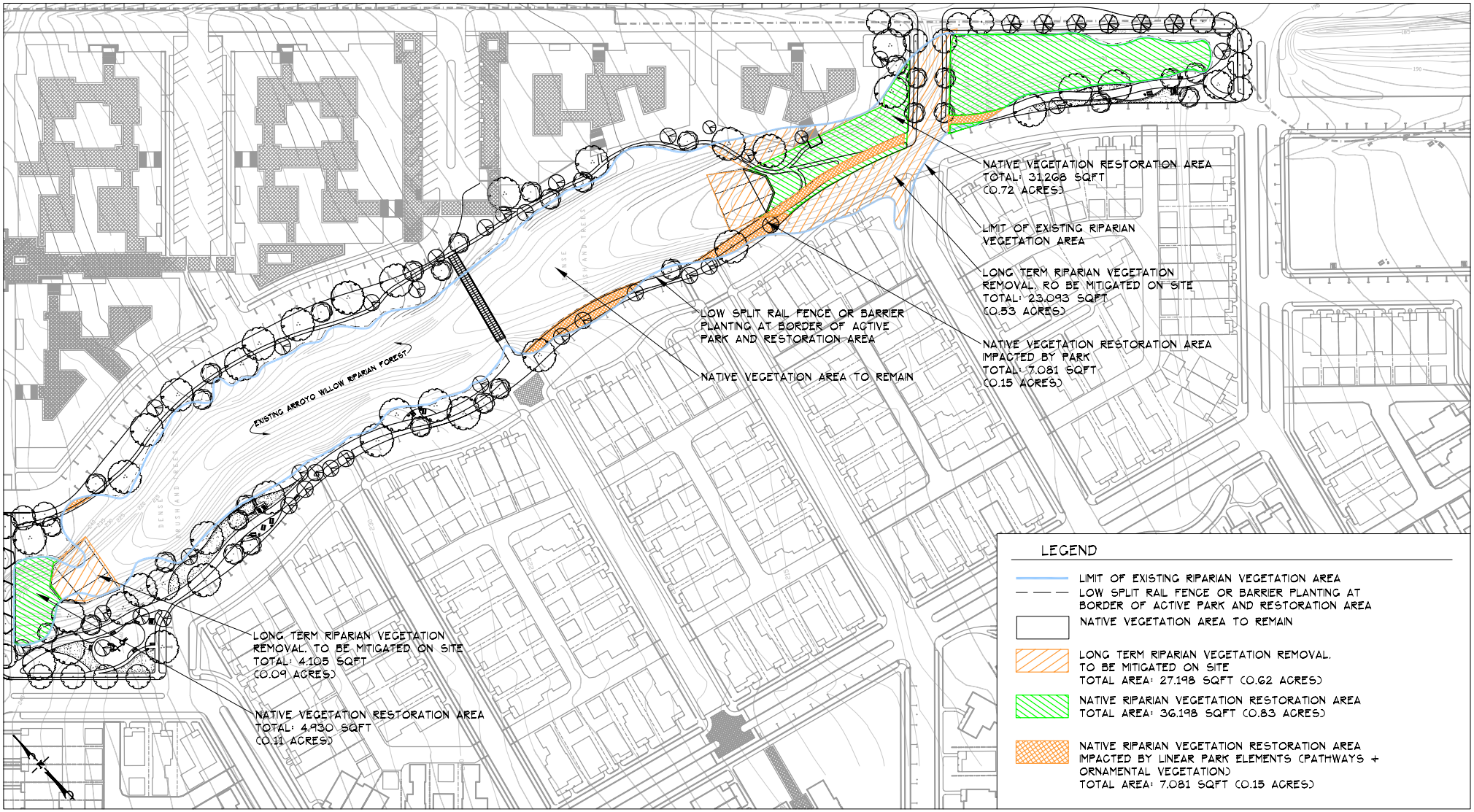
Based on recent hydraulic modeling, the new culverts are necessary to increase storm flow capacity (especially near the Wells Road/Blackburn Road intersection) which would reduce the potential for overbank flow of Brown Barranca and flood damage to proposed residential land uses at the project site and existing land uses south and west of the Blackburn Road/Wells Road intersection.

4.1 RIPARIAN VEGETATION LOSS

Temporary. Approximately 0.83 acres of riparian vegetation would be removed as part of culvert installation and other proposed improvements (see green fill pattern in Exhibit 1). However, this area would be revegetated with native riparian species to form a nature preserve. Barrier plantings and split-rail fencing would be used to separate this restoration area from the adjacent linear park. The restoration area would be off-limits for active recreation, and may include an unpaved foot path with interpretative signage. In addition, approximately 0.03 acres of riparian vegetation would be adversely affected by the proposed foot bridge over Brown Barranca, as a result of canopy trimming to maintain access over the free span bridge. Native vegetation would remain under the bridge.

Permanent. At the upstream end of the Master Plan area, the existing concrete arched culvert beneath Telegraph Road would be extended downstream by approximately 75 feet. At its outlet, a reinforced concrete headwall, a concreted rock rip-rap apron (15 linear feet), and approximately 50 linear feet of concreted rock rip-rap banks would be constructed to prevent scouring during storm events. Downstream of the proposed entrance road crossing (Carlos Street, see Figure 1), the Barranca would be converted into an underground triple box culvert for approximately 725 linear feet. At its inlet, a reinforced concrete headwall, a concreted rock rip-rap apron (15 linear feet), and approximately 50 linear feet of concreted rock rip-rap banks would be constructed to prevent scouring during storm events. In addition, riparian vegetation would be permanently displaced by roadways, bike path and associated project components. Overall, approximately 0.77 acres of riparian vegetation would be permanently removed (see both orange fill patterns in Exhibit 1). Although not shown on Exhibit 1, a small area of riparian vegetation (less than 0.005 acres) would be permanently displaced by the abutments for the proposed foot bridge over Brown Barranca.

Permanent loss of riparian vegetation would be partially offset through enhancement of remaining riparian vegetation, which would include removal of non-native plant species (including castor bean, German ivy, eucalyptus and ornamentals) and replanting with native riparian species. In addition, the proposed detention basin would be managed to maintain native wetland and riparian plant species. As shown in Exhibit 2, approximately 1.60 acres of riparian vegetation loss would be partially offset through restoration, enhancement and creation of 1.39 acres of native riparian and wetland vegetation.



BARRANCA PRESERVE AND RESTORATION AREAS

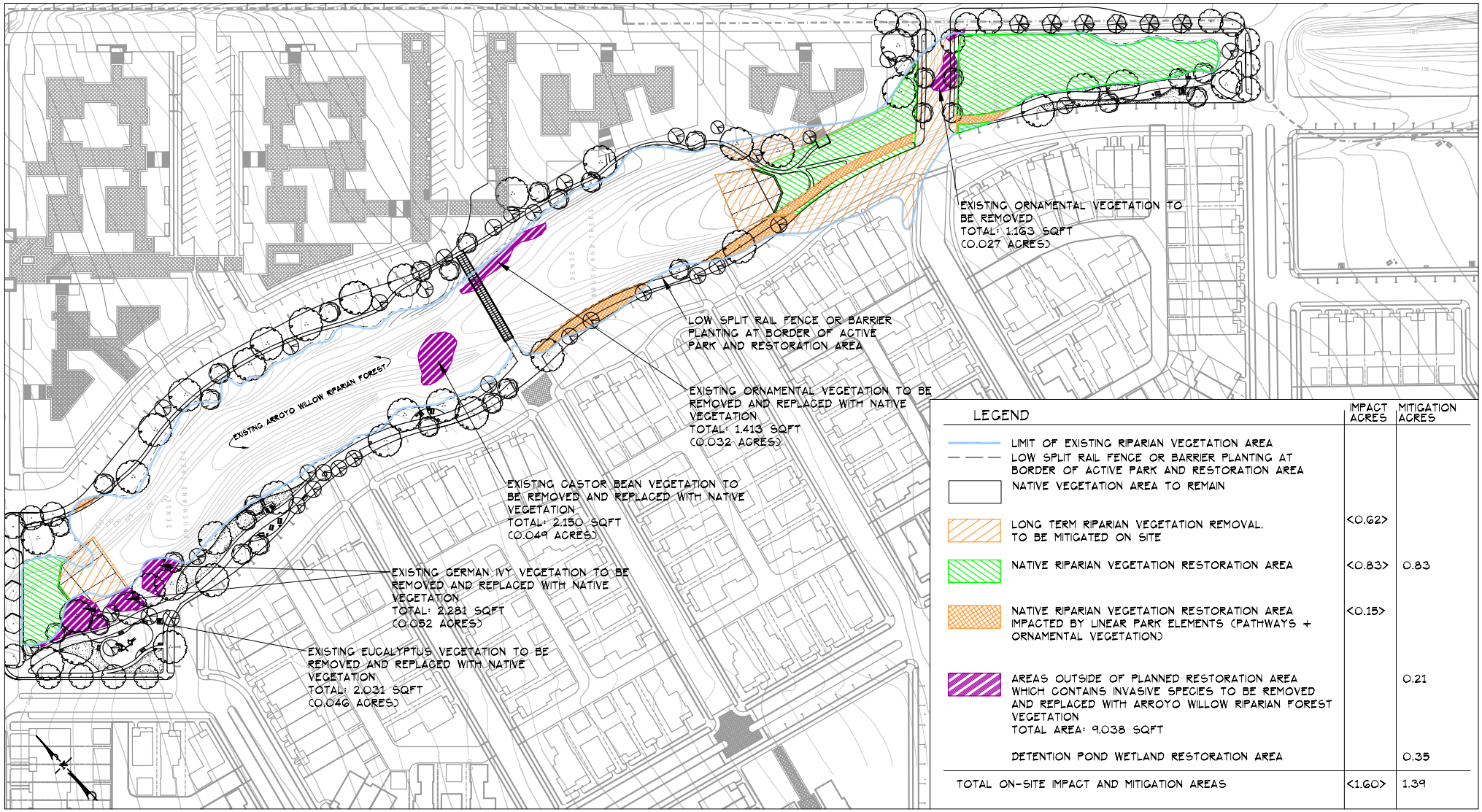
SCALE: 1"=60'-0"

0 60 120 180

THE OFFICE OF
KATIE O'REILLY ROGERS
INC
LANDSCAPE ARCHITECT
CA # 2008
114 EAST DE LA GUERRA St SANTA BARBARA CA 93101
805.965.2007

EXHIBIT 1

APRIL 2007



LEGEND	IMPACT ACRES	MITIGATION ACRES
LIMIT OF EXISTING RIPARIAN VEGETATION AREA		
LOW SPLIT RAIL FENCE OR BARRIER PLANTING AT BORDER OF ACTIVE PARK AND RESTORATION AREA		
NATIVE VEGETATION AREA TO REMAIN		
LONG TERM RIPARIAN VEGETATION REMOVAL. TO BE MITIGATED ON SITE	<0.62>	
NATIVE RIPARIAN VEGETATION RESTORATION AREA	<0.83>	0.83
NATIVE RIPARIAN VEGETATION RESTORATION AREA IMPACTED BY LINEAR PARK ELEMENTS (PATHWAYS + ORNAMENTAL VEGETATION)	<0.15>	
AREAS OUTSIDE OF PLANNED RESTORATION AREA WHICH CONTAINS INVASIVE SPECIES TO BE REMOVED AND REPLACED WITH ARROYO WILLOW RIPARIAN FOREST VEGETATION TOTAL AREA: 9,038 SQFT		0.21
DETENTION POND WETLAND RESTORATION AREA		0.35
TOTAL ON-SITE IMPACT AND MITIGATION AREAS	<1.60>	1.39

THE OFFICE OF
KATIE O'REILLY ROGERS
INC
LANDSCAPE ARCHITECT
CA # 2008
114 EAST DE LA GUERRA St. SANTA BARBARA, CA 93101
805.965.8007

BARRANCA EXISTING VEGETATION RESTORATION AREAS

SCALE: 1"=60'-0"

0 60 120 180

EXHIBIT 2

APRIL 2007

4.2 WILDLIFE IMPACTS

Construction within and adjacent to wildlife habitat of Brown Barranca may reduce foraging and breeding opportunities for common wildlife species such as song sparrow, mourning dove, scrub jay and raccoon. Noise and dust generated by construction may alter behavior patterns and reduce habitat quality. Temporary loss of habitat associated with project implementation may also cause a short-term reduction in wildlife populations in the immediate area.

4.3 SPECIAL-STATUS SPECIES IMPACTS

Southern California black walnut occurs within Brown Barranca, but would not be adversely affected by project implementation as it occurs within natural open space as designated in the Master Plan.

Riparian habitat to be affected by the project may support special-status wildlife species potentially including Cooper's hawk, yellow warbler and yellow-breasted chat. Loss of riparian vegetation along Brown Barranca may adversely affect these species (if present) through habitat loss and construction-related disturbance of habitat to remain.

4.4 WETLANDS

The Master Plan area supports approximately 0.11 acres of Corps-defined wetlands and 4.1 acres of CDFG-defined wetlands. The CDFG-defined wetlands are synonymous with riparian vegetation (discussed above). Approximately 0.03 acres (27 percent) of Corps-defined wetlands would be temporary disturbed by box culvert installation. Approximately 0.02 acres would be displaced by the proposed culvert inlet structure. Therefore, the permanent loss of Corps-defined wetlands would be limited to 0.02 acres (18 percent). These wetland losses would be offset by wetlands that would develop within the proposed detention basin.

4.5 CHANGES IN HABITAT QUALITY

Temporary impacts to habitat quality during construction may occur as a result of the project. Noise, dust and night lighting (if required) associated with construction within or adjacent to Brown Barranca may disturb wildlife using this riparian corridor. Such disturbance may result in reduced foraging success, reduced reproduction and increased predation risk.

Following proposed restoration, the overall width of vegetation/habitat along Brown Barranca would not be substantially different from existing conditions. However, some of this area would be incorporated into the proposed linear park. Increased human activity (biking, dog-walking, child play) associated with use of the linear park may adversely affect wildlife foraging success, reduce reproduction and increase predation risk, and discourage habitat use by secretive species. However, barrier plantings and fencing would be used to discourage public access into the Brown Barranca riparian corridor. Wildlife use of proposed parklands along Brown Barranca would occur, and the parklands would provide a buffer from adjacent residential uses.

4.6 BENEFICIAL IMPACTS

Detention Basin as Wetland Habitat. The detention basin would provide up to 0.35 acres of wetland habitat, which would offset project-related loss of Corps-defined wetlands. Wetlands within the detention basin may provide foraging and nesting wildlife habitat. However, it is expected that maintenance of the basin would prevent maturity of woody vegetation.

Water Quality Improvements. The termination of agricultural activities within the Master Plan area may improve water quality conditions in Brown Barranca by terminating or reducing nutrient and sediment inputs to the streambed. Constituents that would likely be reduced as a result of terminating these inputs to Brown Barranca may include (but are not limited to) organic and inorganic chemicals (fertilizers and pesticides), total suspended solids, turbidity, and extremes in pH.

In addition, the proposed detention basin would serve to remove urban pollutants and prevent degradation of water quality in Brown Barranca.

5.0 CITY OF VENTURA GENERAL PLAN POLICY CONSISTENCY

The City of Ventura 2005 General Plan provides policies for resource conservation that may apply to the subject project. The following is a discussion of consistency for each applicable policy:

5.1 POLICY 1B: INCREASE THE AREA OF OPEN SPACE PROTECTED FROM DEVELOPMENT IMPACTS.

Action 1.8: Buffer barrancas and creeks that retain natural soil slopes from development according to State and Federal guidelines.

Consistency: The project proposes a setback from Brown Barranca and would preserve the slopes along the Barranca (banks), and provide parklands as a buffer. Project implementation would require acquisition of permits from CDFG, California Regional Water Quality Control Board, and the Corps to ensure consistency with State and Federal guidelines.

Action 1.9: Prohibit placement of material in watercourses other than native plants and required flood control structures, and remove debris periodically.

Consistency: Construction of the proposed flood control structures (box or arched culverts) would be required to prevent flood impacts to the proposed development. In addition, areas on top of the culverts would be revegetated with native plants (see Mitigation Measures below). Therefore, the project appears to be consistent with City policy.

Action 1.11: Require that sensitive wetland and coastal areas be preserved as undeveloped open space wherever feasible and that future developments result in no net loss of wetlands or “natural” coastal areas.

Consistency: The project has been designed to preserve wetlands to the extent feasible; however, losses of Corps-defined wetlands and CDFG-defined wetlands (riparian vegetation) would occur. Wetland losses would be offset by creation of wetland habitat as part of the proposed detention basin, and use of native plants in park areas. Most of the loss of riparian vegetation (CDFG-defined wetlands) would be offset through restoration of the area affected by installation of the box culvert. In addition, the project includes parkland and trails adjacent to Brown Barranca, which is considered a valuable amenity by the City and provides wildlife habitat value.

5.2 POLICY 1C: IMPROVE PROTECTION FOR NATIVE PLANTS AND ANIMALS.

Action 1.17: Require development to mitigate its impacts on wildlife through the development review process.

Consistency: Mitigation for impacts to wildlife are provided in the discussion below. Implementation of these mitigation measures would result in the project being consistent with City policy.

Action 1.18: Require new development adjacent to rivers, creeks, and barrancas to use native or non-invasive plant species, preferably drought tolerant, for landscaping.

Consistency: The Master Plan indicates landscaping near Brown Barranca would not include invasive plant species. Therefore, the project is consistent with City policy.

Action 1.19: Require projects near watercourses, shoreline areas, and other sensitive habitat areas to include surveys for State and/or federally listed sensitive species and to provide appropriate buffers and other mitigation necessary to protect habitat for listed species.

Consistency: As previously discussed, a biological survey of Brown Barranca was conducted to determine the potential for special-status species. Additional surveys are recommended in the spring (see Mitigation Measures below). Implementation of these mitigation measures would result in the project being consistent with City policy.

Action 1.24: Require new development to maintain all indigenous tree species or provide adequately sized replacement native trees on a 3:1 basis.

Consistency: The project would involve the loss of riparian vegetation composed of native willows. These trees would be replaced by native species at a ratio of 3:1 (see Mitigation Measures below). Therefore, implementation of tree replacements would result in the project being consistent with City policy.

6.0 MITIGATION MEASURES

The following pre-project and project integrated mitigation measures are recommended to ensure the proposed project is consistent with local, State and Federal policies and regulations:

- A qualified biologist should conduct pre-construction field surveys for arroyo chub, southwestern pond turtle, two-striped garter snake, and San Diego mountain kingsnake;
- If special-status wildlife species are observed on the project site during pre-construction surveys, construction activities within Brown Barranca should be monitored by a qualified biologist, and any wildlife species found in work areas during construction should be relocated to suitable habitat areas up- or downstream of the Master Plan area;
- A qualified biologist should conduct spring surveys for breeding birds within and adjacent to the project site with emphasis on Cooper's hawk, yellow warbler, yellow-breasted chat and other riparian-dependent special-status bird species. If active bird nests are found, prohibit work activities within 100 feet for non-listed species, and 200 feet for listed species and raptors;
- Ensure the proper installation of erosion control devices in areas that have the potential to drain to Brown Barranca throughout the project duration. These device should include silt fencing, sandbags, straw wattles and/or straw bales;
- Install aesthetic (split-rail, or equivalent) fencing between the proposed footpath and Brown Barranca to reduce disturbance of habitat;
- Provide signage and written materials to all property owners describing biological resources and prohibiting entry into the Brown Barranca Preserve;
- Conduct a pre-construction tally of all native trees to be removed;
- Incorporate replacement of native trees as required by General Plan Action 1.24 into planting plans for the area above the underground box culvert and other portions of the proposed Linear Park;
- Fence Brown Barranca during construction to prevent inadvertent entry or storage of materials and equipment within the proposed Preserve by contractors;
- Remove invasive or non-native plants from the Preserve to offset impacts including (but not limited to) castor bean, German ivy, garden blackberry, tree tobacco, garden nasturtium, and palm trees;
- Inlets of storm drains designed to discharge to Brown Barranca should be fitted with oil/grease traps;
- Promote development of wetlands in the proposed detention basin by minimizing vegetation and sediment removal; and
- Provide any additional mitigation required by CDFG and the Corps of Engineers as required by future regulatory permitting.

7.0 REFERENCES

California Native Plant Society. 2001. *Inventory of Rare and Endangered Vascular Plants of California*. Sacramento, CA.

City of Ventura. 2005. *General Plan Final Environmental Impact Report.* Assistance by Rincon Consultants, Inc.

Edwards, R.D., D.F. Rabey, and R.W. Kover. 1970. *Soil Survey Ventura Area, California*. USDA Soil Conservation Service in cooperation with University of California Agricultural Experiment Station.

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Zeiner D. C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1990. *California's Wildlife. Vol. II Birds*. California Department of Fish and Game, Sacramento, California. 731pp.

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APPENDIX A

WETLAND DATA FORMS

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

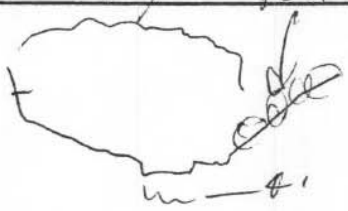
DATA FORM
ROUTINE WETLAND DELINEATION
(1987 COE Wetlands Delineation Manual)

Project Site:	Parklands Master Plan	**Date:**	11/16/2005
Applicant/Owner:	Westwood Communities	**County:**	Ventura
Investigator:	Ingamells	**State:**	CA
Normal circumstances present?	Yes (circled) / No	**Community:**	
Site significantly disturbed (Atypical)?	Yes / No (circled)	**Transect:**	T1
Site considered Problem Area?	Yes / No (circled)	**Plot:**	

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW
Typha latifolia	Herb	OBL
Echinochloa crusgalli	Herb	FACW

hydrophytic veg. not-hydro



Othw - 35

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks: within Othw - width - ~30'

HYDROLOGY

Recorded Data? (explain in Remarks)	Yes	No	**Wetland Hydrology Indicators**	
Stream, lake, tide gauge?	Yes	No	**Primary**	
Aerial photographs?	Yes	No	Inundated	X
			Saturated in upper 12"	X
			Water marks	
			Drift lines	X
Field Observations:	Pit	Channel	Sediment deposits	
Depth of surface water (inches)	0	Z	Drainage patterns	X
Depth to free water in pit (inches)	2		**Secondary**	
Depth to saturated soil (inches)	0		Oxidized roots in upper 12"	
			Water-stained leaves	
Remarks:			Local soil survey data	
			FAC-Neutral test	
			Other (explain in remarks)	

SOILS

Series and Phase: Gullied Land
Drainage Class: well drained
Taxonomy (Subgroup): NA
Field Data Confirm Series? (Yes) No

Profile Description

Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
0-12	A	10YR 3/2			sticky clay

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma		Other (explain in remarks)	
All dominant plants FACW or OBL (one must be OBL)			

Remarks:
width of soil 8-10', too sticky to walk on to measure

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is Plot a Wetland? Yes (No)

Remarks:

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

DATA FORM
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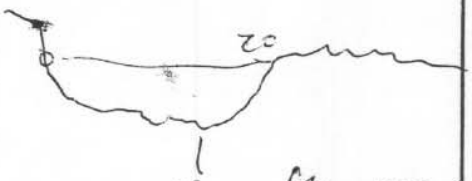
Applicant/Owner:	Westwood Communities	**County:**	Ventura
Investigator:	Ingamells	**State:**	CA

Normal circumstances present?	Yes	No	**Community:**	
Site significantly disturbed (Atypical)?	Yes	No	**Transect:**	T2
Site considered Problem Area?	Yes	No	**Plot:**	

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~

OHW = 20'



Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks: Salix dom.

HYDROLOGY

			Wetland Hydrology Indicators	
Recorded Data? (explain in Remarks)	Yes	No	**Primary**	
Stream, lake, tide gauge?	Yes	No	Inundated	X
Aerial photographs?	Yes	No	Saturated in upper 12"	X
			Water marks	X
			Drift lines	X
Field Observations:	Pit	Channel	Sediment deposits	
Depth of surface water (inches)	0	~0.5	Drainage patterns	X
Depth to free water in pit (inches)	4		**Secondary**	
Depth to saturated soil (inches)	1		Oxidized roots in upper 12"	
			Water-stained leaves	
Remarks:			Local soil survey data	
			FAC-Neutral test	
			Other (explain in remarks)	

SOILS

Series and Phase: Gullied Land
Taxonomy (Subgroup): NA
Drainage Class: well drained
Field Data Confirm Series?: Yes No

Profile Description

Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
0-8		10YR 3/2		none	sticky clay
>8		10YR 3/4			coarse sand

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma		Other (explain in remarks)	
All dominant plants FACW or OBL (one must be OBL)			

Remarks: sediment, some black streaking - leaf decomposition

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No		
Wetland Hydrology Present?	Yes	No	Is Plot a Wetland?	Yes No
Hydric Soils Present?	Yes	No		

Remarks:

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

DATA FORM
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Applicant/Owner:	Westwood Communities	**County:**	Ventura
Investigator:	Ingamells	**State:**	CA

Normal circumstances present?	Yes	No	**Community:**	
Site significantly disturbed (Atypical)?	Yes	No	**Transect:**	T3
Site considered Problem Area?	Yes	No	**Plot:**	

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW

OAW = 20

20

well

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks: some German ivy, P. oak

HYDROLOGY

Recorded Data? (explain in Remarks)	Yes	No
Stream, lake, tide gauge?	Yes	No
Aerial photographs?	Yes	No

Field Observations:	Pit	Channel
Depth of surface water (inches)	0	0
Depth to free water in pit (inches)	>14	
Depth to saturated soil (inches)	>14	

Remarks:

Wetland Hydrology Indicators

Primary	
Inundated	
Saturated in upper 12"	
Water marks	
Drift lines	X
Sediment deposits	X
Drainage patterns	X
Secondary	
Oxidized roots in upper 12"	
Water-stained leaves	
Local soil survey data	
FAC-Neutral test	
Other (explain in remarks)	

SOILS

Series and Phase: Gullied Land
Taxonomy (Subgroup): NA
Drainage Class:
Field Data Confirm Series?: (Yes) No

Profile Description

Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
0-1		10YR 4/4		none	coarse sand
1-8		10YR 3/4		none	clay loam
8-14		10YR 3/3			loam

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma		Other (explain in remarks)	

All dominant plants FACW or OBL (one must be OBL)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is Plot a Wetland? Yes (No)

Remarks:

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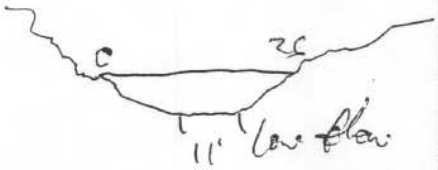
Applicant/Owner:	Westwood Communities	**County:**	Ventura
Investigator:	Ingamells	**State:**	CA

Normal circumstances present?	Yes	No	**Community:**
Site significantly disturbed (Atypical)?	Yes	No	**Transect:** T4
Site considered Problem Area?	Yes	No	**Plot:**

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW

other = 26



Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks: Horseweed, Garden nasturtium also seen in area

HYDROLOGY

Recorded Data? (explain in Remarks)	Yes	No
Stream, lake, tide gauge?	Yes	No
Aerial photographs?	Yes	No

Field Observations:	Pit	Channel
Depth of surface water (inches)	0	0
Depth to free water in pit (inches)	7/4	
Depth to saturated soil (inches)	7/4	

Remarks: unclear if inundated long enough

Wetland Hydrology Indicators	
Primary	
Inundated	
Saturated in upper 12"	
Water marks	
Drift lines	X
Sediment deposits	
Drainage patterns	X
Secondary	
Oxidized roots in upper 12"	
Water-stained leaves	
Local soil survey data	
FAC-Neutral test	
Other (explain in remarks)	

SOILS

Series and Phase: Gullied Land
Taxonomy (Subgroup): NA
Drainage Class:
Field Data Confirm Series?: (Yes) No

Profile Description

Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
0-4		10YR 4/3		none	sand
4-8		10YR 3/2			sandy loam
8->14		10YR 3/1			loam
2nd pit found		10YR 4/1		@ 6"	

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma	X	Other (explain in remarks)	

All dominant plants FACW or OBL (one must be OBL)

Remarks:
Hydric soil width ~12'

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No
Wetland Hydrology Present? * (Yes) No
Hydric Soils Present? (Yes) No

Is Plot a Wetland? (Yes) No

Remarks:
* Assume site is inundated for at least 5% of growing season in most years = wetland hydrology

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Applicant/Owner:	Westwood Communities	**County:**	Ventura
Investigator:	Ingamells	**State:**	CA

Normal circumstances present?	Yes	No	**Community:**	
Site significantly disturbed (Atypical)?	Yes	No	**Transect:**	75
Site considered Problem Area?	Yes	No	**Plot:**	

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW

OHW = 30'
low flow channel = 6'

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks: also Rubus - 5 ft, no spines/thorns

HYDROLOGY

			Wetland Hydrology Indicators	
Recorded Data? (explain in Remarks)	Yes	No	**Primary**	
Stream, lake, tide gauge?	Yes	No	Inundated	
Aerial photographs?	Yes	No	Saturated in upper 12"	
			Water marks	
			Drift lines	X
Field Observations:	Pit	Channel	Sediment deposits	
Depth of surface water (inches)	0	0	Drainage patterns	X
Depth to free water in pit (inches)	7/4		**Secondary**	
Depth to saturated soil (inches)	7/4		Oxidized roots in upper 12"	
			Water-stained leaves	
			Local soil survey data	
			FAC-Neutral test	
			Other (explain in remarks)	

Remarks: Duration of inundation is unknown

SOILS

Series and Phase: Gullied Land
Taxonomy (Subgroup):
Drainage Class:
Field Data Confirm Series? (Yes) No

Profile Description

Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
0-5	A	10YR 4/3			SaLA
5-11		10YR 3/2			
11-714		10YR 3/1	3/2 mot	Comm	10YR 4/6

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma	X	Other (explain in remarks)	

All dominant plants FACW or OBL (one must be OBL)

Remarks:
Hydric soil ~ 6' wide

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No		
Wetland Hydrology Present? *	(Yes)	No	Is Plot a Wetland? (Yes)	No
Hydric Soils Present?	(Yes)	No		

Remarks:
* Assume site is inundated at least 5% of growing season in most years = wetland hydrology.

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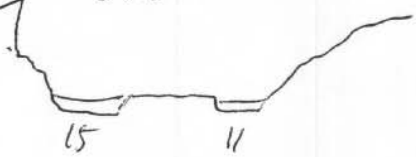
Applicant/Owner:	Westwood Communities		**County:**	Ventura
Investigator:	Ingamells		**State:**	CA
Normal circumstances present?	Yes	No	**Community:**	
Site significantly disturbed (Atypical)?	Yes	No	**Transect:**	T6
Site considered Problem Area?	Yes	No	**Plot:**	

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW

OHW = 11+15



2 channel

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks: Gopher spurge, Viaca

HYDROLOGY

			Wetland Hydrology Indicators	
Recorded Data? (explain in Remarks)	Yes	No	**Primary**	
Stream, lake, tide gauge?	Yes	No	Inundated	
Aerial photographs?	Yes	No	Saturated in upper 12"	
			Water marks	
			Drift lines	X
Field Observations:	Pit	Channel	Sediment deposits	X
Depth of surface water (inches)	0	0	Drainage patterns	X
Depth to free water in pit (inches)	>22		**Secondary**	
Depth to saturated soil (inches)	>22		Oxidized roots in upper 12"	
			Water-stained leaves	
			Local soil survey data	
			FAC-Neutral test	
			Other (explain in remarks)	

Remarks: Duration of inundation is unclear

SOILS

Series and Phase: Gullied Land
Taxonomy (Subgroup): _____
Drainage Class:
Field Data Confirm Series? (Yes) No

Profile Description

Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
0-12		10YR4/4			Sand
* 12->14		10YR4/4			Loamy Sand

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma		Other (explain in remarks)	
All dominant plants FACW or OBL (one must be OBL)			

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No
Wetland Hydrology Present? * (Yes) No
Hydric Soils Present? Yes (No)
Is Plot a Wetland? Yes (No)

Remarks:
* Assumed inundation period at least 5% of growing season

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

DATA FORM
ROUTINE WETLAND DELINEATION
(1987 COE Wetlands Delineation Manual)

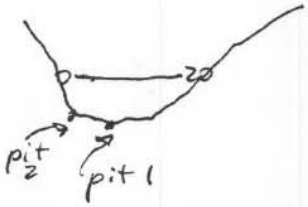
Project Site:	Parklands Master Plan	**Date:**	11/16/2005
Applicant/Owner:	Westwood Communities	**County:**	Ventura
Investigator:	Ingamells	**State:**	CA

Normal circumstances present?	Yes	No	**Community:**	
Site significantly disturbed (Atypical)?	Yes	No	**Transect:**	7 7
Site considered Problem Area?	Yes	No	**Plot:**	

VEGETATION

Dominant Plant Species	Stratum	Indicator
Salix lasiolepis	Tree	FACW

OHW = 20



Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100%

Remarks:

HYDROLOGY

Recorded Data? (explain in Remarks)	Yes	No
Stream, lake, tide gauge?	Yes	No
Aerial photographs?	Yes	No

Field Observations:	Pit	Channel
Depth of surface water (inches)	0	0
Depth to free water in pit (inches)	>20	
Depth to saturated soil (inches)	>20	

Remarks:
Period of inundation is unknown

Wetland Hydrology Indicators	
Primary	
Inundated	
Saturated in upper 12"	
Water marks	
Drift lines	x
Sediment deposits	x
Drainage patterns	x
Secondary	
Oxidized roots in upper 12"	
Water-stained leaves	
Local soil survey data	
FAC-Neutral test	
Other (explain in remarks)	

SOILS

Series and Phase: Gullied Land
Taxonomy (Subgroup): NA
Drainage Class:
Field Data Confirm Series?: (Yes) No

Profile Description

	Depth (")	Horizon	Matrix Color	Mottle Color	Mottle Abundance	Texture, Structure, etc.
Pit 1	0->20	A	10YR 3/4		none	sand
Pit 2	0-5	A	10YR 3/4		none	sand
	5->10	B	10YR 3/3		none	loamy sand

Hydric Soil Indicators:

Histosol		Concretions	
Histic epipedon		High organic content (sandy soil)	
Sulfidic odor		Organic streaking (sandy soil)	
Aquic moisture regime		Local hydric soil list	
Reducing conditions		National hydric soil list	
Gleyed or low chroma		Other (explain in remarks)	

All dominant plants FACW or OBL (one must be OBL)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No
Wetland Hydrology Present? * (Yes) No
Hydric Soils Present? Yes (No)
Is Plot a Wetland? Yes (No)

Remarks:
* Assumed duration of inundation is at least 5% of growing season

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May 30, 2008
Project Number: 05-58810

Iain Holt, Planner
City of Ventura
501 Poli Street
P.O. Box 99
Ventura, CA 93002

Subject: **Results of Breeding Bird Surveys at Parklands Specific Plan, City of San Buenaventura, California**

A breeding bird survey was completed at the above referenced site on May 23, 2008. This survey was conducted as a "good faith effort" to respond to CDFG requests in conjunction with the Parklands Specific Plan Mitigated Negative Declaration. The project site is bounded on the northwest by Telegraph Road, to the southwest by a mobile home park and residences, to the southeast by Blackburn Road, and to the northeast by Wells Road.

The survey site is composed of an agricultural field growing mostly flowers, cilantro, and other low-growing crops, and a riparian area – Brown Barranca. Brown Barranca consists of various riparian trees and shrubs as well as non-native vegetation (dominants include arroyo willow, California walnut, eucalyptus, German ivy, and castor bean). It is a partial dirt-bottom and concrete-lined channel throughout the project site. The determination of breeding status was based on the definitions provided in Table 1, below.

Table 1. Breeding Bird Status Definitions

Status	Symbol	Definition
Observed	O	Present, does not breed within habitat at site.
Possible	X	Seen or heard in appropriate breeding habitat.
Probable		
	S	Singing male seen in appropriate habitat
	P	Pair observed in suitable habitat
	T	Territorial behavior
	A	Agitated behavior
	C	Courtship or copulation
	N	Visiting probable nest site or cavity
Confirmed		
	NB	Nest building
	DD	Distraction display
	UN	Used nest
	FL	Fledglings
	FS	Adult with fecal sac
	FY	Adult with food
	ON	Occupied nest
	NE	Nest with eggs
	NY	Nest with young

The locations of species observed (Table 2) were categorized by use area: the agricultural field ("field"), Brown Barranca ("the barranca"), or the entire site. Juveniles and breeding birds were identified at the project site. Species were noted that possibly have nested at the site or in the near vicinity, or were currently nesting at or near the site. These included Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), Brewer's blackbird (*Euphagus cyanocephalus*), brown-headed cowbird (*Molothrus ater*), house sparrow (*Passer domesticus*), Hutton's vireo (*Vireo huttoni*), lesser goldfinch (*Carduelis psaltria*), mourning dove (*Zenaida macroura*), and song sparrow (*Melospiza melodia*). Each of these was identified copulating, carrying nest material or food, or otherwise displaying nesting behavior within the site. Secondary nesting attempts could occur given the time of year.

Table 2. Survey Results

Species	Status	Comments
Allen's hummingbird	X	Male observed in barranca
American crow	O	Group, pair observed flying over site
American goldfinch	X	Male observed foraging all over site
Anna's hummingbird	X, S, P	Pair observed foraging together and exhibiting aggression toward each other
Band-tailed pigeon	X	Individual observed flying
Barn swallow	X	Many observed all over site
Bewick's wren	X	Individual seen in barranca
Black-headed grosbeak	X	Male seen in barranca
Black phoebe	FL, X	One pair observed exhibiting aggression toward Western scrub jay in field, fledglings observed
Brewer's blackbird	X, FY	Female observed carrying food in field
Brown-headed cowbird	X, P, C	Copulation observed in field, individuals also observed in barranca
Bushtit	X	Group foraging in field rows
California towhee	X	Pair observed flying, foraging all over site
Cliff swallow	O	Many observed all over site
Common raven	X	Individual seen flying over site
Common yellowthroat	X	Male heard singing in barranca
Domestic chicken	X	Male observed in field
European starling	X	Many individuals seen all over site
Hooded oriole	X	Males and females in barranca
Horned lark	X	Many individuals seen in field
House finch	X	Groups observed all over site
House sparrow	X, FY	Adults seen carrying food in field
Hutton's vireo	P, X	Pair observed; male observed pecking at female's cloaca repeatedly in barranca
Lesser goldfinch	X, C, FL	Copulation observed between pair, fledglings observed
Mourning dove	X, C	Flew over site, courtship observed
Northern mockingbird	X	Observed all over site
Northern rough-winged swallow	O	Pair observed flying/foraging over site
Red-shouldered hawk	P, X	Pair observed perching at two locations on utility poles, onsite and just adjacent to site
Red-winged blackbird	X	Observed in field rows
Rock dove	X, P	Pair observed foraging in fields

Selasphorous hummingbird (unknown species)	X	Female seen foraging and perching in barranca
Song sparrow	X, S, P, FL, FY	Fledglings and adult with food observed all over site
Spotted towhee	X, V	Male heard singing and observed in barranca
Turkey vulture	O	Observed flying over site
Warbling vireo	X	Individual seen in barranca
Western gull	O	Observed flying over site
Western scrub jay	X	Observed perching in barranca near road
Yellow warbler	X, S	Mainly seen in barranca, but also in field rows along the edge of the barranca

Of the birds seen during this survey, Allen's hummingbird is considered a Special Animal by California Department of Fish and Game (CDFG) while nesting, the California horned lark is on the CDFG Watch List, and the yellow warbler is a CDFG Species of Special Concern while nesting. These birds are not listed as threatened or endangered under the federal or state Endangered Species Acts, but are under consideration for conservation. Specifically, a Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered;
- meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status (Comrack et al. 2008).

Allen's hummingbird has a small geographic area of breeding and wintering ranges compared to other hummingbirds (Mitchell 2000). This, in addition to being at a potential competitive disadvantage for food sources with Anna's hummingbird (*Calypte anna*), has contributed to the decline in this species range. A female of this species was seen onsite, but its breeding status was unknown and more detailed surveys would be required to determine whether this species is nesting onsite. This species generally breeds from early February to mid-June (Mitchell 2000). Nest-building typically takes 8–11 days, incubation takes 17–22 days, and nestling period 18–23 days to fledging.

The California horned lark (*Eremophila alpestris actia*) is on the CDFG watch list, but it frequently intergrades with other subspecies, so is not always easy to differentiate in the field (Beason 1995). Moreover, the species is in need of review and revision to determine whether prairie and western subspecies represent discrete forms or a highly variable series (Beason 1995). This species is experiencing population declines partially as a result of land

clearing in North America. As this species prefers to nest in agricultural fields that are sometimes marshy, it could be nesting onsite, but more detailed surveys would be necessary to determine breeding status. This species generally breeds from March through July (Zeiner et al. 2988).

The range of the yellow warbler (*Dendroica petechia*) is considered greatly (>40-80%) reduced, its range is slightly (>10-20%) reduced or suspected of having been reduced but the trend is unknown, and its population size is ≥ 100,000 but <1,000,000 individuals (Shuford and Gardali 2008). Although Shuford and Gardali (2008) do not note any records of breeding in Ventura County, this species generally breeds in riparian vegetation. Therefore, it is possible that this species is breeding on the site, but more detailed surveys would be necessary to determine breeding status. This species generally breeds from mid-April to early August (Zeiner et al. 1988).

Native birds, including raptors such as the red-tailed hawk, are regulated under the Federal Migratory Bird Treaty Act (MTBA) of 1918 (50 C.F.R.) and protected under California Fish and Game Code (Section 3503, raptors under Section 3503.5). According to this legislation, breeding birds and nests should be avoided until the young have fledged and left the nest.

If you have any questions, please call Nancy Fox-Fernandez at 805-641-1000 ext. 36.

Sincerely,

RINCON CONSULTANTS, INC.

Nancy Fox-Fernandez, M.S.
Associate Biologist

Duane Vander Pluym, D. ESE
Principal

REFERENCES

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MEMORANDUM

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Date: 2 July 2008

To: Iain Holt, Associate Planner

Organization: City of Ventura

From: Jennifer M Turner, Biologist

Email: Jturner@rinconconsultants.com

cc: Cori Thomas, Rincon Consultants

Re: **Results of Site Assessment Surveys at Parklands Specific Plan, City of San Buenaventura, California**

A general site reconnaissance of the above referenced project was completed on May 23 and June 16, 2008. The purpose of these surveys was to verify that onsite conditions had not substantially changed since the preparation of the Padre Associates study (revised April 2007). Survey efforts focused on Brown Barranca, as the majority of the Plan Area has remained in agricultural use. Surveys in 2008 confirmed that onsite conditions were similar to those discussed in the Padre study.

General species composition within the barranca was found to be similar and the barranca continues to support dense native riparian habitat primarily composed of arroyo willow (*Salix lasiolepis*) and poison oak (*Toxicodendron diversilobum*). The California black walnut (*Juglans californica*) identified in the Padre study is located in an associated upland area. Some non-native species, such as blue gum trees (*Eucalyptus globulus*) and castor bean (*Ricinus communis*) appear to have increased in area since the Padre study. A notable difference from the earlier study is the presence of vegetation within the concrete trapezoidal channel, which is located downstream of Blackburn Road. This vegetation is growing on sediment deposited on the floor of the channel and consists primarily of cattails (*Typha* sp). Stream flow within the barranca continues to be intermittent, however several large pools of ponded water were observed from the middle of the barranca (approximate transect T4 of Padre Associates study) south towards Blackburn Road. More significant ponding than was apparently present during the Padre Associates study was found from just north of Blackburn Road to the south through the trapezoidal channel. Bird species observed during these surveys have already been reported in the May 30, 2008 Breeding Bird Survey Report. Additional wildlife species that were observed include western fence lizard (*Sceloporus occidentalis*) and desert cottontail rabbit (*Sylvilagus auduboni*).

Anecdotal discussions with residents living within the Plan Area indicate the presence of other species of reptiles (lizards, snakes, turtles), mammals (e.g. coyote, opossum), and amphibians (frogs). Furthermore, one resident stated that a California Department of Fish and Game (CDFG) representative had visited the site earlier in the year during a California red-legged frog (*Rana aurora draytonii*) survey. Animals mentioned by the residents had generally not been identified to species, and are most likely common species such as the native Pacific tree frogs (*Hyla regilla*) and the introduced red-eared sliders (*Trachemys scripta elegans)*. However, the potential presence of sensitive species such as Western pond turtles (*Actinemys marmorata*; California Sensitive Species) and California red-legged frogs (federally threatened) warrant further investigation. A search of the California Natural Diversity Database (CNDDB) RareFind indicated that the nearest recorded Western pond turtle sighting was approximately 5 miles away from the Parklands Specific Plan area at the Santa Clara River mouth. The nearest red-legged frog sighting was approximately 11 miles away in Santa Paula Creek. Dan Blankenship, the CDFG representative mentioned above, confirmed via phone conversation on June 20, 2008 that he had visited the project site in April or May during a site survey for red-legged frogs and that no frogs were observed. Mr. Blankenship stated that the Brown Barranca within the Plan Area was "moderately healthy riparian habitat for red-legged frogs" and that he was recommending to the Department and the U.S. Fish & Wildlife Service (USFWS) that protocol level surveys be conducted.

Parklands Specific Plan
Environmental Impact Report

California Red-legged Frog
Site Assessment and Surveys

Prepared for:
City of San Buenaventura
Community Development Department
501 Poli Street
Ventura, CA 93002

Prepared by:
Rincon Consultants, Inc
790 East Santa Clara Street, Suite 103
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August 2008

Table of Contents

1.0 INTRODUCTION 1
1.1 Site Location 1
1.2 Site Description 1
1.3 California Red-legged Frog 2
2.0 METHODS 3
3.0 RESULTS 4
3.1 Known Occurrences of California Red-legged Frogs 4
3.2 Habitats Within the Vicinity of the Study Site 5
3.3 Habitat Characterization of the Study Site 5
3.4 Survey Results 6
4.0 CONCLUSIONS 7
5.0 LITERATURE CITED 7

Figures

Figure 1 Project Vicinity Map
Figure 2 Habitat Types within the Project Vicinity
Figure 3 Habitat Types and Species Observed at the Project Site

Appendix

Appendix A Qualifications of Surveyors for California Red-legged Frogs
Appendix B Site Assessment and Survey Data Sheets
Appendix C Photo Plate of Brown Barranca at Parklands Specific Plan Site

1.0 INTRODUCTION

The Parklands Specific Plan Area (Plan Area) is comprised of eight parcels on 66.7-acres in Wells Community, near West Saticoy, Ventura County, California. A proposal has been submitted that would annex three parcels currently under agricultural production into the City of San Buenaventura for development into residential and commercial uses. The remaining five parcels are currently within the city limits. Brown Barranca, a natural drainage that crosses through the Plan Area, would be set aside as open space under the plan. Brown Barranca (study site) is the lower reach of Long Canyon within the valley of the Santa Clara River. Approximately 1,660 linear feet of this drainage is present in the Plan Area.

U.S. Fish and Wildlife Service (USFWS; 2005) protocol surveys and a site assessment for the California red-legged frog (*Rana draytonii*) were requested by the California Department of Fish and Game (CDFG; 2008a) in their review of the Draft Mitigated Negative Declaration of the Parklands Specific Plan. Prior surveys known to be conducted at the site include a biological impact study (Padre Associates 2007), a site assessment (Rincon Consultants 2008a), and a breeding bird survey (Rincon Consultants 2008b).

This document describes a protocol site assessment and four non-breeding season surveys for the California red-legged frog at Brown Barranca within the Plan Area.

1.1 Site Location

The Plan Area is situated in Ventura County, east of the City of San Buenaventura (= Ventura; Figure 1). It occurs entirely in the USGS Saticoy, CA 7.5 minute topographic quadrangle map (Townships 2 and 3 N, Range 22 W). It is located south of the intersection of Telegraph Road and Wells Road (Figure 2). The Plan Area is bounded by Telegraph Road on the northwest, Wells Road on the northeast, Blackburn Road and State Route 126 (SR 126) on the southeast, and single family homes and a mobile home park on the southwest.

1.2 Site Description

Most of the site outside of Brown Barranca is cultivated with row crops, and a single family residence is present in the northwestern corner of the site with access from Telegraph Road. Additional areas of human occupancy or use include recreational vehicles in the vicinity of the residence, several outbuildings near Blackburn Road, and camps within the riparian area. On-site elevations range from approximately 192 to 250 feet above sea level. The area is on a terrace northwest of the Santa Clara River, and occurs at the base of Sulphur Mountain, which is to the northwest.

Brown Barranca passes through the site generally in a southeast direction. It originates in the foothills below Sulphur Mountain where it is called Long Canyon. It flows into Santa Clara

River through a modified channel to the south of Saticoy. The Santa Clara River flows into the Pacific Ocean north of McGrath Beach State Park, south of the City of Ventura.

Flows in Brown Barranca appear to be intermittent during dry years, although there may be subsurface flow that supports standing water in isolated pools throughout the summer in wet years. Downstream of the Blackburn Road crossing, the drainage is confined to a concrete trapezoidal channel. This area is outside of the Plan Area, but it was included in the surveys to be consistent with prior biological studies of the site. Flows in this stretch may be perennial since a culvert just upstream of Blackburn Road contributes a large amount of discharge to the drainage. The portion of the creek adjacent to Wells Road has riprap on the eastern bank. Upstream from these areas in which the channel has been confined, there are at least two low flow channels within the band of riparian vegetation. Additional information on the habitat at the study site is provided in Section 3.3.

1.3 California Red-legged Frog

The California red-legged frog, *Rana draytonii*, is a member of the true frog family Ranidae. Formerly considered a subspecies of *Rana aurora*, evidence currently supports full species status (Hayes and Miyamoto 1984, Hayes and Kremples 1986, Shaffer et al. 2004). The California red-legged frog is the largest (2.7 to 5.3 inches snout-urostyle length) frog native to the western United States (Stebbins 2003). The California red-legged frog is named for a reddish or salmon coloration on the hind legs and lower abdomen of adult frogs. Their dorsal surface is brown, black, dark red, or olive, with black flecks that have light centers (Stebbins 2003). Dorsolateral folds are prominent, and are often pinkish on juvenile frogs and tan on adults. The species is endemic to Baja California, Mexico and California, and occurs at elevations from sea level to 5,000 feet. It occurs in the Coast Ranges of California from Marin County to Ventura County, with a few isolated localities in the Sierra Nevada, San Joaquin Valley, and southern California (Jennings and Hayes 1994, U.S. Fish and Wildlife Service 2002). Historically, this species also was found throughout the Central Valley, the western slope of the Sierra Nevada from Shasta County to Tulare County, and the coastal regions of southern California, but almost all of these populations are now extinct.

California red-legged frogs occupy ephemeral and permanent ponds, intermittent and perennial streams, springs, man-made aquatic impoundments, marshes, dune ponds, lagoons, riparian forest, blackberry thickets, scrub habitats, non-native annual grasslands, and oak savannas. Preferred aquatic habitat of the California red-legged frog is characterized by dense shoreline or emergent riparian vegetation, such as arroyo willow, cattails, and bulrushes, associated with deep (greater than 2 feet), still or slow-moving water (Hayes and Jennings 1989). Breeding habitat is characterized as the shallow (0.8 – 1.6 feet deep) vegetated margins of ponds or stream pools, although they can successfully breed in artificial ponds with little or no emergent vegetation. Adults remain at breeding sites throughout the year or move to other aquatic or upland habitats. While in upland habitats, adult frogs take cover under dense leaf litter and shrubby vegetation such as willow thickets, blackberry, herbs, German ivy, nettles, downed trees or logs, root balls, rocks, or in small mammal burrows (Rathbun et al. 1993, Christopher 2004a). They can occupy upland areas for as long as 60 consecutive days (Bulger et

al. 2003). Adults not already at the breeding sites begin moving to them during the first heavy rain storms, usually in November through December. Radio-tagged California red-legged frogs have been found to move between aquatic sites that were up to 1.7 miles apart in one season (Bulger et al. 2003), but in many cases individuals remain within 164 feet of water (Rathbun et al. 1993). Males typically remain at the breeding site through the entire breeding season, while females often leave the site after egg laying. California red-legged frogs breed from late November to late April (Jennings and Hayes 1994), with most egg laying occurring in late-February through March in the Central Coast. Larvae typically metamorphose between July and September, but occasionally they may overwinter as tadpoles and transform the following spring (Fellers et al. 2001). Metamorphs are active during the day and at night, and they disperse to upland areas July through February where they apparently remain throughout the winter (Christopher 2004b).

The California red-legged frog is federally listed as threatened and is a state species of special concern. Habitat loss, the introduction of aquatic predators such as fish and bullfrogs, pesticides, and disease are the primary factors that appear to have negatively affected the California red-legged frog throughout its range (USFWS 2002, Christopher 2004b, Davidson 2004). The majority of extant localities are isolated and fragmented remnants of larger historical populations. Large populations still remain in the Central Coast, Marin County, and the vicinity of San Francisco Bay (Lannoo 2005). Many of the largest remaining populations occur in stock ponds that have undergone cattle grazing for 150 years (Lannoo 2005).

2.0 METHODS

Prior to and during the field survey effort, Rincon Consultants reviewed the U.S.G.S. Saticoy 7.5-minute topographic map and a site-specific aerial photograph (Padre Associates 2007). California red-legged frog localities within 1 mile radius from the Plan Area were determined by a search of the California Natural Diversity Data Base (CNDDB; CDFG 2008b). Literature containing California red-legged frog distribution information was searched (Jennings and Hayes 1994, U.S.D.A. Forest Service 1999, Davidson et al. 2001, Stebbins 2003) and unpublished data from taxon experts were consulted (Samuel S. Sweet 1989). Specimen records from natural history museums were searched via HerpNET online. Habitats within a one mile radius of the project site were determined by ground-truthing aerial photography. Since areas within this area were privately owned, ground-truthing was conducted by driving public streets on 29 July 2008. Habitat mapping within the Plan Area was adapted from Padre Associates (2007). A protocol Site Assessment data sheet was completed, and photographs of the study site were taken.

The U.S. Fish and Wildlife Service (2005) protocol recommends a total of up to eight surveys to determine the presence of California red-legged frogs at a project site. Two day surveys and four night surveys are recommended during the breeding season, which is February 25 and April 30 in this area. One day and one night survey are recommended during the non-breeding season, July 1 to September 30. As detailed in Rincon's 27 June 2008 proposal for this study, two day and two night surveys in the non-breeding season were conducted. While not meeting the protocol standards to determine absence of the frog, this level of effort was determined to

provide a sufficient level of information to determine the likelihood of presence and aid in developing any appropriate mitigation measures.

One day and one night survey were conducted on 28 July 2008, and these surveys were repeated on 4 August 2008. Biologists experienced with the identification of all life stages of amphibians and in performing California red-legged frog protocol surveys conducted the surveys (Appendix A). Daytime surveys were conducted at least one hour after sunrise and one hour before sunset, and night surveys were conducted at least one hour after sunset. Night surveys were conducted using Wizard II adjustable focus beam lights (Nite Lite, Clarksville, Arkansas) to detect eyeshine. Weather conditions were recorded prior to the start of each survey, and were appropriate during both surveys for the detection of frogs as outlined in the protocol. Visual encounter surveys were conducted by walking through the drainage, and visually scanning stream pools and banks. Binoculars were used to aid in frog identification. Downstream of Blackburn Road, the trapezoidal ditch was surveyed from the bank. Observers used caution during the surveys to ensure that disturbance to sediments, vegetation, and other features of the aquatic habitat was minimized, and no life stages of amphibians were disturbed. All amphibians observed or heard were identified to species. Data were recorded on the protocol data sheets, and additional information was recorded in a field note book and on maps. Significant habitat features were mapped on aerial photographs. Equipment that came in contact with water was decontaminated following the survey.

3.0 RESULTS

No California red-legged frogs were observed during the surveys, although marginally suitable habitat is present. Completed site assessment and survey data sheets are provided in Appendix B.

3.1 Known Occurrences of California Red-legged Frogs

The study site is within the historic range of the California red-legged frog (Jennings and Hayes 1994, Stebbins 2003). No localities recorded by the CNDDB were within 1 mile (1.6 kilometer) of the Plan Area. Several historic localities exist in the Santa Clara River watershed, including the Santa Clara River approximately 4.5 miles upstream of Saticoy, Wheeler Canyon, Santa Paula Creek, and Sespe Creek (Samuel S. Sweet, unpublished data, 1989; U.S.D.A. Forest Service 1999, Los Angeles County Museum of Natural History 2008). The populations in the Santa Clara River and Wheeler Canyon appear to have been extirpated (Jennings and Hayes 1994). The Santa Paula Creek population apparently has been extirpated, but they remained extant at Sespe Creek at least until the late 1990s (Davidson et al. 2001). The study area is not within designated California red-legged frog critical habitat (USFWS 2006).

3.2 Habitats Within the Vicinity of the Study Site

Land use in the vicinity of the Plan Area is predominantly residential and agriculture (Figure 2). Agricultural areas included row crops and orchards. Other land use types include commercial, industrial, parks, golf courses and vacant lots (intensively disturbed by mowing or discing). The foothills to the northwest of the Plan Area have a mixture of orchards and ranches with patches of native coastal scrub. Drainages in the foothills appear to be vegetated by southern willow scrub. Areas with southern coast live oak riparian forest and southern cottonwood-willow riparian forest may also be present along these drainages.

Upstream from the Plan Area, Brown Barranca passes through a residential area in which the riparian habitat is confined to the drainage channel by roadways, a recreational path, and residential development. Many non-native species, such as eucalyptus (*Eucalyptus* sp.) and Peruvian peppertree (*Schinus molle*), co-occurred with the native arroyo willow (*Salix lasiolepis*) and poison oak (*Toxicodendron diversilobum*) at the Foothill Road crossing of the creek. Upstream from Foothill Road, Long Canyon is bordered on each side by orchards, and the riparian vegetation appears to be less dense. Downstream from the Plan Area, Brown Barranca continues through a trapezoidal concrete channel that has cattails (*Typha* sp.) and small willows in the bottom. Wetland habitat present in this portion of the ditch could be considered to be coastal and valley freshwater marsh. After diverging away from Wells Road, Brown Barranca continues through a new development as a maintained ditch.

Other drainages in the vicinity of the Plan Area have been modified and are currently maintained or concrete agricultural ditches that lack riparian vegetation. Wason Barranca was vegetated by non-native eucalyptus and giant reed (*Arundo donax*) at the crossing of Foothill Road (just outside the 1 mile buffer; Figure 2) and did not contain water at the crossing of Telegraph Road. After crossing under the Santa Paula Freeway Highway 126, Wason Barranca becomes a modified agricultural ditch. Franklin Barranca was a concrete ditch as it passed through agricultural areas.

Despite the amount of agriculture surrounding the Plan Area, the only agricultural pond or reservoir seen during the driving survey or from aerial photography was the pond immediately to the east of the Plan Area, which was to the southeast of the intersection of Wells Road and Telegraph Road (Figures 2 and 3). This pond was lined with concrete and the only vegetation present was floating algae.

3.3 Habitat Characterization of the Study Site

The vegetation within Brown Barranca was comprised mainly of dense arroyo willow. The understory was vegetated by poison oak, non-native castor bean (*Ricinus communis*), and ornamental saw palmettos (*Serenoa repens*). California black walnut (*Juglans californica*), blue gum trees (*Eucalyptus globulus*), and German ivy (*Senecio mikanioides*) were present in some areas. Immediately upstream of Blackburn Road for a distance of 30-40 feet, the channel was vegetated by dense cattails. The substrate was silt, with areas of sand, gravel and cobble. A few natural pools fed by subsurface flow were present at the time of the survey. Natural pools were

approximately six by eight feet wide and maximum depth was one and one-half feet. Some of these pools were plunge pools formed by flow over dense willow roots. Undercut banks and dense bank vegetation were observed in association with these pools. A pool that was formed by erosion at the base of a concrete weir was about six feet wide by ten feet long and at least three feet deep at the time of the first survey (Figure 3). Water depth had dropped about six inches within one week by the time of the second survey, and many of the smaller pools had dried up.

There were two low flow channels between Telegraph Road and the reach abutting Wells Road, and the channel width at high water was approximately 20 feet. At high flow, water could be as much as six feet deep. Outfall pipes along Wells Road were seen that discharge into Brown Barranca. Additional flows may enter the stream from irrigation runoff from the adjacent agricultural fields. Water clarity was poor in the deeper pools due to suspended mud, and was clear in pools fed by subsurface flow. Water quality appeared to be poor as there was a cloudy and/or oily film on the surface and orange-colored fungal or bacterial mats. Green filamentous algae was present only in one area below an outfall. Agricultural and urban trash was present throughout the study area.

Downstream of Blackburn Road the drainage is confined to a trapezoidal concrete channel. Vegetation growing on sediment deposited on the channel floor consisted of cattails, watercress (*Rorippa nasturtium-aquaticum*), grasses, and an aquatic smartweed (*Polygonum* sp.). This area could be considered to be coastal and valley freshwater marsh habitat even though it exists in an anthropogenic situation. On 28 July, water in this section was flowing swiftly due to input from an outfall immediately upstream of Blackburn Road, which increased flow by at least four times that present in Brown Barranca upstream of the outfall. On 4 August, there was no discharge from this outfall and flow rates in the trapezoidal channel were substantially reduced. Water depth was less than one foot in this portion of the channel.

3.4 Survey Results

The only amphibian species seen during the surveys was the non-native African clawed frog (*Xenopus laevis*). They were present in extremely high densities in the pool at the concrete weir, and occurred in pools throughout the study site, including the shallow areas downstream of Blackburn Road. Water turbidity and underwater crevasses prevented a direct count of the number of African clawed frogs present in the weir pool. More African clawed frogs were seen at night than during the day, but they were highly light sensitive. Observers stood quietly at the edge of the pool with the lights off for several minutes, and then turned on lights and counted frogs that could be seen in the shallow edges of the pool. On 28 July, approximately 50 were seen in the pool and on 4 August, 44 were seen. It is estimated that 100-200 African clawed frogs could have been present in the pool. Adults and juveniles were seen, and no tadpoles were observed. During the 4 August day survey, a cast net was used to capture and remove 12 African clawed frogs that were dispatched.

Aquatic invertebrate diversity was very low, and could be related to poor water quality and/or predation by African clawed frogs. Water striders (family Gerridae), conical-shelled snails

(probably in the family Lymnaeidae or Physidae.), and the non-parasitic flatworm planaria (family Planariidae) were observed during the surveys.

It is reported that no frogs were observed in Brown Barranca within the Plan Area during a survey for California red-legged frogs in April or May 2008 by Dan Blankenship from the California Department of Fish and Game (Rincon Consultants 2008a).

4.0 CONCLUSIONS

Marginally suitable habitat exists for the California red-legged frog at Brown Barranca within the Plan Area. During the spring when deeper water would be present, the aquatic habitat at the site would be of higher quality. The cultivated areas surrounding Brown Barranca could be used for dispersal by California red-legged frogs, but these areas are marginal to poor for upland habitat use. Riparian habitat bordering the creek and coastal and valley freshwater marsh habitat within the modified portion of the channel could potentially provide sufficient cover for California red-legged frogs.

Due to the abundance of predatory African clawed frogs, it is unlikely that the California red-legged frog could reproduce successfully in Brown Barranca. The absence of the common species Pacific treefrog (*Pseudacris regilla*) and the low diversity of aquatic invertebrates suggests that predation by African clawed frogs is responsible for impacting or eliminating some native aquatic species. It is possible that African clawed frogs are present in the irrigation reservoir or in other areas near the study site, and that these sources provide immigrants that recolonize Brown Barranca after dry periods. In addition, because California red-legged frogs are not thought to occur within the site vicinity or the Santa Clara River watershed, it is highly unlikely that they would occur within the Plan Area.

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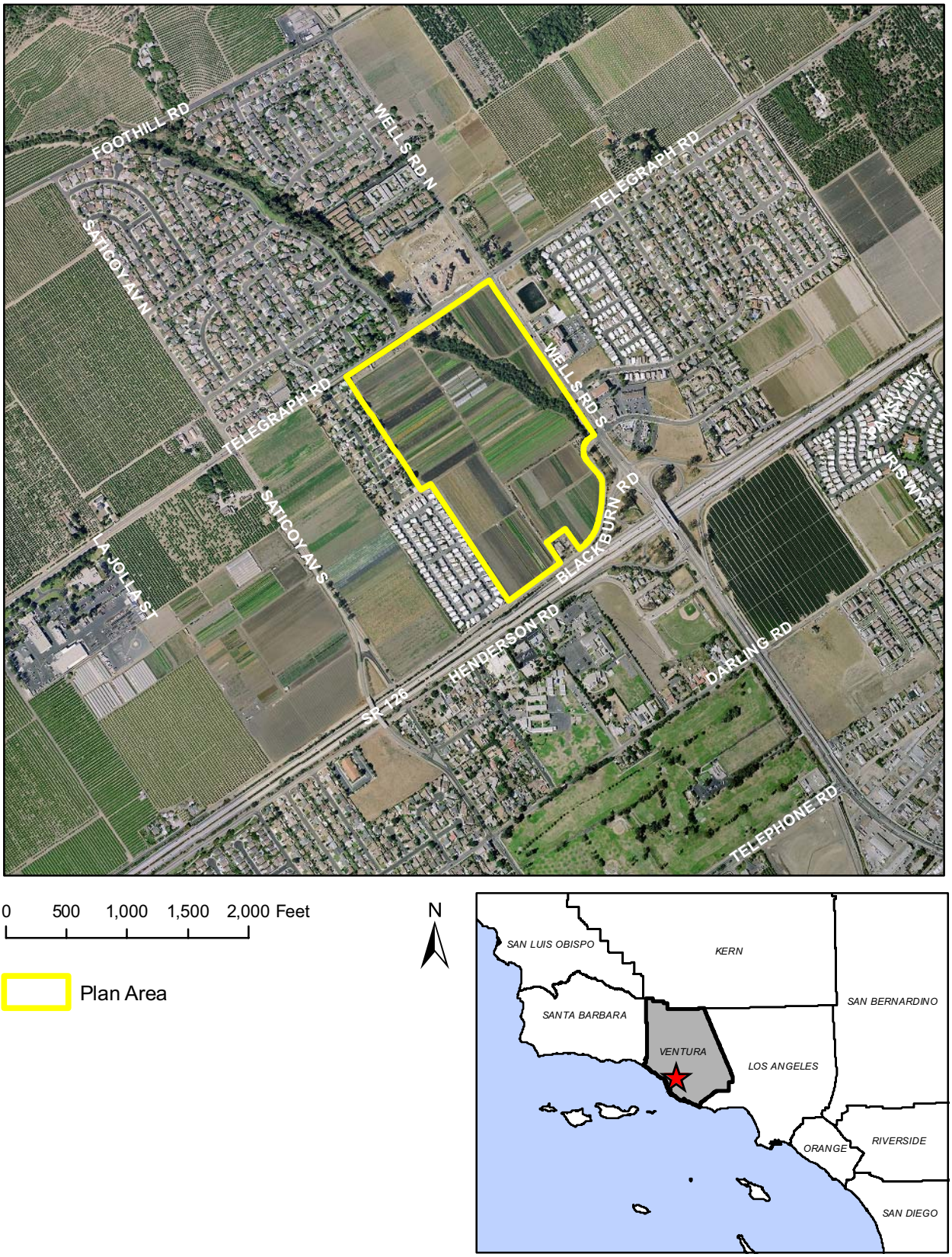
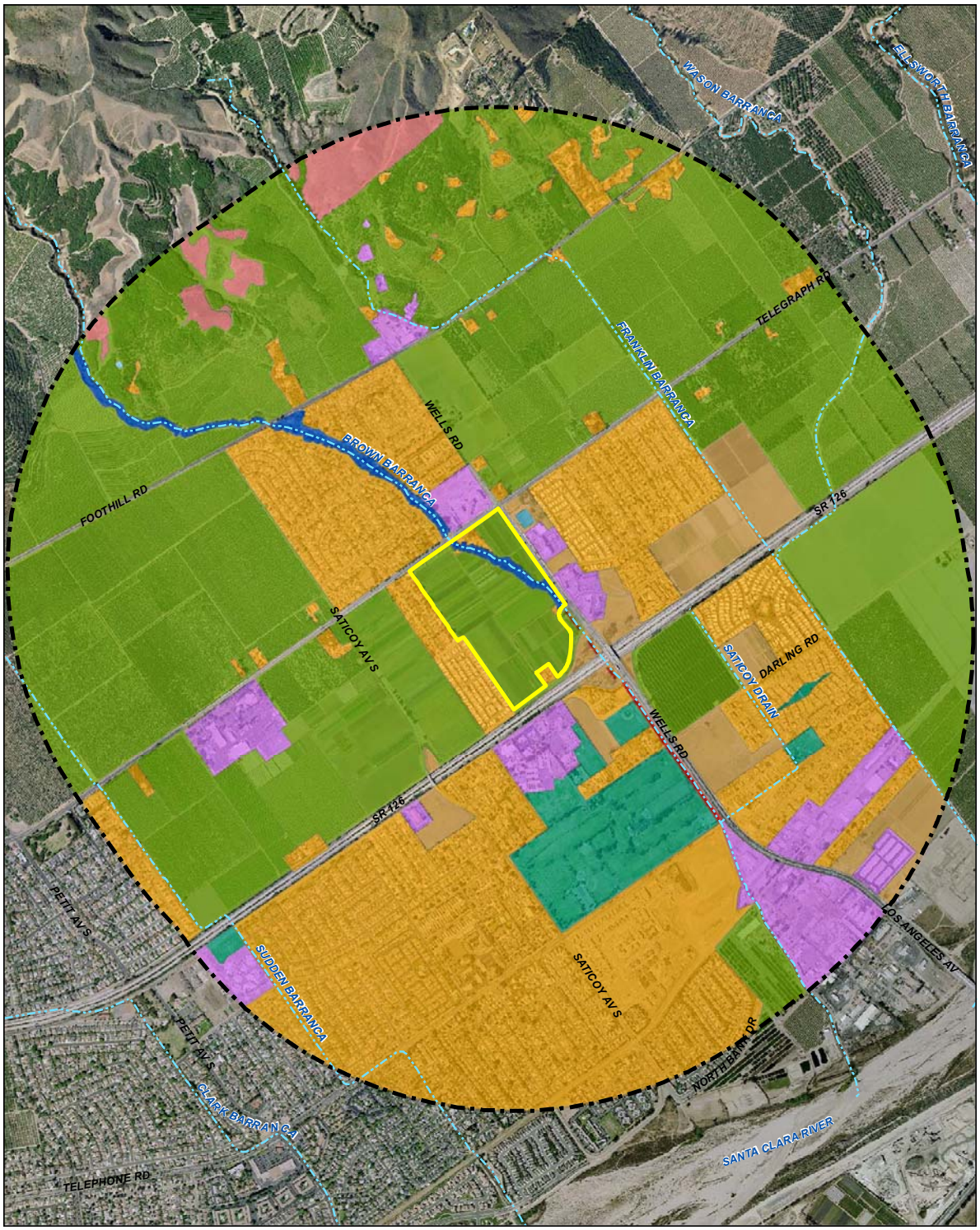


Source: US Bureau of the Census TIGER 2004 data.
Image Source: CIRGIS, 2004.

Project Vicinity Map

Figure 1



Base Aerial Source: CIRGIS, 2004.

Plan Area
One-Mile Buffer
Maintained Ditch/Other Drainage
Agriculture
Coastal Scrub
Coastal and Valley Freshwater Marsh
Developed Parks/Golf Course
Industrial/Commercial
Irrigation Reservoir
Residential
Southern Riparian Forest/Willow Scrub
Vacant Land

N
0 0.125 0.25 0.375 0.5 Mile

Habitat Types within the Project Vicinity

Figure 2

Habitat Types Source: Padre Associates, Inc., 2007.
Base Aerial Source: CIRGIS, 2004.

Habitat Types and Species Observed at the Project Site
Figure 3

Appendix A

Qualifications of Surveyors for California Red-legged Frog

QUALIFICATIONS OF SURVEYORS FOR CALIFORNIA RED-LEGGED FROGS

Susan V. Christopher, Ph.D. Dr. Christopher is a herpetologist who has performed specialized research on the ecology of the California red-legged frog (*Rana draytonii*) since 1992. She holds a B.A. in Biology from the University of North Carolina at Wilmington and a Ph.D. in Biology from the University of California, Santa Barbara. Her dissertation research focused on non-native fish and bullfrog effects on the California red-legged frog. Other aspects of her research included movement patterns, breeding and upland habitat use, larval ecology, and distribution patterns. She has taught the field portion of the California red-legged frog training workshop with Dr. Norman Scott and led California red-legged frog training workshops for the California Conservation Corps. As an associate research biologist for the Museum of Systematics and Ecology and the Santa Barbara Museum of Natural History, Dr. Christopher has expertise in the identification, collection, and curation of California central coast amphibian and reptile species. She has taught the Herpetology Lab at the University of California, Santa Barbara. She has conducted numerous herpetological inventories that involved the identification of local amphibian eggs, larvae and adults. She has performed over 500 protocol California red-legged frog surveys, and handled 1000s of ranid frogs and larvae. She holds a current 10(a)(1)(A) federal permit and a state permit for handling California red-legged frogs.

Lacrissa Cook, MESM, serves as a biologist and manages Rincon's Ventura Biological Services group. Ms. Cook holds a Master's of Environmental Science and Management degree with an emphasis in Conservation Planning from the University of California at Santa Barbara, with expertise in the areas of watershed and resource management, ecology, threatened and endangered species, as well as CEQA and NEPA. She has wide ranging biological, ecological, business, and land-use planning experience in the government, academic, non-profit, and private sectors. Ms. Cook is an experienced field biologist and technical writer. She has worked extensively on watershed management and human impact studies for the National Forest Service and The Nature Conservancy, developing relational databases to unify resources data, reduce data entry and data analysis efforts, and promote standardized and geographically referenced data. She has conducted amphibian surveys (Red-Legged Frog and Arroyo Toad) in Los Padres National Forest, California, including eggmass surveys, habitat characterization, human-impact monitoring, and night surveys.

Appendix B

Site Assessment and Survey Data Sheets

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by _____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 07/29/2008
(mm/dd/yyyy)

Site Assessment Biologists: Christopher Susan _____
(Last name) (first name) (Last name) (first name)

_____ _____
(Last name) (first name) (Last name) (first name)

Site Location: Ventura Co., Ventura, Brown Barranca, 34° 17.571'N, 119° 09.636'W
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Parklands Specific Plan EIR
Brief description of proposed action:
Annex 66.7 acres into the City of Ventura for residential and commercial development.

1) Is this site within the current or historic range of the CRF (circle one)? (YES) NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES (NO)
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: _____ Maximum depth: _____

Vegetation: emergent, overhanging, dominant species: _____
_____
_____

Substrate: _____
_____

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Appendix D.

California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8–20'

Depth at bank full: ~2m

Stream gradient: low unplunge pools

Are there pools (circle one)? YES NO

If yes,

Size of stream pools: 6' X 8' X 1'1/2' deep

Maximum depth of stream pools: 1m deep at old weir

Characterize non-pool habitat: run, riffle, glide, other: riffles, alternate channels

Vegetation: emergent, overhanging, dominant species: Salix, castor bean poison oak, palmetto, cattails at Blackburn Rd xing + watercress, ornamental

Substrate: silt, sand, cobble, gravel

Bank description: Densely vegetated with willows. Rip rap along Wells Rd.

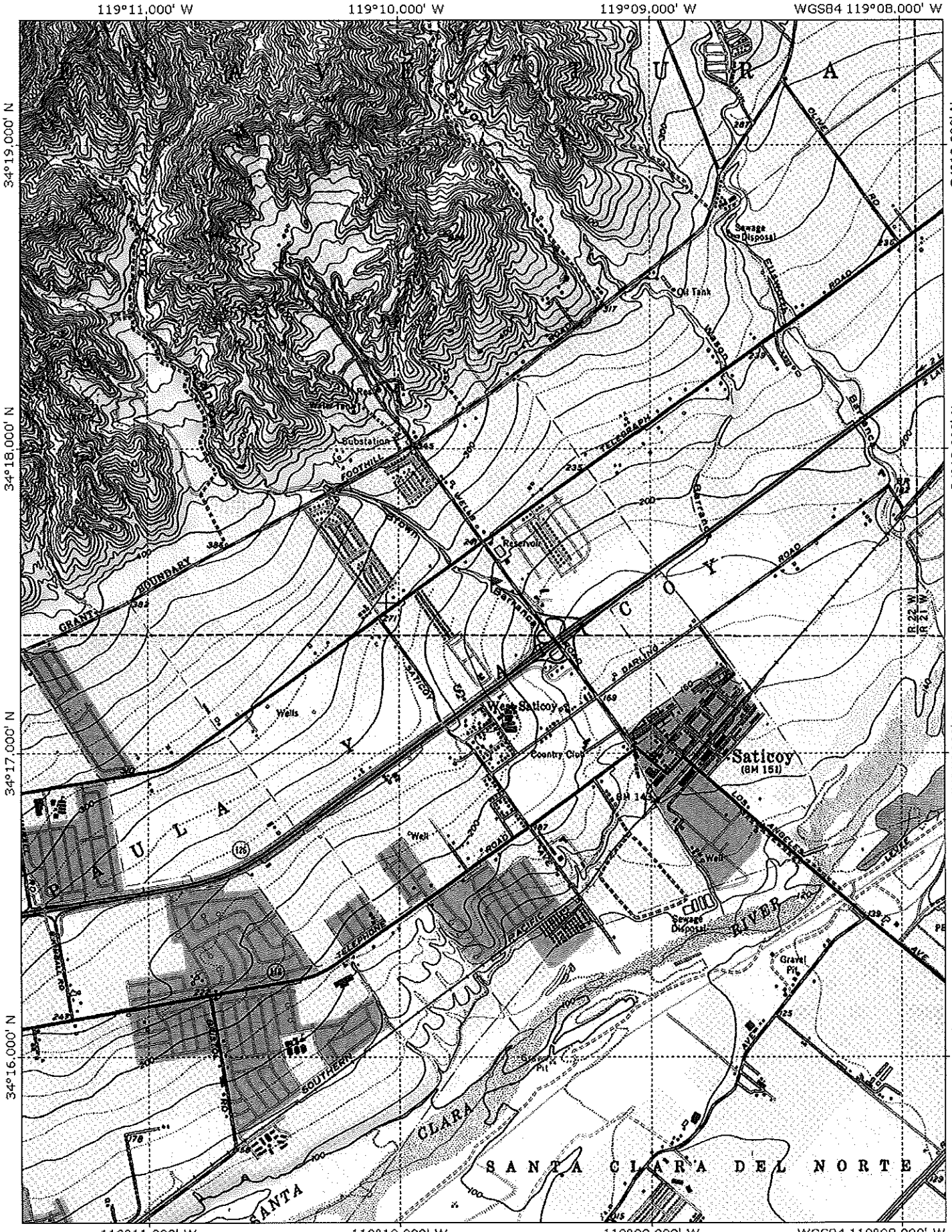
Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: If ephemeral, dry by September

Other aquatic habitat characteristics, species observations, drawings, or comments:

See field notes

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location



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Appendix E.
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____
(FWS Field Office) (date) (biologist)

Date of Survey: 07/28/08 (mm/dd/yyyy) **Survey Biologist:** Christopher Susan (Last name) (first name)
Survey Biologist: Cook Larissa (Last name) (first name)

Site Location: Ventura Co., Ventura, Brown Barranca; 34° 17.571'N, 119° 09.636'W
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Parklands Specific Plan EIR
Brief description of proposed action:
Annex 66.7 acres into the City of Ventura for residential + commercial development

Type of Survey (circle one): **DAY** / **NIGHT** **BREEDING** / **NON-BREEDING**

Survey number (circle one): **1** 2 3 4 5 6 7 8

Begin Time: 1655 **End Time:** 1815

Cloud cover: 0 **Precipitation:** 0

Air Temperature: 24.5 °C **Water Temperature:** 21.0 °C

Wind Speed: Ave. 4.5 mph **Visibility Conditions:** very good

Moon phase: less than 1/4 **Humidity:** dry

Description of weather conditions: breezy, mild

Brand name and model of light used to conduct surveys: Wizard Nite Lite (2) (night surveys)

Were binoculars used for the surveys (circle one)? **YES** **NO**
Brand, model, and power of binoculars: Nikon 8x23, Bushnell 10x12

1655 –

Appendix E.
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
Xenopus laevis	~10	O	Adults + JV		100%

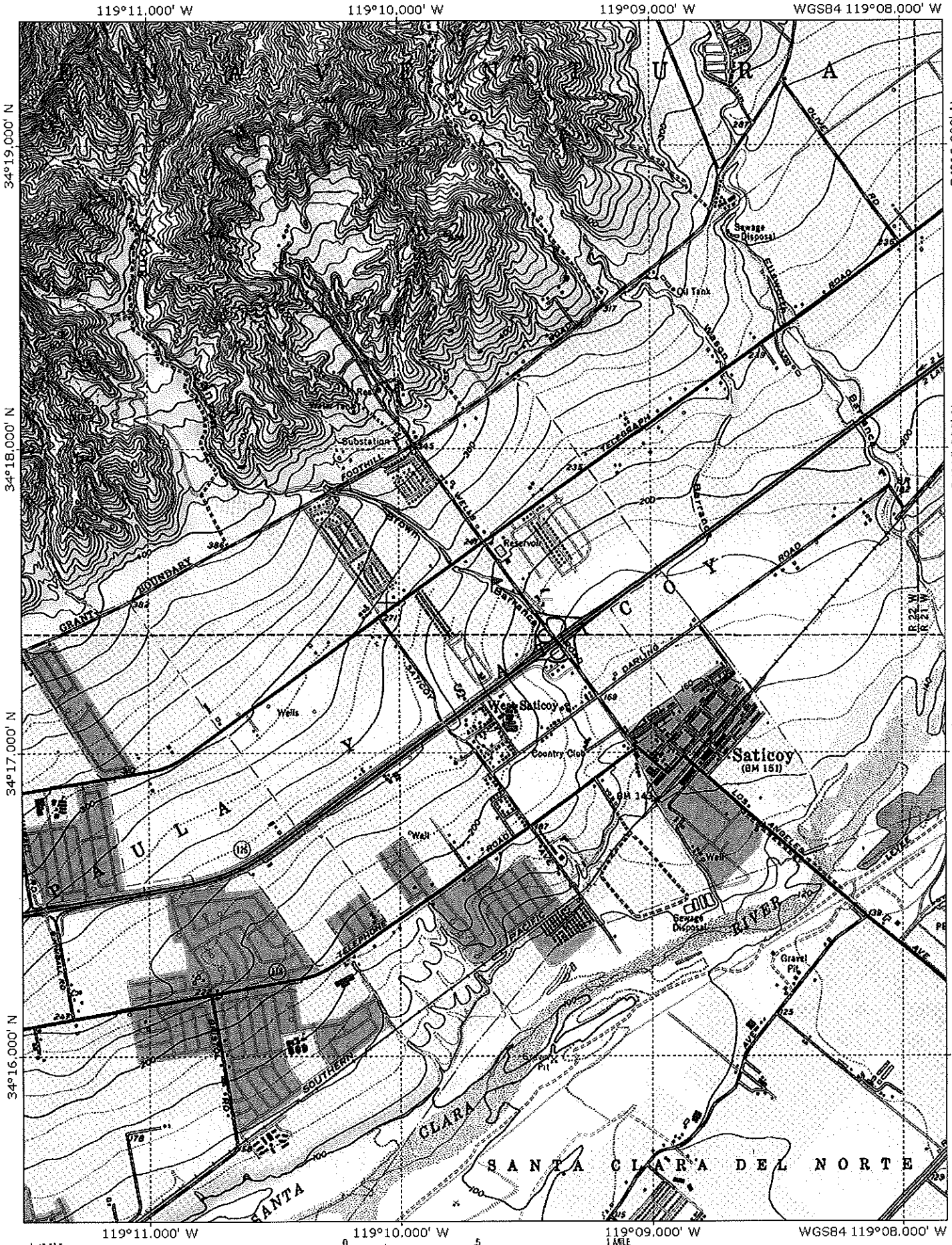
Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: Water quality appears poor - orange fungi, cloudy water, oil sheen; dam in creek Xenopus

Other notes, observations, comments, *etc.*

See field notes

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations



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Appendix E.
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____ (RWS Field Office) _____ (date) _____ (biologist)

Date of Survey: 07/28/2008 (mm/dd/yyyy) **Survey Biologist:** Christopher (Last name) Susan (first name)
Survey Biologist: Poole (Last name) Melissa (first name)

Site Location: Ventura Co., Ventura, Brown Barranca
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).
34° 17.571'N, 119° 09.6036'W
****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Parklands Specific Plan EIR
Brief description of proposed action:
Annex 66.7 acres into City of Ventura for residential + commercial development.

Type of Survey (circle one): **DAY** **NIGHT** **BREEDING** **NON-BREEDING**

Survey number (circle one): **1** **2** **3** **4** **5** **6** **7** **8**

Begin Time: 2036 **End Time:** 2155

Cloud cover: 0 **Precipitation:** None

Air Temperature: 20.5°C **Water Temperature:** 18.5°C

Wind Speed: Ave 0 to mph **Visibility Conditions:** Very good

Moon phase: < 1/4, not out yet **Humidity:** Dry

Description of weather conditions: Still, slight breeze, mild

Brand name and model of light used to conduct surveys: Wizard Nite Lite (2)

Were binoculars used for the surveys (circle one)? **YES** **NO**
Brand, model, and power of binoculars: Nikon 8x25 / Bushnell 10x12

Appendix E.
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
Xenopus laevis	50+	O	Adults + Juveniles		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: Xenopus

Other notes, observations, comments, *etc.*
Invertebrates depauperate - water Striders, planaria, + conical snails only. No crayfish or treefrog.

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix E.
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____ (FWS Field Office) _____ (date) _____ (biologist)

Date of Survey: 08/04/2008 (mm/dd/yyyy) **Survey Biologist:** Christopher (Last name) Susan (first name)

Survey Biologist: ~~Cook Tacosa~~ (Last name) (first name)

Site Location: Ventura Co., Ventura, Brown Barranca
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).
34° 17.571'N, 119° 09.636'W

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Parklands Specific Plan EIR
Brief description of proposed action:
Annex 66.7 acres into the City of Ventura for residential + commercial development.

Type of Survey (circle one): **DAY** **NIGHT** **BREEDING** **NON-BREEDING**

Survey number (circle one): **1** **2** **3** **4** **5** **6** **7** **8**

Begin Time: 1625 **End Time:** 1717

Cloud cover: 35% **Precipitation:** none

Air Temperature: 30.0°C **Water Temperature:** 22.0°C

Wind Speed: 6.1 mph ave **Visibility Conditions:** very good

Moon phase: 1/4 **Humidity:** dry

Description of weather conditions: breezy + warm, clear

Brand name and model of light used to conduct surveys: n/a

Were binoculars used for the surveys (circle one)? **YES** **NO**
Brand, model, and power of binoculars: Nikon 8X25, ~~Bushnell 10X25~~

Appendix E.
California Red-legged Frog Survey Data Sheet

8/4/08
Day

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
Xenopus laevis	12	O (mugging)	Net cast 10 Adult 2-juv.		100%
			Released from wild		

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: _____

Other notes, observations, comments, *etc.*
Water level at pool by weir is down ~6" + some of the smaller pools have dried.

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix E.
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____ (FWS Field Office) _____ (date) _____ (biologist)

Date of Survey: 08/04/2008 (mm/dd/yyyy)

Survey Biologist: Christopher (Last name) Susan (first name)

Survey Biologist: Cook (Last name) Larissa (first name)

Site Location: Ventura Co., Ventura, Brown Barranca
(County, General location name, UTM Coordinates or Lat./Long, or T-R-S).
34° 17.571N, 119° 09.636W

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Packlands Specific Plan EIR
Brief description of proposed action:
Annex 661 acres into the City of Ventura for residential + commercial development.

Type of Survey (circle one): **DAY** **NIGHT** **BREEDING** **NON-BREEDING**

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 2020 **End Time:** 2108

Cloud cover: 50% **Precipitation:** none

Air Temperature: 21.0°C **Water Temperature:** 20.0°C

Wind Speed: 3.5mph **Visibility Conditions:** Very good

Moon phase: less than 1/4 **Humidity:** dry

Description of weather conditions: Breezy + mild

Brand name and model of light used to conduct surveys: Wizard Nite Lite (2)

Were binoculars used for the surveys (circle one)? **YES** **NO**
Brand, model, and power of binoculars: Nikon 8x25, Bushnell 10x25

Appendix E.
California Red-legged Frog Survey Data Sheet

night
8/4/08

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
Xenopus laevis	49	O	Adult + juv		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: _____

Other notes, observations, comments, *etc.*

No discharge thru Blacktown Rd. pipe

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix C

Photo Plate of Brown Barranca at Parklands Specific Plan Site

PHOTO PLATE OF BROWN BARRANCA AT PARKLANDS SPECIFIC PLAN SITE

Photo Point 1. Brown Barranca is confined to a concrete channel downstream of Blackburn Road, and this picture is looking upstream from midway down the channel. Grasses, watercress and cattails filled the bottom of the channel.

Photo Point 2. Upstream view from the Blackburn Road crossing showing riprap on the northeast bank along Wells Road, and cattails and willows in the channel.

Photo Point 3. The channel was densely vegetated by willows and contained small pools separated by gentle riffles or dry areas.

Photo Point 4. A natural plunge pool formed by water flow over willow roots. Undercut banks associated with willow roots were common in the survey area. The water quality appeared poor in this and other areas.

Photo Point 5. Pool exceeding three feet in depth formed from scour under and around a concrete weir. African clawed frogs were observed in this pool, and it is estimated that at least 100 individuals could have been present.

Photo Point 6. Dense riparian vegetation in the channel as viewed from outside the stream channel.