

**COMPLIANCE MONITORING  
FOR THE ARCHER PROPERTY  
CONSTRUCTION ACTIVITIES  
IN SAN ANTONIO CREEK,  
VENTURA COUNTY, CALIFORNIA  
(CORPS FILE NO. 200501071-JWM)**

*Prepared for:*

**UNITED STATES ARMY CORPS OF ENGINEERS  
NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION  
UNITED STATES FISH AND WILDLIFE SERVICE**

*On Behalf of:*

**BRIAN ARCHER**

**May 2005**

---

---



**Compliance Monitoring for the Archer Property  
Construction Activities in San Antonio Creek,  
Ventura County, California  
(Corps File No. 200501071-JWM)**

*Prepared for:*

**United States Army Corps of Engineers**

Regulatory Branch, Ventura Field Office

2151 Alessandro Drive, Suite 110

Ventura, California 93001

Contact: John W. Markham, Project Manager 805/585-2150

**National Oceanic Atmospheric Administration**

501 West Ocean Boulevard, Suite 4200

Long Beach, California 90802

Contact: Stan Glowacki 521/980-4061

**United States Fish and Wildlife Service**

Ventura Fish and Wildlife Office

2493 Portola Road, Suite B

Ventura, California 93003

Contact: Chris Dellith, Senior Biologist 805/644-1766

*On Behalf of:*

**Bryan Archer**

340 Avenida de Recreo

Ojai, California 93023

805/646-3137

*Prepared by:*

**David Magney Environmental Consulting**

P.O. Box 1346

Ojai, California 93024-1346

Contact: David L. Magney 805/646-6045

**6 May 2005**

*This document should be cited as:*

David Magney Environmental Consulting. 2005. Compliance Monitoring for the Archer Property Construction Activities in San Antonio Creek, Ventura County, California (Corps File No. 200501071-JWM). 6 May 2005. (PN 05-0111.) Ventura County, California. Prepared for: U.S. Army Corps of Engineers, Ventura, California; National Oceanic Atmospheric Administration, Long Beach, California; and U.S. Fish and Wildlife Service, Ventura, California. Prepared on behalf of Mr. Brian Archer.



**TABLE OF CONTENTS**

	<b>PAGE</b>
<b>SECTION 1. PROJECT DESCRIPTION .....</b>	<b>1</b>
PROJECT PURPOSE .....	1
PROJECT LOCATION .....	1
PHYSICAL SETTING .....	3
PROJECT DESCRIPTION.....	3
<b>SECTION 2. METHODS .....</b>	<b>5</b>
CONSTRUCTION MONITORING FOR COMPLIANCE .....	5
Construction Monitoring Daily Logs.....	5
Construction Monitoring Hours.....	6
SPECIAL-STATUS WILDLIFE SURVEYS.....	6
<b>SECTION 3. SENSITIVE BIOLOGICAL RESOURCES.....</b>	<b>8</b>
RIPARIAN AND AQUATIC HABITAT DESCRIPTIONS .....	8
Riverine Habitat.....	8
Palustrine Habitat.....	9
Special-Status Wildlife .....	11
<b>SECTION 4. RESULTS.....</b>	<b>13</b>
COMPLIANCE WITH PERMIT CONDITIONS .....	13
SPECIAL-STATUS WILDLIFE SURVEYS.....	13
<b>SECTION 6. ACKNOWLEDGEMENTS.....</b>	<b>15</b>
<b>SECTION 7. CITATIONS.....</b>	<b>15</b>
PRINTED REFERENCES.....	15
<b>APPENDICES .....</b>	<b>16</b>
APPENDIX A. SITE PHOTOGRAPHS .....	16
APPENDIX B. FIELD MONITORING DAILY LOGS .....	16
APPENDIX C. CALIFORNIA RED-LEGGED FROG SURVEY .....	16

**LIST OF TABLES**

Table 1. Likelihood of Special-Status Wildlife of San Antonio Creek at the Archer Property .....	12
Table 2. Permit Conditions Compliance Monitoring Results .....	14

**LIST OF FIGURES**

Figure 1. Archer Project Site Location Map .....	2
Figure 2. Aerial Photograph of Project Site and Special-status Species Survey Area .....	7

## SECTION 1. PROJECT DESCRIPTION

### PROJECT PURPOSE

Bryan Archer is permitted to conduct construction activities adjacent to San Antonio Creek in order to reinforce the west bank and to grade and level the site for future construction and development of a residence (guesthouse). Mr. Archer received an Emergency Actions Authority permit approval from the U.S. Army Corps of Engineers (Corps) (Corps Regional General Permit No. 063).

Mr. Archer engaged the services of a contractor to clear the land, buttress San Antonio Creek's west bank with riprap and loose material, and level the property using soil found onsite and imported material. Mr. Archer intends to build a guesthouse on the property.

David Magney Environmental Consulting (DMEC) was contracted by Mr. Archer to provide independent compliance monitoring for the construction activities associated with his property. The compliance-monitoring program described by the Corps requires that a qualified biologist conduct monitoring when construction activities are performed in or adjacent to jurisdictional waters of the United States. The purpose of this program is to ensure compliance with Corps and NOAA regulations. This is accomplished by conducting regular monitoring sessions of the construction activities. Potential impacts to state and federally listed faunal and floristic resources are a primary concern, while other special interest concerns include:

- Loss of potential habitat and/or alteration of habitat that would threaten the Federally-listed Threatened California Red-legged Frog ([CRLF] *Rana aurora draytonii*) and the Federally-listed Endangered Southern California Steelhead (*Oncorhynchus mykiss irideus*);
- Siltation of steelhead and CRLF spawning habitat;
- Construction activities creating conditions that would impact native vegetation and riparian habitat;
- Loss of habitat for any sensitive wildlife species, including Southwestern Pond Turtle (*Emys marmorata pallida*), Two-striped Garter Snake (*Thamnophis hammondi*), and Arroyo Chub (*Gila orcutii*); and
- Loss of any wildlife species resulting from operation of heavy equipment in a stream channel.

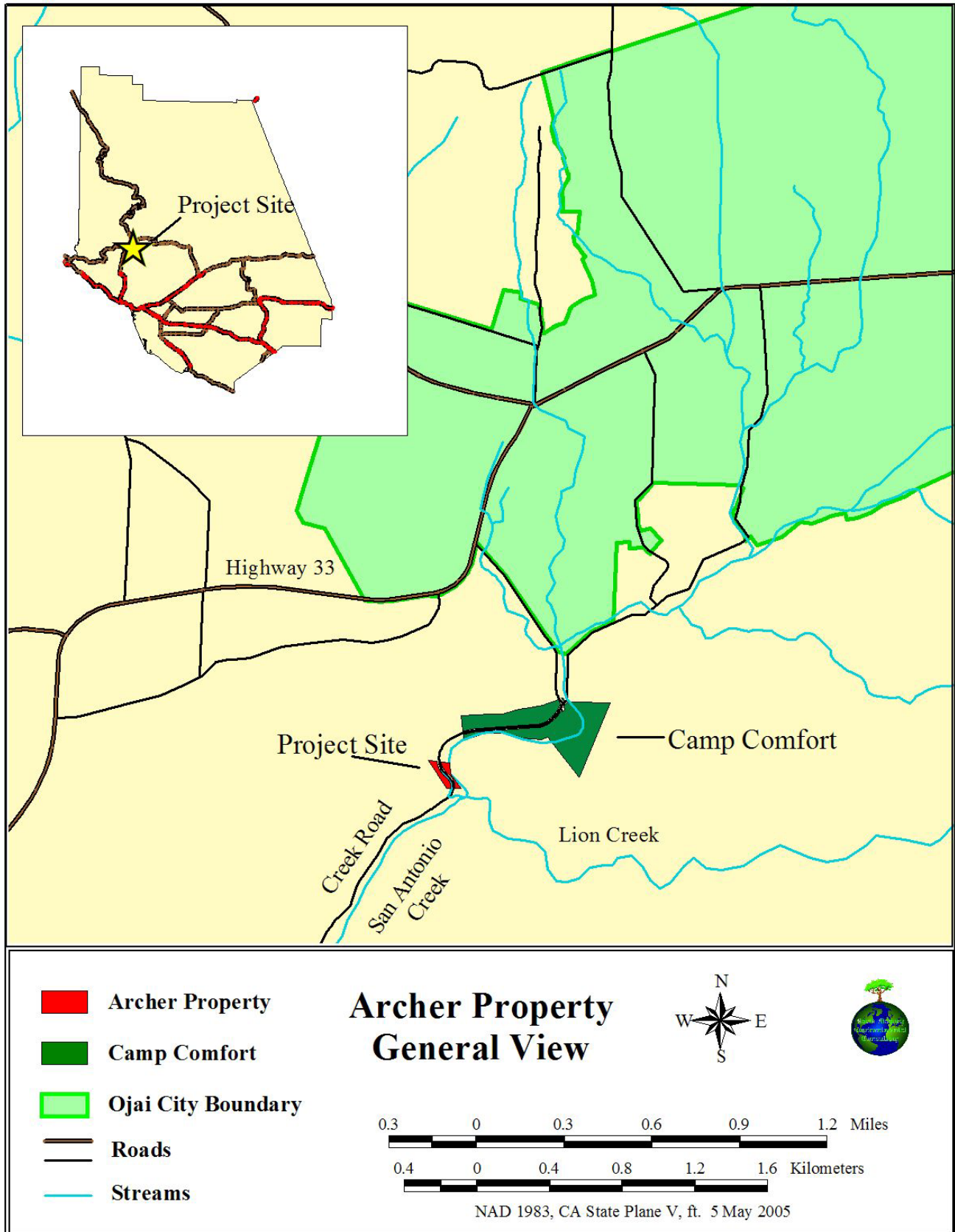
Significant variables that may affect observations of these conditions, such as weather, climate, and operational factors, are also observed and evaluated.

### PROJECT LOCATION

The Archer property (project site) is owned by Brian Archer and is located on Creek Road along San Antonio Creek in unincorporated Ventura County. The Assessor's parcel number for the property is 033-0-130-110. This project site is located approximately ten (10) miles north of the City of San Buenaventura (Ventura), and less than one mile (approximately 3,300 feet) south of the Ojai city limits (refer to Figure 1, Project Location Map). The project site is situated at the approximate coordinates of 34.423585°N latitude and 119.265435°W longitude, and is at an elevation of approximately 550 feet above mean sea level.

The property includes land on both east and west sides of the road, and the eastern section includes portions of San Antonio Creek. The project site is located immediately between the creek and the road, with San Antonio Creek to the east, and Creek Road to the west.

Figure 1. Archer Project Site Location Map



## PHYSICAL SETTING

San Antonio Creek is located in Ventura County, north of the city of Ventura and is considered to be a part of the Ventura River system. Its upper reaches drain areas of the Los Padres National Forest; its middle reaches run through the city of Ojai, and from there it runs roughly south/southwest through rural lands, emptying into the Ventura River just north of the unincorporated community of Casitas Springs.

The creek flows in a north-to-south direction in the vicinity of the project site, flowing into the Ventura River approximately 4.5 miles south of the project site.

The San Antonio Creek system can generate high-energy flows during peak winter months. Several significant storm events occurred during late fall, winter, and early spring of 2004/2005 (including mid-October, 26 December through 5 January, 7-11 January, 17-23 February, and 22 March) resulted in high energy flows in the San Antonio Creek drainage creating peak flows as high as 68 cubic feet per second (cfs).

As a result of the significant storm events, and the subsequent high-energy flow, the fluvial geomorphology of this creek system has been altered throughout much of its reaches. The Archer property suffered stream bank erosion as a result of the high stream flows.

The substrate of San Antonio Creek consists of a mixed grain size aggregate ranging from clay to large boulders. The majority of the particle sizes are predominantly in the middle of the range (cobbles).

## PROJECT DESCRIPTION

This section describes the type of work conducted on the Archer property, associated with the construction activities, under the observation of the biological monitors.

**Equipment** used on the Archer property project includes: one Caterpillar excavator; one Caterpillar backhoe; and one dump truck.

**Four Construction Phases** of the Archer property project include:

1. Erecting exclusion barrier/sedimentation fencing around project site;
2. Creating access for machinery and clear land of vegetation;
3. Reinforcing bank/slope with riprap and loose material; and
4. Grading/leveling the project site using existing material (only importing material if necessary).

### PHASE 1. EXCLUSION BARRIER/SEDIMENTATION FENCING

The first phase of the construction work involved erecting exclusion barrier/sedimentation fencing around project site. Prior to any heavy machinery being brought onsite, Mr. Archer's work crew installed an exclusion barrier to delineate the work area. This barrier was installed in a "U-formation," which served effectively as sedimentation filtration, keeping loose materials that came down the bank during work from entering the active flows of San Antonio Creek. The fencing also aided in preventing wildlife species from entering the work area.



## **PHASE 2. CREATE ACCESS AND CLEAR LAND**

Phase 2 involved creating access to the project site and clearing the vegetation onsite. An excavator was used to create the first access point to the property from Creek Road. This access consisted of a steep ramp, approximately ten feet wide, down the embankment that delineates the eastern edge of the road's shoulder. A minor amount of upland vegetation was removed in the process, including *Ceanothus* and various ruderal grassland species. A second point of access was created 100 feet south of the first access point, and again a minor amount of upland vegetation was removed in the process. This second point of access was approximately 15 feet wide, and was used by dump trucks to deliver the introduced fill material later in the project. Once the excavator gained access to the construction area, the operator cleared existing vegetation, which also included ruderal and chaparral species.

## **PHASE 3. REINFORCE BANK WITH RIPRAP**

Immediately downstream of the Archer project site, a large amount of riprap, fortified with concrete, was installed on the western bank of San Antonio Creek prior to this project. The third phase of the project was to continue this riprap north, reinforcing the bank that separates the future guesthouse site from the active flows of San Antonio Creek. The new riprap was not cemented; rather, it was filled in with loose soil in order to facilitate the planting of native species. Enough boulders and blocks were present onsite that no foreign material was needed for this phase.

## **PHASE 4. PROJECT SITE GRADING AND LEVELING**

The final phase of the project was grading and leveling the project site. During this phase, dump trucks imported foreign fill material, and the excavator spread the material throughout the site to bring the land up to grade where the guesthouse will be built. This phase included two days of work.



## SECTION 2. METHODS

This section described the methods used to conduct the Special-status wildlife species surveys of the project site prior to and during each day of construction activities, as well as the methods used for monitoring the contractors for compliance with Corps conditions.

### CONSTRUCTION MONITORING FOR COMPLIANCE

The compliance-monitoring program described by the Corps requires that a qualified biologist conduct monitoring when construction activities are performed in or adjacent to jurisdictional waters of the United States. The purpose of this program is to ensure compliance with Corps and NOAA regulations. This is accomplished by conducting regular monitoring sessions of the construction activities.

A summary of the Special Conditions required by the Corps (verification letter dated 30 March 2005) include:

1. Prior to construction, the project site impact areas shall be delineated by fencing to prevent equipment from entering the flowing channel and exceeding the 250-linear-foot impact area.
2. To minimize impacts and take of California Red-legged Frog, the permittee shall employ a qualified wildlife biologist to survey the project area and its vicinity initially and periodically during the project.
3. If California Red-legged Frog are identified within the project site or in its vicinity, and capture/relocation is deemed necessary by the biologist, the monitor shall notify the Corps and U.S. Fish and Wildlife Service prior to capture efforts.
4. The permittee shall submit a post-project report including a brief written summary of work performed.

### Construction Monitoring Daily Logs

A one-page monitoring form was prepared by DMEC to record observations relevant to the compliance monitoring. Completed monitoring forms can be found in Appendix B (Field Monitoring Daily Logs) for each monitoring session that was conducted. Corps conditions compliance monitoring involves ensuring that:

- Equipment is working out of flowing water, except as permitted;
- Sediment barriers (hay bales/filter fabric/sand bags) are in place;
- Exclusion area fencing is in place;
- Groundwater dewatering is being discharged into a catchment basin;
- Silt fencing is present downslope of work areas adjacent to wetlands;
- Oak tree(s) are being protected or native vegetation is properly fenced or marked;
- All permits are present onsite;
- Vehicles are refueling in designated area(s);
- Nonnative debris/fill (concrete, trash, garbage) is kept out of streambed; and
- Litter is picked up daily.

Some of the permit conditions listed on the general Field Monitoring Daily Logs were not applicable to this project; therefore, additional comments and observations were recorded as needed and necessary concerning this project.

## Construction Monitoring Hours

Field monitoring was conducted from 14 April 2005 through 21 April 2005. Field monitoring occurred each day that the project operated. Monitoring was conducted in a manner that allowed the work to be conducted within compliance of the permit regulations and requirements. Activities were monitored at different times of the day to observe the consistency of compliance in a range of daily situations. Observations were made and recorded as the day progressed, comments were noted, and corrective action was taken if any activities were found to be out of compliance.

Field monitoring for compliance was conducted by Bryce Breslin of DMEC. The majority of the monitoring time was spent observing the construction activities for compliance with Corps and NOAA regulations. Other observations reported on include: weather conditions; changes in the construction plans which would maintain Corps and NOAA compliance and reduce potential impacts; and survey results for fish and other wildlife resources potentially frequenting or inhabiting the project site.

Photographs were taken for the pre- and post-construction phases of this project. These photographs are included in Appendix A, Archer Project Photographs, and consist of representative scenes of the project and the surrounding environment. Additional photographs, not in Appendix A, are included in the project file at DMEC, and are available for viewing upon request.

## SPECIAL-STATUS WILDLIFE SURVEYS

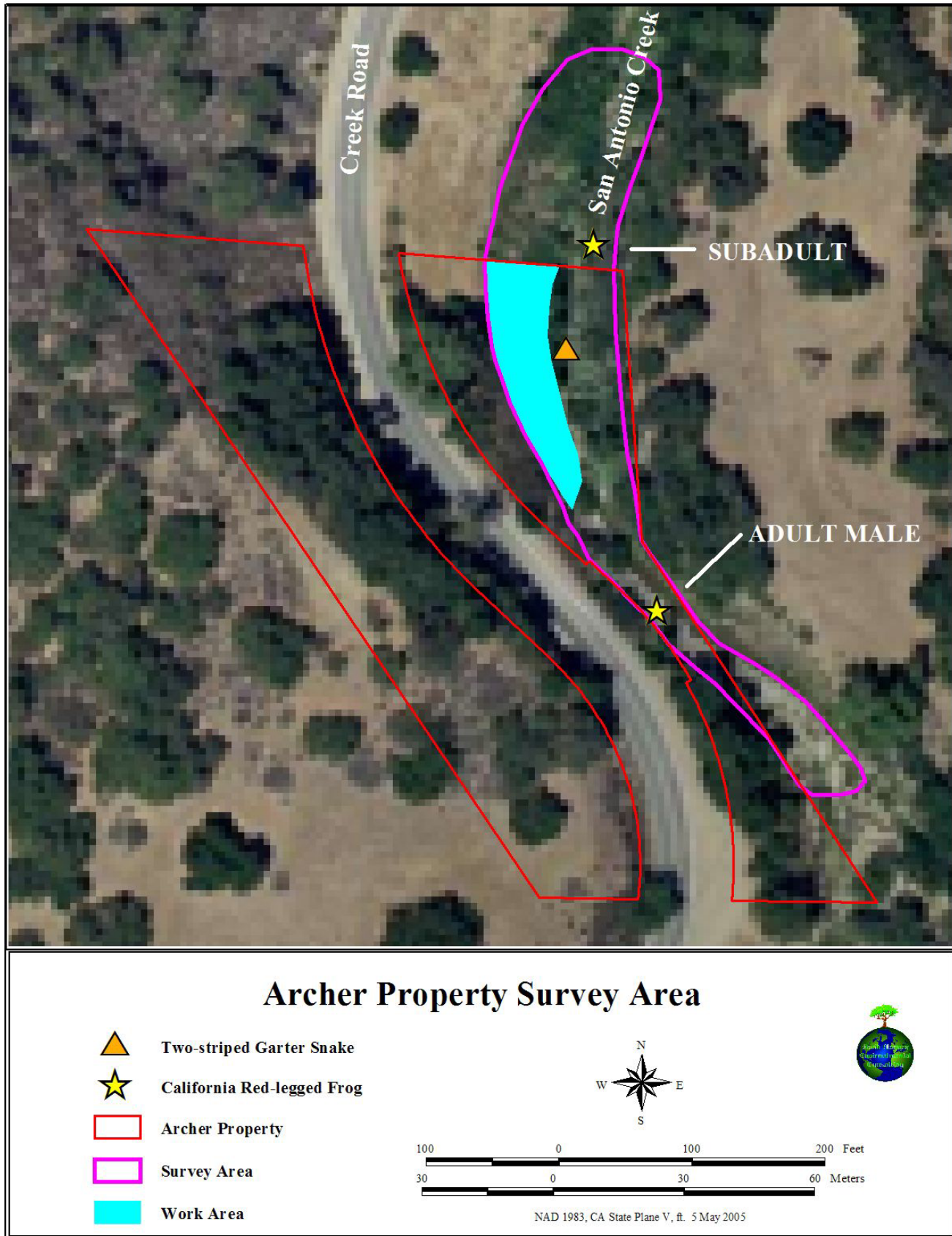
An initial night survey was conducted on 11 April 2005 for California Red-legged Frog (*Rana aurora draytonii*) along San Antonio Creek at the project site. Figure 2, Aerial Photograph of Project Site and Special-status Species Survey Area, shows the area surveyed by biologists for special-status wildlife species. The survey was conducted by Vince Semonsen (Wildlife Biologist [California Red-legged Frog Expert], VJS Biological Consulting), and David Magney and Bryce Breslin of DMEC at approximately 8:45 p.m. The stream channel was surveyed using lights and binoculars to scan the creek corridor for California Red-legged Frog. The project site was surveyed for other wildlife species as well.

On 12 April 2005, Mr. Semonsen began environmental training for all workers onsite. Mr. Magney, Mr. Breslin, and Elizabeth Chatten (Ventura County's Wildlife Biologist) were also present. After training was conducted, Mr. Semonsen and the other biologists onsite surveyed along the stream banks and within the work area for any animals to be relocated. After construction began, biologists worked with the contractor to carefully move several trees and boulders that were potential hiding places for frogs. (Refer to Appendix C, California Red-legged Frog Survey Report, for a detailed description of the frog surveys conducted onsite.)

All remaining days that construction work was conducted onsite, Mr. Breslin, a DMEC biologist, conducted initial wildlife surveys prior to construction activities each day, as well as periodic wildlife surveys throughout each day of construction work. Mr. Breslin was informed that if he observed any California Red-legged Frogs during construction activities, he was to notify Mr. Semonsen (for relocation) and the appropriate agencies immediately.

DMEC also conducted a search of the California Department of Fish and Game's (CDFG's) California Natural Diversity Data Base (CNDDDB) RareFind3 (CDFG 2004) for the Ojai and Matilija, California Quadrangles (USGS 7.5-minute Series Topographic Map) to account for all tracked special-status wildlife species with potential to occur in the vicinity of the project site.

**Figure 2. Aerial Photograph of Project Site and Special-status Species Survey Area**



## **SECTION 3. SENSITIVE BIOLOGICAL RESOURCES**

This section describes the sensitive biological resources present at the project site on the banks of San Antonio Creek, and includes a description of the habitat types and special-status wildlife species for which the construction monitoring was required.

### **RIPARIAN AND AQUATIC HABITAT DESCRIPTIONS**

Three general habitat classifications currently exist in the immediate vicinity of the Archer project site, including Riverine and Palustrine, which include the plant communities associated with jurisdictional waters of the U.S. These habitat types include floristic plant communities that contribute to the landscape of the project site.

Numerous species of wildlife are known to occur within the San Antonio Creek region, to frequent the habitats of the Palustrine and Riverine Systems on a seasonal basis, or to regularly use resources provided by San Antonio Creek. Riverine and Palustrine habitats contain numerous attributes and resources that are important for wildlife. The structure of the riparian community, in addition to the high plant species diversity and richness, provides necessary foraging, nesting, and cover opportunities for numerous species. In addition, streams and rivers such as San Antonio Creek are important sources of water for numerous upland wildlife species. Riparian zones along rivers are also often used as migration corridors by various species of wildlife including small and large mammals, birds, and reptiles. These migration corridors can act as connections between habitat patches and they allow for physical and genetic exchange between animal populations. Wildlife can use riparian zones for cover while traveling across otherwise open areas.

Descriptions are provided in the following subsections for the following habitats and plant communities: Riverine Upper Perennial Unconsolidated Bottom; Palustrine Scrub/Shrub; and Palustrine Forested.

#### **Riverine Habitat**

The Riverine habitat existing onsite is classified by the CNDDDB (CDFG 2004) as Southern California Steelhead Stream, and is considered a sensitive habitat type.

A Riverine system includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens; and (2) habitats with water containing ocean-derived salts in excess of 0.5‰. Channel is defined as a conduit that periodically or continuously contains moving water, or that forms a connecting link between two bodies of water.

#### **RIVERINE UPPER PERENNIAL UNCONSOLIDATED BOTTOM**

The stream habitat, observed within the Riverine system throughout the vicinity of the project site, is further classified as Riverine Upper Perennial Unconsolidated Bottom. Riverine Upper Perennial Unconsolidated Bottom includes habitats with at least 25% cover of particles smaller than stones, and a vegetative cover less than 30%. Water regimes are restricted to subtidal (not present at the project



site), permanently flooded, intermittently exposed, and semipermanently flooded. This class is characterized by the lack of large stable surfaces for plant and animal attachment. Unconsolidated Bottom is usually found in areas with lower energy than Rock Bottoms, and may be very unstable. In the Riverine System, the substrate type of this class is largely determined by current velocity, and plants and animals exhibit a high degree of morphologic and behavioral adaptation to flowing water. (Cowardin et al. 1979.)

The Riverine habitat onsite associated with San Antonio Creek is predominantly unvegetated and contains recent fluviually deposited sediments otherwise known as Riverwash materials (described below). Boulder, Cobble, and gravel, with some sand were observed as predominant substrate types within the Riverine system onsite.

Riverwash generally occurs within the bed of intermittent streams, and consists of highly stratified, water-deposited layers of stony and gravely sand that contains relatively small amounts of silt and clay. It is characterized as having high permeability, but is present as the result of frequent and regular fluvial processes. Riverwash is frequently inundated during high water flow immediately following storms, where fresh deposits of alluvium are laid down and removed as the result of streambank erosion. Riverwash is subject to frequent disturbance, such as scouring and deposition, and the development and establishment of riparian vegetation is severely limited. (Woodruff et al. 1970, Edwards et al. 1970.)

The most important physical parameters for fish are stream depth, current velocity, substrate composition, cover, and temperature (Faber et al. 1989). However, the composition and structure of the associated riparian community can have a significant effect on the overall quality of the instream environment for fish. A well-established riparian corridor is important for fish in that shade, provided by the vegetation, maintains cooler stream temperatures during the summer months. In addition, the presence of a well-developed riparian community provides an ongoing source input of woody debris within the stream channel, which consequently provides cover and refuge for fish and other wildlife.

Various resident fish species known to occur within the Ventura River system, including San Antonio Creek, and they include: Prickly Sculpin (*Cottus asper*), Partially Armored Threespine Stickleback (*Gasterosteus aculeatus microcephalus*), Fathead Minnow (*Pimephales promelas*), Rainbow Trout (*Oncorhynchus mykiss*), and Arroyo Chub (*Gila orcutti*) (Hunt 1991). Nonnative, warm-water species known to occur within portions of the study area include Green Sunfish (*Lepomis cyanellus*), Channel Catfish (*Ictalurus punctatus*), and Carp (*Carassius auratus*). Two species of anadromous fish are present within the Ventura River Study Area, Pacific Lamprey (*Lampetra tridentata*) and Southern Steelhead (*Oncorhynchus mykiss irideus*), the migratory form of Rainbow Trout.

## Palustrine Habitat

The Palustrine habitats existing onsite are tracked by the CNDDDB (CDFG 2004) as Southern Willow Scrub (listed with a global-rank of G3 and a state-rank of S2.1) and Southern Sycamore Alder Riparian Woodland (with a global-rank of G4 and a state-rank of S4).

The Palustrine system includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5‰ (Cowardin et al. 1979). Palustrine habitats can be characterized as performing various hydrologic, geomorphologic, biogeochemistry, and plant and

wildlife habitat functions. The performance of these functions is largely dependent upon the maintenance of natural channel morphology and native plant communities.

The Palustrine Shrub/Scrub and Forested habitats existing onsite are used as nesting and foraging habitat for several species of birds, and as cover and foraging habitat for small and large mammals, some of which may use the riparian vegetation as a movement corridor. Palustrine habitat function is generally increased by the presence of adjacent natural upland habitats, which together create high species richness and structural diversity of an area. The Palustrine habitats observed within the Archer project site are further classified and defined below.

### **PALUSTRINE SCRUB/SHRUB HABITAT (ARROYO WILLOW SERIES)**

Palustrine Scrub/Shrub habitat is dominated by woody plants less than six meters tall. Contributing plants include true shrubs that are typically small or stunted due to environmental conditions. Palustrine Scrub/Shrub habitats may represent a successional stage leading to Palustrine Forested habitats, or may be relatively stable communities. (Cowardin et al. 1979.)

The Palustrine Scrub/Shrub habitat observed onsite is described below as Arroyo Willow Series.

Arroyo Willow Series is dominated by *Salix lasiolepis* (Arroyo Willow), which is a winter-deciduous shrub or small tree with shiny dark green (upper surface) and grayish (lower surface) oblanceolate leaves. Arroyo Willow is listed with a wetland indicator status of facultative wetland species (FACW, or usually found in wetlands [Reed 1988]). Arroyo Willow Series occurs in seasonally flooded or saturated freshwater wetland habitats, such as floodplains and low-gradient depositions along rivers and streams, and is abundant in marshes, meadows, and springs, at elevations below 1,800 meters. This riparian woodland forms a closed to intermittent canopy less than 10 meters tall, growing over a patchy shrub layer and a variable ground layer. (Sawyer and Keeler-Wolf 1995.)

Other associate species observed contributing to the shrub and ground layers of the plant community include: *Artemisia douglasiana* (Mugwort), *Baccharis pilularis* (Coyote Brush), *Baccharis salicifolia* (Mulefat), *Conium maculatum* (Poison Hemlock), *Marah macrocarpus* var. *macrocarpus* (Large-fruited Man-root), *Piptatherum miliaceum* (Smilo Grass), *Rubus ursinus* (Pacific Blackberry), and *Sambucus mexicana* (Blue Elderberry).

Amphibians and reptiles are well represented within riparian scrub habitats of San Antonio Creek. Amphibians known or expected to occur in San Antonio Creek and associated riparian habitats, include Western Toad (*Bufo boreas*), Pacific Treefrog (*Hyla regilla*), Black-bellied Slender Salamander (*Batrachoseps nigriventris*). The Bullfrog (*Rana catesbiana*) is an introduced species, native to the East Coast of North America, and is present in the Ventura River and associated tributaries. The introduction and presence of the Bullfrog in many California streams is most likely contributing to the decline of several native species of amphibians and reptiles (Faber et al. 1989).

Various reptiles expected to inhabit suitable riparian scrub habitats of San Antonio Creek include: San Diego Alligator Lizard (*Elgaria multicarinatus*), California Kingsnake (*Lampropeltis getulus californiae*), Western Fence Lizard (*Sceloporous occidentalis*), Side-blotched Lizard (*Uta stansburiana elegans*), Two-striped Garter Snake (*Thamnophis hammondi*), and San Diego Gopher Snake (*Pituophis melanoleucus annectens*).

## **PALUSTRINE FORESTED HABITAT (CALIFORNIA SYCAMORE SERIES)**

Palustrine Forested can be further classified as Palustrine Broad-leaved Winter-deciduous Forested habitat, which is characterized by woody, broad-leaved (as apposed to needle-leaved), winter-deciduous (loses leaves in the winter season) vegetation that is six meters tall or taller. This habitat possesses an overstory of trees, an understory of young trees and shrubs, and an herbaceous layer. (Cowardin et al. 1979.)

California Sycamore Series forms winter-deciduous riparian woodland dominated by the native, monoecious, wind-pollinated, broad-leaved, winter-deciduous *Platanus racemosa* var. *racemosa*. *P. racemosa* has smooth, pale bark and large, densely hairy, palmately lobed leaves. It is common along streamsides or in canyons and is listed with an FACW wetland indicator status (Reed 1988).

California Sycamore Series grows in seasonally flooded (permanently saturated at depth) wetland soils of freshwater riparian corridors, braided depositional channels of intermittent streams, springs, seeps, and riverbanks. This series may also occur on more upland rocky canyon slopes, in alluvial, open-cobbly, and rocky soils, at elevations below 2,400 meters. A shrubby thicket of evergreen and deciduous shrubs may be scattered with Arroyo Willow below the 35-meter, widely spaced, sycamore canopy, and the ground layer is generally sparsely grassy.

*Fraxinus velutina* (Velvet Ash), *Juglans californica* var. *californica* (Southern California Black Walnut), *Populus fremontii* ssp. *fremontii* (Fremont Cottonwood), *Quercus agrifolia* (Coast Live Oak), and *Salix laevigata* (Red Willow) are important riparian woodland canopy contributors observed in the vicinity of the Archer property.

Other important understory species are associated with this predominantly riparian plant community, and they generally include: *Ambrosia psyllostachya* ssp. *californica* (Western Ragweed), *Artemisia douglasiana* (Mugwort), *Baccharis pilularis* (Coyote Brush), *B. salicifolia* (Mulefat), *Clematis ligusticifolia* (Virgins Bower), *Epilobium ciliatum* (Narrow Willow-herb), *Mimulus guttatus* (Streamside Monkeyflower), *Phoradendron macrophyllum* (Bigleaf Mistletoe), *Ricinus communis* (Castor Bean), *Rosa californica* (California Wild Rose), *Rubus ursinus* (Pacific Blackberry), *Toxicodendron diversilobum* (Poison Oak), *Typha domingensis* (Southern Cattail), *Urtica dioica* ssp. *holosericea* (Hoary Creek Nettle), and *Xanthium strumarium* (Cocklebur).

Riparian forest habitats support more species of birds than any other habitat type in California, and have significant abundance and diversity of avian fauna (Faber et al. 1989). San Antonio Creek supports a variety of both resident and migratory species, including: Cooper's Hawk (*Accipiter cooperi*), Great Blue Heron (*Ardea herodias*), Black-crowned Night Heron (*Nycticorax nycticorax*), Great Egret (*Casmerodius albus*), Northern Flicker (*Colaptes cafer*), Woodpeckers (*Picoides* spp.), and Belted Kingfisher (*Ceryle alcyon*). Many mammals are closely associated with riparian forest habitats as well. Several species will establish dens or burrows in areas of the riparian community, where understory growth is dense and food is readily available.

## **Special-Status Wildlife**

Based on information obtained resulting from a search of the CNDDDB RareFind3 (CDFG 2004) and review of existing literature, five sensitive wildlife species are known to occur (were observed), or have a high potential to occur, in the aquatic and riparian habitats associated with San Antonio Creek. The special-status wildlife species known to occur in the vicinity of the project site are listed below in Table 1 (Likelihood of Special-Status Wildlife Species of San Antonio Creek at the Archer



Property). The CNDDDB search for the Ojai and Matilija Quadrangles resulted in four special-status wildlife species; however, Table 1 summarizes five species, since DMEC biologists observed another special-status wildlife species just downstream from the Archer project site (Arroyo Chub).

**Table 1. Likelihood of Special-Status Wildlife of San Antonio Creek at the Archer Property**

Scientific Name	Common Name	Status: Fed./State/CNDDDB/ CDFG <sup>1</sup>	Preferred Habitat	Likelihood of Occurrence	Monitoring Results
<i>Emys marmorata pallida</i>	Southwestern Pond Turtle	-/-/G3G4T2T3, S2/SC	Permanent or nearly permanent water bodies in many habitats.	Highly Likely. Observed just downstream of the project site on the Whitman property.	No Southwestern Pond Turtles were directly observed in the vicinity of the Archer property. The Archer project did not result in any impacts to the Southwestern Pond Turtle.
<i>Gila eruct</i>	Arroyo Chub	-/-/G2, S2/SC	Slow water stream sections with mud or sand bottoms.	Highly Likely. Observed just downstream of the project site on the Whitman property.	No Arroyo Chubs were directly observed in the vicinity of the Archer property. The Archer project did not result in any impacts to the Arroyo Chub.
<i>Oncorhynchus mykiss irideus</i>	Southern California Steelhead Trout (ESU)	E/-/G5T2, S2/SC	Cool, clear, highly oxygenated streams.	Highly Likely. Last observed by DMEC in Stewart Canyon Creek (2004) just below Creek Road, and upstream from Archer project site (1998) at the Soule Golf Course Arizona Crossing.	No Southern Steelhead were directly observed in the vicinity of the Archer property. The Archer project did not result in any impacts to Steelhead.
<i>Rana aurora draytonii</i>	California Red-legged Frog	T/-/G4T2T3, S2S3/SC	Lowlands and foothill in or near permanent sources of deep-water habitats with dense shrubby or emergent riparian vegetation.	Observed on and immediately adjacent to the Archer property, but outside of the construction area.	The Archer project did not result in any impacts to CA Red-legged Frog.
<i>Thamnophis hammondi</i>	Two-striped Garter Snake	-/-/G3, S2/SC	Highly aquatic; found in or near permanent fresh water; often along streams with rocky beds and riparian growth.	Observed immediately outside of the construction area of the Archer property.	The Archer project did not result in any impacts to Two-striped Garter Snake.

<sup>1</sup> Definitions: E = Federally Listed as Endangered; T = Federally Listed as Threatened; SC = California Department of Fish and Game Species of Special Concern; ESU = Ecologically Significant Unit. The CNDDDB status refers to the species global- and state-rankings.



## SECTION 4. RESULTS

This section presents the results of the compliance by the property owner and his contractor with the special condition and regulations associated with the Emergency Actions Authority permit approval from the Corps (Corps Regional General Permit No. 063). Section 4 also presents the results of the California Red-legged Frog (and other special-status wildlife species) surveys conducted at the Archer property.

### COMPLIANCE WITH PERMIT CONDITIONS

The Corps permit conditions for the project were enforced by DMEC monitors in order to protect the aquatic and riparian resources of San Antonio Creek, with particular attention given to streambank disturbance, post-construction erosion, sedimentation, water quality, and protection of sensitive habitats and wildlife species. The results of this bank stabilization project of the Archer property, for each of these areas of concern, are described below. Table 2, Permit Conditions Compliance Monitoring Results, shows whether the property owner and contractor were in compliance with each of the permit conditions required by the Corps. Table 2 also presents the dates on which construction and monitoring were conducted, as well as any notes relating to the conditions.

### SPECIAL-STATUS WILDLIFE SURVEYS

The special-status wildlife surveys of the Archer property resulted in two positive surveys: on 11 April 2005, two California Red-legged Frogs were observed just outside of the work area during the night survey; and on 12 April 2005, one Two-striped Garter Snake was observed just outside of the work area during the morning survey (Figure 2). DMEC reported the discovery to the appropriate agencies.

Although the California Red-legged Frog and the Two-striped Garter Snake were the only special-status wildlife observed onsite, three additional special-status wildlife species are highly likely to frequent the aquatic and riparian habitats onsite, including Southwestern Pond Turtle, Arroyo Chub, and Southern California Steelhead Trout. The Southwestern Pond Turtle and Arroyo Chub were observed by DMEC just downstream of the Archer project site on the Whitman property in San Antonio Creek. Southern Steelhead have been observed by DMEC within the San Antonio Creek Watershed in 2004 and 1998, and are highly likely to inhabit the waters of San Antonio Creek this year as a result of significant flows from exceptional winter storms.

The Archer project did not result in any impacts to these special-status wildlife species, nor did the project impact any other wildlife species not of any particular status.



**Table 2. Permit Conditions Compliance Monitoring Results**

Permit Condition	In Compliance? (Yes/No; Date of 2005; Comments)					
	14 Apr a.m.	14 Apr p.m.	15 Apr	19 Apr	20 Apr	21 Apr
Equipment working out of flowing water, except as permitted?	Yes	Yes	Yes; not working in water today	Equipment was out of flowing water; however, 1 excavator began work prior to monitor onsite and prior to CA Red-legged Frog survey. Crew was informed to wait for biologist to be onsite prior to work.	Yes	Yes
Sediment barriers (hay bales/filter fabric & sand bags) in place downstream of work areas?	Yes	Yes	Yes	No (was unclear as to where equipment was being parked over night-no designated area)	Yes	Yes
Exclusion area fencing in place?	Not Applicable; was to be installed on the following day	Not Applicable	Yes; was installed this morning prior to any work	Yes	Yes	Yes
Groundwater dewatering discharged into catchment basin?	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Silt fencing present downslope of work areas adjacent to wetlands?	Yes	Yes	Yes	Yes	Yes	Yes
Protected oak tree(s) or sensitive vegetation properly fenced or marked?	Yes	Yes	Yes	Yes	Yes	Yes
All permits present onsite?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicles refueled in designated area(s)?	Yes	Yes	Yes	Yes	Yes	Yes
Surface water downstream of work area not 20% more turbid than upstream?	Yes	Yes	Yes	Yes	Yes	Yes
Nonnative debris/fill (concrete, trash, garbage) kept out of streambed?	Yes	Yes	Yes	Yes	Yes	Yes
Litter picked up daily?	Yes	Yes	Yes	Yes	Yes	Yes

## SECTION 6. ACKNOWLEDGEMENTS

Sections of this report were written by Cher Batchelor, Bryce Breslin, and Teri Reynolds. Mr. Magney managed the project and reviewed and edited the report. Mr. Breslin conducted the onsite monitoring with assistance from Vince Semonson.

## SECTION 7. CITATIONS

### PRINTED REFERENCES

- California Department of Fish and Game. 2004. California Natural Diversity Database search of RareFind3. (Updated 2 November 2004) The Resource Agency, State of California, Sacramento, California.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. (FWS/OBS-79/31.) U.S. Fish and Wildlife Service, Washington, DC.
- Edwards, R.D., D.F. Rabey, and R.W. Kover. 1970. *Soil Survey of the Ventura Area, California*. U.S. Department of Agriculture, Soil Conservation Service, Washington D.C., in cooperation with the University of California Agricultural Experiment Station, Davis, California.
- Faber, Phyllis M., Ed Keller, Anne Sands, and Barbara M. Massey. 1989. *The Ecology of Riparian Habitats of the Southern California Coastal Region: A Community Profile*. (USFWS Biological Report 85(7.27).) National Wetlands Research Center. Washington, DC.
- Hunt, Lawrence E. 1991. *Environmental Impact Report on the Vertebrate Resources of the Lower Ventura River*.
- Reed, P.B., Jr. 1988. *National List of Plant Species that Occur in Wetlands: California (Region 0)*. (Biological Report 88[26.10].) U.S. Fish and Wildlife Service, Ft. Collins, Colorado.
- Sawyer, J.O., and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento, California.
- Woodruff, G.A., W.J. McCoy, and W.B. Sheldon. 1970. *Soil Survey Antelope Valley Area California*. U.S. Department of Agriculture, Soil Conservation Service, Washington D.C., in cooperation with the University of California Agricultural Experiment Station, Davis, California.

<b>APPENDICES</b>
-------------------

**APPENDIX A.  
SITE PHOTOGRAPHS**

**APPENDIX B.  
FIELD MONITORING DAILY LOGS**

**APPENDIX C.  
CALIFORNIA RED-LEGGED FROG SURVEY REPORT**



## APPENDIX A. ARCHER PROJECT PHOTOGRAPHS



*Exclusion Barrier/Sedimentation Fencing installed at bottom of bank.*



*First access point from Creek Road*





*(left) First access point, looking toward Creek Road. (right) First access point from Creek Road.*



*(left) Second access point. (right) Second access point, used to import foreign material.*



*(left) Removing vegetation. (right) Clearing work area of vegetation*





*Existing boulders onsite used for riprap.*



*(left) Before: existing boulders onsite. (right) After: boulders removed to use for riprap.*



*(left) Building riprap. (right) Building riprap.*





*(left) Building rip-rap. (right) Filling rip-rap with soil to facilitate re-vegetation.*



*Completed rip-rap bank.*



*Introduced material used to bring site to grade.*





*Spreading introduced material to level site.*



*Leveling project site*



*Project site at grade*



**APPENDIX B.**  
**FIELD MONITORING DAILY LOGS**



## **APPENDIX C. CALIFORNIA RED-LEGGED FROG SURVEY REPORT**