

***LOW-EFFECT HABITAT CONSERVATION PLAN FOR  
THE  
CALIFORNIA TIGER SALAMANDER  
FOR THE LAS TRES MARIAS ESTATES PROJECT  
CALAVERAS COUNTY, CALIFORNIA***

***PREPARED FOR:***

LUIS SAN BARTOLOME  
4120 WEST HIGHWAY 12  
VALLEY SPRINGS, CA 95252  
(650) 799-5997

***PREPARED BY:***

MIRIAM GREEN ASSOCIATES  
664 COLE COURT  
FOLSOM, CA 95630  
(916) 673-9793

MAY 25, 2012

## EXECUTIVE SUMMARY

Luis San Bartolome (landowner and project proponent) has applied for a permit pursuant to Section 10(a)(1)(B) of the Endangered Species Act of 1973 as amended (16 U.S.C. 153101544, 87 Stat. 884), from the U.S. Fish and Wildlife Service (USFWS) for the incidental take of the threatened California tiger salamander (CTS) (*Ambystoma californiense*). The potential take could occur as a result of the construction of a 15-unit subdivision known as *Las Tres Marias Estates*. This subdivision will consist of 15 parcels zoned and designated for single-family residential construction within the 108.76±-acre project site located along the north side of Highway 12 in Calaveras County (County), California. This permit is intended to include all activities associated with the proposed action (i.e., site preparation and development, construction of single family dwellings, and post-construction activities to ensure that all new owners adhere to the specific conditions contained in their deed restrictions. It will also include any take associated with monitoring and management of the open space within the subdivision. The minimum parcel size in this portion of the County is 5 acres. Thirteen of the lots would be between 5.0 and 5.5 acres, one lot would be 9.0 acres, and the largest and most northerly lot would encompass 26.57 acres, including an existing pond that would be preserved.

The project site consists of open space/grazing land. Grading of the lots and eventual construction of single-family residences would result in the removal of potential CTS upland habitat. Although formal surveys for adult CTS were not conducted, adults may utilize the project site as an overland migration route. Therefore, the landowner is applying for a Section 10(a)(1)(B) permit and proposes to implement the habitat conservation plan (HCP) described herein, which provides for measures for mitigating adverse effects on CTS. The landowner is requesting issuance of the Section 10(a)(1)(B) permit for a period of ten (10) years.

This HCP summarizes information about the project and identifies the responsibilities of the USFWS and the project proponent/landowner for implementing the actions described herein to benefit CTS. During informal consultation with the USFWS prior to the preparation of this HCP, the landowner and his representatives have conducted site visits with USFWS staff, attended meetings with both the USFWS and County staff, and corresponded with the USFWS. As a result of this informal consultation, the landowner has modified his original subdivision plan and lot layout to avoid the most suitable CTS upland habitat and other sensitive areas. These changes have resulted in minimizing disturbance to potential upland CTS habitat and preservation of an existing pond and surrounding area that represent potential CTS aestivation habitat. The changes were made to address USFWS concerns regarding potential impacts to CTS following their site visits. Within the revised subdivision layout, the project proponent will maintain approximately 50 percent of the project site as open space. These areas will remain undeveloped and will be governed by deed restrictions.

The project proponent has reduced the potential effects to CTS by reconfiguring the lot layout from what was originally proposed, resulting in fewer lots, and preserving an on-site pond and surrounding buffer zone. In addition, the recorded map for the subdivision will show each individual lot and will delineate specific building envelopes and open space corridors. The landowner also intends to impose deed restrictions on all buildable lots that will specify size restrictions on residences and outbuildings.

This HCP describes measures that will ensure that the elements of the HCP are implemented. Funding sources for implementation of the HCP, actions to be taken for unforeseen events, alternatives to the proposed permit action, and other measures required by the USFWS are also discussed.

# TABLE OF CONTENTS

	<u>Page</u>
<b>Executive Summary</b>	
<b>Table of Contents</b>	
<b>List of Tables</b>	
<b>List of Figures</b>	
<b>1.0 Introduction</b>	1
1.1 Project Location	1
1.2 Project Site	1
1.3 HCP History	3
<b>2.0 Project Description</b>	2
2.1 Project Description and Covered Activities	2
2.1.1 Project Roadways and Overall Grading	2
2.1.2 Electrical and Communications Utilities	6
2.1.3 Water Infrastructure	6
2.1.4 On-Site Wastewater Infrastructure	6
2.1.5 Individual Home Site Development	7
2.2 Permit Holder/Permit Area	7
2.3 Zoning and Surrounding Land Uses	7
<b>3.0 Regulatory Framework</b>	8
3.1 Federal Regulations	8
3.1.1 Endangered Species Act of 1973	8
3.1.2 National Environmental Policy Act of 1969	10
3.2 California Regulations	11
3.2.1 California Environmental Quality Act	11
3.3 Calaveras County Regulations	11
<b>4.0 Biology</b>	12
4.1 Habitat Types	15
4.2 Covered Species: California Tiger Salamander	15
4.2.1 Conservation Status	16
4.2.2 Taxonomy and Description	16
4.2.3 Geographic Distribution	16
4.2.4 Ecology and Habitats	16
4.2.5 Occurrence at the Project Site and in the General Vicinity	17

<b>5.0</b>	<b>Impacts and Environmental Compliance</b>	20
5.1	Impact Assessment	20
5.2	Direct and Indirect Effects	21
5.3	Cumulative Effects	22
5.4	Effects on Critical Habitat	22
<b>6.0</b>	<b>Take of the Covered Species</b>	23
<b>7.0</b>	<b>Mitigation Measures</b>	24
7.1	USFWS Conservation Guidelines	24
7.2	Mitigation Plan	24
7.3	Avoidance and Minimization Measures	24
<b>8.0</b>	<b>Plan Implementation</b>	27
8.1	Biological Goals and Objectives	27
8.2	Responsibilities	27
8.3	Scope	27
8.4	Plan Duration	28
8.5	Monitoring	28
	8.5.1 Reporting	28
	8.5.2 Adaptive Management	29
8.6	Management	29
8.7	Funding	29
<b>9.0</b>	<b>Changed and Unforeseen Circumstances</b>	30
<b>10.0</b>	<b>Permit Amendment/Renewal Process</b>	32
10.1	Permit Amendments	32
10.2	HCP Amendments	32
10.3	Permit Renewal	33
10.4	Permit Transfer	34
<b>11.0</b>	<b>Alternatives Considered</b>	35
11.1	Alternative #1: No Action	35
11.2	Alternative #2: Reduced Take	35
11.3	Alternative #3: Proposed Action (permit issuance)	35
<b>12.0</b>	<b>References</b>	37
	<b>APPENDIX A</b>	39
	Copies of Correspondence between the USFWS and Project Proponent	

## List of Tables

<b>Table 1.</b> CTS Occurrence Records in the Project Area	<u>Page</u> 18
--	-------------------

## List of Figures

<b>Figure 1.</b> Las Tres Marias Estates Regional Location and Vicinity Map	2
<b>Figure 2.</b> Subdivision Lot Layout	5
<b>Figure 3.</b> Habitat Types on the Project Site	13
<b>Figure 4.</b> Locations of California Tiger Salamander in the Project Area	19

## 1.0 INTRODUCTION

This Habitat Conservation Plan (HCP) has been prepared for the proposed 15-parcel subdivision known as *Las Tres Marias Estates* (proposed project) located on the north side of Highway 12 in Calaveras County (County), California. It has been prepared pursuant to the requirements of Section 10(a) of the Federal Endangered Species Act (ESA). The HCP is intended to provide the basis for issuance of a Section 10(a)(1)(B) permit to Luis San Bartolome, the permit applicant, project proponent, and landowner, to authorize incidental take (see Section 6.0) of the California tiger salamander (CTS) (*Ambystoma californiense*), a federally- and state-listed threatened species, that could potentially result from grading and construction activities on the 108.76±-acre project site. The U.S. Fish and Wildlife Service (USFWS), Sacramento Fish and Wildlife Office, has concluded that the project site provides potential, albeit marginal, upland habitat for CTS. Because there are known CTS occurrences within dispersal distance of the project site, potential breeding habitat in an adjacent off-site stock pond, and suitable upland habitat within the project site, it is likely that the project area is utilized by CTS. Therefore, the proposed project is likely to result in take of this species. The landowner requests a permit for a period of 10 years commencing on the date of permit approval.

This HCP provides an assessment of the existing habitat on the project site for CTS, evaluates the effects of the proposed project, and presents a mitigation plan to offset habitat losses and/or direct harm to CTS that could result from grading and construction activities at the project site. The biological goal of this HCP is to maintain appropriate natural buffers to allow the movement of CTS across the project site and to preserve potential breeding habitat in perpetuity. Specifically, modifications to the original lot layout based on USFWS concerns are discussed to avoid and minimize potential adverse effects on CTS.

### 1.1 PROJECT LOCATION

The proposed project encompasses approximately 108.76 acres and is located on the north side of Highway 12, in northwest Calaveras County, California. The site lies just west of the town of Burson at the northwest corner of Highway 12 and Messing Road (Figure 1). The site is located within the boundaries of the Wallace 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle, specifically in the east half of Section 19, Township 4N, Range 10E, Mt. Diablo Meridian. Coordinates to the approximate center of the site are: 38° 10' 58"N and 120° 54' 40" W. The project site consists of three separate parcels, Assessor's Parcel Number (APN) 048-017-098 consisting of 2.47± acres, APN 048-017-103 consisting of 23.58± acres, and APN 048-017-112 consisting of 82.71± acres.

### 1.2 PROJECT SITE

The project site consists of open space/grazing land and is located in a rural area of the County. Ranchlands border the property to the north. The Golden Oaks Ranchettes subdivision, consisting of 5-acre parcels, borders the project site on the west. Highway 12 forms the southern boundary and a rural residence forms the eastern boundary. Ponds, an intermittent stream, seasonal pools, and scattered mature trees are located on the property. The majority of the property is comprised of non-native annual grassland with inclusions of mixed chaparral and

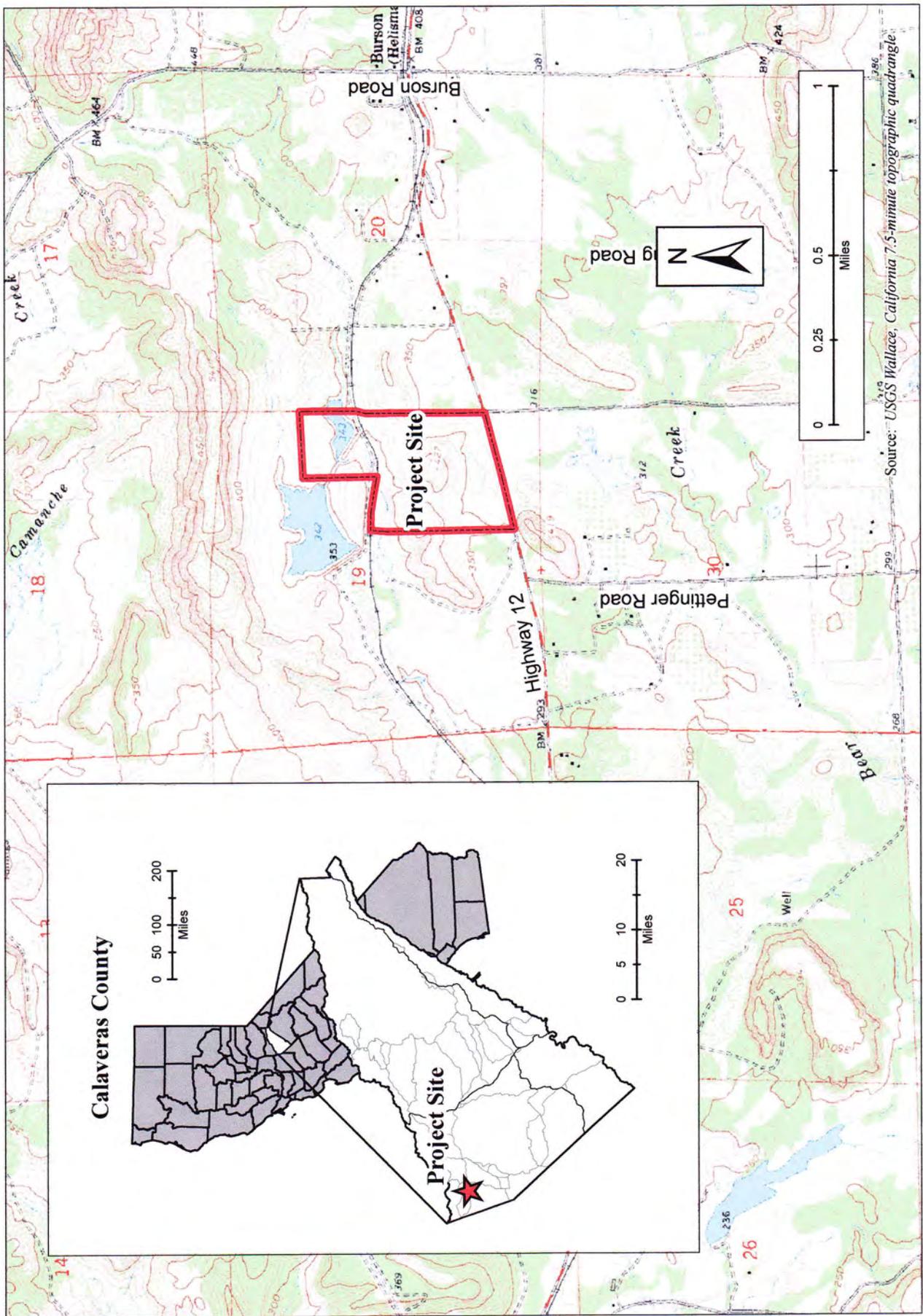


Figure 1. Las Tres Marias Estates Regional Location & Vicinity Map

blue oak woodland. Several small outbuildings are located in the southeast corner of the project site.

Topography is flat to slightly sloped; elevations range between 322 and 430 feet above mean sea level. Small ranchettes and pastureland are found throughout the region along both sides of Highway 12. The project site lies within the historic and current range of CTS.

### **1.3 HCP HISTORY**

During informal consultation with USFWS staff (Jeremiah Karuzas, Arnold Roessler, and Christopher Nagano), during 2008, 2009, and 2010, several modifications to the project were made in anticipation of preparing a permit application, and in response to comments and concerns posed by USFWS staff. USFWS biologist, Brian Peterson, conducted earlier visits to the project site in 2007. In order to avoid the most suitable upland habitat and other sensitive areas that may be used by CTS, two proposed 5-acre lots were combined and reconfigured into one larger lot, building envelopes were redrawn, and proposed driveways were relocated. The current design designates that approximately half (54 of the 109± acres) of the property will be protected as open space, including CTS migration corridors. In addition, deed restrictions will be placed on the developed parcels to minimize potential impacts to CTS, and allow their continued movement across the property. Copies of all correspondence between the USFWS and landowner are provided in Appendix A.

Since no Federal agency is involved with the permitting, funding, or carrying out of the project and a federally listed species is involved, formal consultation between that agency and the USFWS pursuant to section 7 of the ESA is not applicable. Therefore, the applicant is applying an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

## **2.0 PROJECT DESCRIPTION**

### **2.1 PROJECT DESCRIPTION AND COVERED ACTIVITIES**

The proposed project, *Las Tres Marias Estates*, consists of a 15-lot subdivision, with a minimum 5-acre parcel size. Thirteen of the lots would be between 5.0 and 5.5 acres, one lot would be 9.0 acres, and the largest and most northerly lot would encompass 26.57 acres, including an existing pond that would be left undisturbed. Figure 2 is a site plan showing the subdivision lot layout and building envelopes within each lot that have been approved by the County.

#### **2.1.1 Project Roadways and Overall Grading**

The project proponent would construct approximately 0.8 mile of paved internal roads to serve the interior parcels, as well as the entrance to the project site. All internal roads (Sofia Court, Victoria Court, and Carmela Court) would consist of two 12-foot-wide paved travel lanes with 4-foot gravel shoulders on each side. The cul-de-sacs at the end of Sofia and Victoria courts would consist of 80-foot diameter paved travel areas with 4-foot wide gravel shoulders, and the turn-around at the end of Carmela Court would consist of a 60-foot wide paved hammerhead with 4-foot-wide gravel shoulders. All internal roads have been surveyed and are included on the tentative map that has been approved by the County. When fully developed, the project's internal roadways will produce an aggregate of approximately 2.25 acres of impervious (i.e. paved) surfaces.

Roadway construction would utilize conventional earthmoving equipment; blasting or unusual earthmoving equipment is not anticipated for the project. Earthmoving equipment required for roadway construction would include at least one water truck, one or two dozers in the D-6 or D-8 class, one paddlewheel scraper, one excavator or backhoe, one self-propelled sheepsfoot compactor, one grader, one smooth-drum roller, and a paving machine. Other minor, incidental equipment may include portable compactors, a 10-yard end-dump truck, and miscellaneous service vehicles. Driveways leading to the building envelopes on each lot would have a maximum grade of 12 percent and would be constructed utilizing techniques and equipment similar to that utilized for roadway construction. Driveways are typically 12 feet in width, having finish surfaces ranging from rolled gravel to asphalt paving to concrete. Total grading that would be necessary to construct the subdivision, not including the improvements on individual lots, is estimated to be approximately 5,000 cubic yards. No mass grading of the site is proposed and none of the existing drainage patterns would be changed.

Because grading for internal roads, utilities, driveways, and building pads will exceed one acre in aggregate area the project must comply with the State of California's General Permit for Discharges of Storm Water associated with Construction and Land Disturbance Activities (Permit No. 2009-009-DWQ). Among other things required by the General Permit, the applicant must prepare, maintain, and implement a Storm Water Pollution Prevention Plan (SWPPP) that prescribes erosion and sediment control Best Management Practices (BMPs). Compliance with the General Permit and implementation of a SWPPP is a condition of approval of the project.



### **2.1.2 Electrical and Communications Utilities**

The applicant would be responsible for bringing electrical and communication utilities onto the project site to service the individual lots. PG&E has an existing electrical supply along Highway 12; therefore service to the project site would likely extend from this supply. Electrical service will likely be overhead with primary feeds to pole-mounted transformers and secondary feeds to individual homes. Secondary feeds may be overhead or underground, at the individual homeowner's discretion. Underground services, where utilized, would require a single conduit trench, approximately 18 to 24 inches wide, which would be excavated with a backhoe or trencher and then completely backfilled on completion.

Communications utilities would be extended onto the project site from existing infrastructure along Highway 12. Communications utilities may be either overhead on joint poles co-utilized for primary electrical service, or underground. Underground utilities would likely take the form of a joint trench, which combines several utilities together in a single trench. Joint trench configurations vary, however a typical joint trench is between 24 and 36 inches wide and contains two or more conduits, cables or pipelines. The joint trench would be excavated with a backhoe or trencher and would be completely backfilled upon completion.

### **2.1.3 Water Infrastructure**

The applicant would be responsible for drilling one well per lot prior to the sale of each lot to prove a sufficient water supply prior to lot recordation. Fifteen (15) wells would be drilled upon full buildout. A conventional air or mud rotary water well drilling rig would be utilized to drill each well. Well diameters vary; however, in this area most well drillers construct an 8-inch borehole, which is fitted with a 6-inch PVC casing extending to the ground surface. Each well would be completed to the surface with a concrete sanitary seal and a four-foot square concrete pad. Once drilled, the applicant would test and cap each borehole, and then well development (i.e. fitting each well with pumping and control equipment) would be the future responsibility of individual lot owners.

### **2.1.4 On-Site Wastewater Infrastructure**

Each individual lot's wastewater disposal requirements would be served by an on-site septic system. Leach fields for each of the septic systems would vary in size depending on home size and other site-specific factors, however, most leach fields range between 5,000 and 6,000 square feet in area. Leach fields are typically - but not always - located downslope from the dwelling, are mostly or entirely below ground, and finished leach field surfaces are grass-covered soil. Most leach fields are difficult to differentiate from the surrounding landscape once finished. In addition to the leach field, each septic system would also include one or more septic tanks, the size of which varies with the size of the dwelling. Most septic tanks are approximately 5 feet wide and 10 feet long; tanks are completely buried and backfilled, with the only surface exposure taking the form of one or more manhole risers with lids at or near finish grade. Construction equipment typically utilized for septic system construction includes one backhoe and often a small dozer or Bobcat-type loader. Septic systems would be designed for and constructed by each individual lot owner at the time of home construction.

### **2.1.5 Individual Home Site Development**

Grading and site preparation within the assigned building envelopes for personal residences and outbuildings would generally be the responsibility of the individual lot owners. Specific building envelopes for each lot have been identified in the approved tentative map on file with the County. Deed restrictions for the entire project site will be recorded against the title of individual lots, copies will be filed with the Calaveras County Planning Department and the final map will contain designations of specific building envelopes within each lot. When future lot owners apply to the County for planning, grading, or building permits, the County's computerized land development tracking system will alert all departments of the existence and location of the approved building envelopes so that building permits are not issued for areas outside the building envelope.

Ground slope on the project site ranges between 2 percent (near the southeasterly corner of Lot 1) and approximately 40 percent (on a portion of Lot 9). Proposed building envelopes have been configured so as to include sufficient buildable area having ground slopes of less than 15 percent. Grading for home sites within individual building envelopes will generally consist of conventional cut and fill grading operations necessary to prepare a relatively level site for home construction and related uses (parking, etc.). The magnitude of grading would vary, with some home sites requiring moderate grading and others very little. Rules of thumb for home site grading in this area suggest that a typical home site might require between 1,000 to 2,500 cubic yards of cut or fill. Construction equipment utilized for home site construction would typically include one backhoe, one water truck, a small to medium dozer, and a self-propelled compactor.

## **2.2 PERMIT HOLDER/PERMIT AREA**

Mr. Luis San Bartolome will be the holder of the Section 10(a)(1)(B) permit.

The permit area includes the entire project site encompassing approximately 108.76 acres located on the north side of Highway 12, in northwest Calaveras County, just west of the town of Burson (see Figure 1).

## **2.3 ZONING AND SURROUNDING LAND USES**

The 1996 General Plan land-use designation for the project site is Agricultural Preserve. The property is currently zoned A-1 Agriculture. Lands immediately surrounding the project site support small ranchettes and open space/grazing land uses. Several properties, including the adjacent subdivision, have been rezoned to residential single-family (SFR) with a 5-acre minimum parcel size.

In 2009, the landowner submitted an application to the County for rezoning of this property from A-1 to RA Residential Agriculture with a 5-acre minimum. The County Board of Supervisors approved this request on June 21, 2011 and also approved the tentative map.

## **3.0 REGULATORY FRAMEWORK**

### **3.1 FEDERAL REGULATIONS**

#### **3.1.1 Endangered Species Act of 1973**

The Endangered Species Act of 1973 (ESA), 15 United States Code (U.S.C.) Section 1531 *et seq.*, provides for the protection and conservation of various species of fish, wildlife, and plants that have been federally listed as threatened or endangered. Section 9 of the ESA prohibits the "take" of any fish or wildlife species by any person subject to the jurisdiction of the United States that is listed as endangered under the ESA unless such take is otherwise specifically authorized pursuant to either Section 7 or Section 10(a)(1)(B) of the ESA. Pursuant to the implementing regulations of the ESA, the take of fish or wildlife species listed as threatened is also prohibited unless otherwise authorized by the USFWS.

"Take" is defined in the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Federal regulation 50 CFR 17.3 further defines the term "harm" in the "take" definition to mean any act that actually kills or injures a federally-listed species, including significant habitat modification or degradation. Activities otherwise prohibited under ESA Section 9 and subject to the civil and criminal enforcement provisions under ESA Section 11 may be authorized under ESA Section 7 for actions by Federal agencies and under ESA Section 10 for nonfederal entities.

Section 10(a) of the ESA establishes a process for obtaining an "incidental take permit," which authorizes non-federal entities to incidentally take federally listed wildlife or fish subject to certain conditions. "Incidental take" is defined by the ESA as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." Preparation of a conservation plan, generally referred to as a habitat conservation plan or HCP, is required for all Section 10(a) permit applications. The USFWS and the National Marine Fisheries Service (NMFS) have joint authority under the ESA for administering the incidental take program. Generally, NMFS has jurisdiction over marine and anadromous species and the USFWS has jurisdiction for over land and freshwater species.

Section 7 of the Endangered Species Act requires all Federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA or result in the destruction or adverse modification of its habitat. Technically, the issuance of an incidental take permit is an authorization for take by a Federal agency; in conjunction with issuing a permit, the USFWS must conduct an internal Section 7 consultation on the proposed HCP. The internal consultation is conducted after an HCP is developed by a non-federal entity (e.g., a private consultant) and submitted for formal processing and review. Provisions of Sections 7 and 10 of the ESA are similar, but Section 7 requires consideration of several factors not explicitly required by Section 10. Specifically, Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants and animals, and effects on critical habitat. (The ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered.) The internal consultation results in a Biological Opinion prepared by

the USFWS regarding whether implementation of the HCP will result in jeopardy to any listed species or adversely modify critical habitat.

The Section 10 process for obtaining an incidental take permit has three primary phases: 1) the HCP development phase, 2) the formal permit processing phase, and 3) the post-issuance phase.

During the HCP development phase, the project applicant prepares a plan that integrates the proposed project or activity with the protection of listed species. An HCP submitted in support of an incidental take permit application must include the following information:

- Impacts likely to result from the proposed taking of the species for which permit coverage is requested;
- Measures that will be implemented to monitor, mitigate for, and minimize impacts;
- Funding that will be made available to undertake such measures;
- Procedures to deal with unforeseen circumstances;
- Alternative actions considered that would minimize or not result in take; and
- Additional measures the USFWS may require as necessary or appropriate for purposes of the plan.

The HCP development phase concludes and the permit-processing phase begins when a complete application package is submitted to the appropriate permit-issuing office of USFWS. The complete application package for a low-effect HCP consists of: 1) an HCP; 2) a completed permit application; and 3) a \$100 permit fee from the applicant.

According to section 10(a)(2)(B) of the ESA and associated Federal regulations, HCPs must meet six requirements before an incidental take permit can be issued. These requirements are:

1. All takings must be incidental,
2. Impacts must be minimized and mitigated "to the maximum extent practicable,"
3. There must be both adequate funding, and provisions to address "unforeseen circumstances,"
4. The taking must "not appreciably reduce the likelihood of the survival and recovery of the species in the wild,"
5. The applicant must ensure that additional measures required by federal regulators will be implemented, and
6. Federal regulators must be certain that the HCP can and will be implemented.

The USFWS must publish a “Notice of Availability” of the NEPA document and receipt of a complete HCP application package in the Federal Register; prepare a Section 7 Intra-Service Biological Opinion; prepare a Set of Findings that evaluates the Section 10(a)(1)(B) permit application in the context of permit issuance criteria and 5-point policy (see below); and prepare an Environmental Action Statement (a brief document that serves as the USFWS's record of compliance with NEPA for categorically excluded actions (see below), if it is a low-effect HCP.

An implementing agreement is not typically required for a low-effect HCP. A Section 10 incidental take permit is granted upon determination by the USFWS that all requirements for permit issuance have been met.

Federal regulators must be certain that the HCP can and will be implemented. On March 9, 1999, the USFWS and NMFS published proposed guidelines (64 FR 11485) to clarify and strengthen the use of HCPs as conservation tools under the ESA. The proposed guidelines were intended to improve the way HCPs are developed and administered in five areas:

- 1) Establishment of measurable biological goals and objectives,
- 2) Use of adaptive management,
- 3) Monitoring to ensure proper compliance with an HCP,
- 4) Increased public participation, and
- 5) Permit duration.

If the HCP addresses all of these requirements and those of other applicable laws, a permit can be issued. After receipt of a complete application, an HCP and permit application is typically processed within one year. This schedule includes the Federal Register notice and 30-day public comment period.

During the post-issuance phase, the permittee and other responsible entities implement the HCP and the USFWS monitors the permittee's compliance with the HCP and the long-term progress and success of the HCP. The public may be notified of permit issuance through publication in the Federal Register; however, this is a discretionary action by the USFWS.

### **3.1.2 National Environmental Policy Act of 1969**

The National Environmental Policy Act (NEPA) of 1969, as amended, requires that Federal agencies analyze the environmental impacts of their proposed actions (i.e., issuance of an incidental take permit) and include public participation in the planning and implementation of their actions. Although Section 10 of the ESA and NEPA requirements overlap considerably, the scope of NEPA also considers the impacts of the proposed action on non-biological resources, such as water quality, air quality, and cultural resources. Depending upon the scope and impact of the HCP, NEPA compliance is obtained through one of three actions:

- 1) Preparation of an Environmental Impact Statement (EIS) (generally prepared for high-effect HCPs);
- 2) Preparation of an Environmental Assessment (EA) (generally prepared for moderate-effect HCPs); or

- 3) A categorical exclusion (allowed for low-effect HCPs).

The NEPA process helps Federal agencies make informed decisions with respect to the environmental consequences of their actions and ensures that measures to protect, restore, and enhance the environment are included, as necessary, as a component of their actions. If an HCP meets the requirements for a categorical exclusion under NEPA, it may be processed as a low-effect HCP as outlined in the USFWS (1996b) Habitat Conservation Planning Handbook and as defined by the Department of Interior Manual 516 DM2, Appendix 1, and Manual 516 DM6, Appendix 1.

## **3.2 CALIFORNIA REGULATIONS**

### **3.2.1 California Environmental Quality Act**

In many ways, the California Environmental Quality Act, commonly known as CEQA (Public Resources Code Section 21000 *et seq.*), is analogous at the state level as NEPA is to the federal level. CEQA applies to projects that require approval by state and local public agencies. It requires that such agencies disclose a project's significant environmental effects and provide mitigation whenever feasible. This environmental law covers a broad range of environmental resources. With regard to wildlife and plants, those that are already listed by any state or federal governmental agency are presumed to be endangered for the purposes of CEQA and impacts to such species and their habitats may be considered significant.

The Calaveras County Planning Department was the lead agency for CEQA review for the proposed project. As part of its CEQA compliance, the County Planning staff prepared an Initial Study and a Mitigated Negative Declaration (IS/MND) for the proposed project. A copy of this document is on file with the USFWS Sacramento Fish and Wildlife Office. The County Board of Supervisors certified the IS/MND on June 21, 2011.

## **3.3 CALAVERAS COUNTY REGULATIONS**

The 1996 Calaveras County General Plan designation for the project site is Agricultural Preserve. This land use designation allows one dwelling unit per 20 acres when not in a Williamson Act contract.

The current zoning is A-1 Agriculture with one residential structure permitted on 20 acres. The landowner applied to the County to have the project site rezoned from A-1 Agriculture [20-acre minimum parcel size] to RA Residential Agriculture [Single Family] with one residential structure permitted on each 5-acre parcel. This zoning is consistent with parcels that have individual wells for water supply and individual septic systems. The County Board of Supervisors approved the zoning change at its June 21, 2011 meeting.

The proposed project is consistent with the Land Use, Conservation, and Open Space Elements of the 1996 General Plan.

## 4.0 BIOLOGY

### 4.1 HABITAT TYPES

A map of the various habitat types found on the project site is provided in Figure 3.

**Annual Grassland** – The project site is comprised of more than 75 percent non-native annual grassland habitat with small inclusions of mixed chaparral and blue oak woodland. The annual grassland is characterized by common species including red brome (*Bromus madritensis* ssp. *rubens*), soft chess (*Bromus hordeaceus*), medusa-head (*Taeniatherum caput-medusae*), foxtail barley (*Hordeum murinum* ssp. *leporinum*), and mousetail fescue (*Vulpia myuros*). Other commonly associated species include storksbill (*Erodium* spp.), popcorn flower (*Plagiobothrys* spp.), farewell-to-spring (*Clarkia* sp.), dovefoot geranium (*Geranium molle*), goldfields (*Lasthenia californica*), and red maids (*Calandrinia ciliata*).

Burrowing animals such as ground squirrels and gophers are largely absent from the project site. This may be due to soil conditions or other factors. The lack of natural burrows on most of the site reduces its suitability for CTS.

**Blue Oak Woodland** – Blue oak woodland is confined mainly to the northern portion of the project site and along small ravines. This plant community is characterized by the presence of blue oak (*Quercus douglasii*) as the dominant canopy species. Foothill pine (*Pinus sabiniana*) and interior live oak (*Quercus wislizeni*) are less abundant. Buck brush (*Ceanothus cuneatus*), chamise (*Adenostemma fasciculatum*), and other species more commonly associated with the chaparral community intergrade with blue oak woodland.

**Mixed Chaparral** – A dense mixed chaparral community is scattered throughout the project site, but is particularly distributed along the ridge tops and slopes. Although buck brush is the dominant species, chamise, yerba santa (*Eriodictyon californicum*), poison oak (*Toxicodendron diversilobum*), and hoary coffeeberry (*Rhamnus tomentella* ssp. *tomentella*) are scattered over the site. Mixed chaparral is also present along the stream banks in the northern portion of the project site.

**Aquatic Habitats** – The project site contains several wetland features that are described below:

*Channel.* One channel, dominated by medusa-head, runs along the southeastern corner of the project site and flows off-site and under Highway 12. No hydrological connection between this channel and waters of the United States is apparent (Quad Knopf 2007a). Once water leaves the project site, it becomes a sheet flow with no defined bed and bank to the roadside ditch. Culverts are in place to divert the flow from a V-ditch into this channel.

*Seasonal Wetland.* Six seasonal wetlands are located in the southern portion of the project site along Highway 12. These appear to be isolated features were water ponds seasonally with no hydrological connection to each other or off-site. Characteristic vegetation in the seasonal

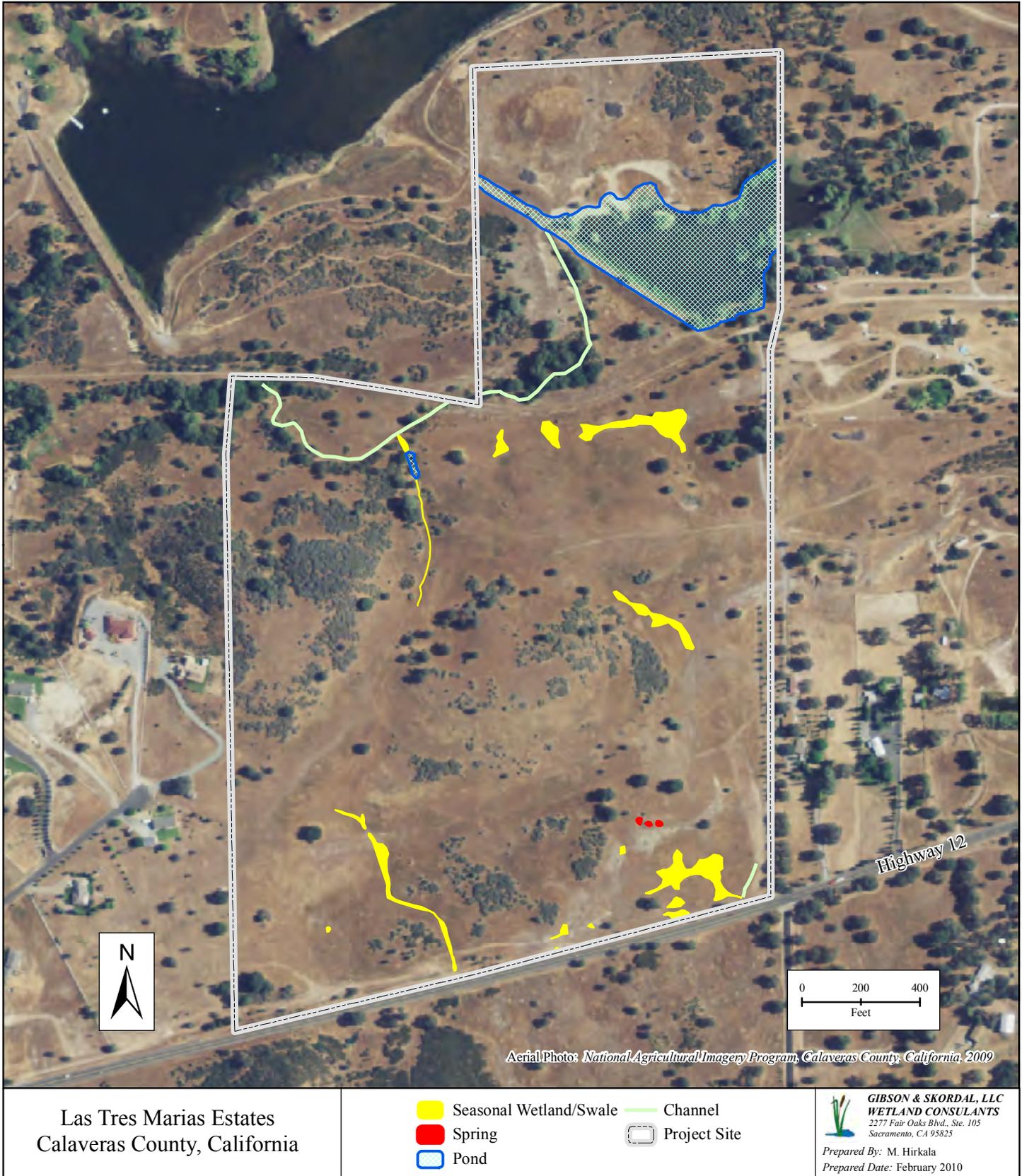


Figure 3. Habitat Types on the Project Site

wetlands consists of coyote thistle (*Eryngium castrense*), little quaking grass (*Briza minor*), wooly marbles (*Psilocarphus brevissimus* var. *brevissimus*), and tarweed (*Holocarpha virgata*). Some of the pools have been graded as part of the firebreak that runs along the fence line at Highway 12.

*Swale.* Six swale features are located on the project site. These are larger features than the seasonal wetlands and appear to be areas where the water may pond but they mainly serve as locations where the water gathers and flows down hill. Although there is no defined bed or bank, the topography is lower and the vegetation is different than in the wetlands. Vegetation in the swales is similar to that found in the seasonal wetlands, with the exception of wooly marbles, which is absent.

*Spring.* One spring is located in the northern portion of the project site on a hill near a rock outcrop. This ephemeral water feature drains into a seasonal stream and dries up following the winter rains. The dominant vegetation at this location is dallisgrass (*Paspalum dilatatum*).

*Permanent Pond.* An earthen dam forms the southwest border of the 5-acre pond located in the northern portion of the project site [in Lot 15]. A linear channel runs between the northwest end of the pond and a larger body of water (a water ski lake) located off-site to the northwest. During the wet season this channel flows northwest from the pond to the ski lake and to an adjacent channel. Although the elevation of the pond fluctuates throughout the year, it is considered a permanent water feature.

The banks of the pond are open along the southern and western aspects. Emergent vegetation, such as buttercup (*Ranunculus* sp.), surrounds the pond forming dense mats along the margins and up to 12 feet from the shore. Willows (*Salix* spp.) and cottonwoods (*Populus fremontii* ssp. *fremontii*) are scattered around the pond with blue oak and buck brush growing further away from it. Large numbers of adult and tadpole bullfrogs (*Rana catesbeiana*) were observed within and around the shallow backwater areas of the pond during several site visits.

*Seasonal Stream.* The seasonal stream consists of a scoured channel that runs from the confluence of the linear channel that runs between the permanent pond and the off-site ski lake located to the northwest and the headwaters of the stream itself. As the pond level rises during precipitation events, it eventually flows over a small weir and runs down the seasonal stream channel flowing in a meandering course toward the southwest. Based on the topography and the presence of driftlines, it appears that pools form within and adjacent to the stream channel and persist for some time after it ceases to flow.

*Ephemeral Pond.* A small pond is located just east of the project site. This feature is a manmade, ephemeral pond that fills with rain during the winter and retains water until early to mid-summer. The pond covers approximately 1,000 square feet during a normal water year and has a maximum depth of approximately 3 feet at its deepest point. A few pine trees are located along the tops of the banks and buttercup grows along the water's edge.

*Adjacent Habitats.* Upland habitats occurring within 2 kilometers (km) of the project site are similar to the upland habitats found on the project site. The dominant plant community throughout this portion of Calaveras County is non-native annual grassland with a mosaic of

mixed chaparral, blue oak woodland, and blue oak savanna. Surrounding land use in the vicinity is primarily rangeland interspersed with rural residences and small ranchettes.

Aquatic habitats found within 2 km of the project site are similar to those found on-site. These include stock ponds, small recreational lakes, intermittent drainages, perennial streams, and seasonal wetlands. The project site is located in the Lower Cosumnes – Lower Mokelumne watershed and is drained by Bear Creek, which eventually flows into the San Joaquin River. The southern extent of Camanche Reservoir is located approximately 2 km to the north.

## **4.2 COVERED SPECIES: CALIFORNIA TIGER SALAMANDER**

The species addressed in this HCP and covered by the HCP's associated Section 10(a)(1)(B) permit includes one federally listed species, the threatened CTS. CTS are known to occur in the general area around the project site; with the nearest known occurrence located approximately one mile west of the project site. The CTS is the only federally listed species likely to be incidentally taken as a result of the proposed project.

### **4.2.1 Conservation Status**

The Central California Distinct Population Segment (DPS) of CTS was proposed for listing as threatened on May 23, 2003 (68 FR 286480). The Santa Barbara County population of CTS was federally listed as endangered on September 21, 2000 (65 FR 57242) and the Sonoma County DPS of CTS was listed as endangered on July 22, 2002 (67 FR 47727).

The CTS was designated as a Federal Threatened species throughout its range on August 4, 2004 (69 FR 47212), upgrading the Central DPS from a Federal Species of Concern and subsequently downgrading the Federal Endangered status formerly assigned to the Santa Barbara and Sonoma County populations. This designation became effective on September 3, 2004. On August 18, 2005, as a result of litigation of the August 4, 2004 final rule (69 FR 47211), both the Santa Barbara County and Sonoma County DPSs were reinstated their prior listing status as endangered.

The CTS was recently listed as threatened throughout its range by the California Department of Fish and Game. The Office of Administrative Law approved the listing on August 2, 2010 and the regulations became effective on August 19, 2010 (CDFG 2011).

Critical habitat has been designated for CTS in various California counties by the USFWS. The most recent proposal was in 2009 when the USFWS proposed to designate critical habitat for the Sonoma County DPS of CTS consisting of approximately 74,223 acres (30,037 hectares) in Sonoma County (74 FR 41662). Critical habitat has also been designated for the Central DPS of CTS, which includes portions of Calaveras County (see below).

The closest critical habitat to the project site is known as Unit 5, Indian Creek Unit, Calaveras County. This unit encompasses approximately 3,128 acres (1,266 ha) and its northern boundary is located approximately 1.2 miles southeast of the project site (see Figure 4). It is essential to the conservation of CTS because it is needed to maintain the current geographic and ecological distribution of the species within the Central Valley Geographic Region. Unit 5 represents the

northeastern portion of the range and the southeastern Sacramento Valley vernal pool region. Four extant occurrences of the species have been documented in this unit. Unit 5 is generally bordered by State Route 26 on the south and east, Warren Road on the west, and lands approximately one mile south of State Route 12 on the north. Land ownership is private. The southeastern corner of another CTS critical habitat unit, Unit 4, is located approximately 6.5 miles northwest of the project site (see Figure 4).

As of December 2011, a recovery plan has not been prepared for CTS, although the USFWS (2004) has stated its intention to do so. In the interim, efforts toward conservation and recovery of the species appear to emphasize habitat preservation by protecting sites with vernal pools and other suitable wetland habitats from loss, fragmentation, degradation, and incompatible uses. When a project is proposed within the known range of CTS, the USFWS typically requires protection of the surrounding upland habitats to conserve burrowing mammals, whose burrows provide subterranean retreats for CTS during the non-breeding season and during their overland migration to and from breeding sites.

#### **4.2.2 Taxonomy and Description**

The CTS is a member of the family known as Ambystomatidae. They are relatively large, secretive amphibians that are endemic to California. Adults can grow to a length of about 7 to 8.5 inches; males tend to be slightly larger than females (USFWS 2003). They have stocky bodies, broad rounded snouts, protruding black eyes, and long tails that curl around their bodies. Adults are black with yellow or cream spots and stripes on their back, sides, and tail; larvae are greenish-grey in color. Like other salamanders, their bodies are low to the ground and their four legs protrude sideways. They are poor climbers.

#### **4.2.3 Geographic Distribution**

The range of this species includes the Central Valley and low foothills from Dunnigan in Yolo County south to Kern County, and coastal lowlands from near Santa Rosa in Sonoma County, south into Santa Barbara County (Zeiner *et al.* 1988, Shaffer and Stanley 1991).

CTS are typically found at elevations below 460 m (1,509 feet) (USFWS 2004), although the known elevational range extends up to 1,053 m (3,458 feet) (Jennings and Hayes 1994). The species inhabits natural ephemeral pools or artificial ponds that mimic them (e.g., stock ponds that are allowed to dry).

#### **4.2.4 Ecology and Habitats**

CTS are typically found in annual grasslands, oak savannah, and coastal scrub communities of lower hills and valleys where aquatic sites are available for breeding. Adults breed in temporary and permanent ponds and in streams, but spend the majority of their lives underground in subterranean retreats (burrows) created by other animals, such as ground squirrels, gophers, and other rodents. CTS appear to be absent in waters containing predatory game fish (69 FR 47212).

Breeding takes place after the first rains in late fall and early winter, when the wet season allows the salamanders to migrate to the nearest pond, a journey that may be as far as a mile and take

several days. The eggs, which the female lays in small clusters or singly, hatch after approximately 10 to 14 days.

The larval period lasts from 3 to 6 months; however, CTS larvae may also overwinter. Transformation for overwintering larvae may take 13 months or more wherein the larvae feed on other small invertebrates, including tadpoles.

Larvae require a minimum of approximately 10 weeks to complete metamorphic transformation (Anderson 1968, Feaver 1971), significantly longer than other amphibians such as the Pacific chorus frog (*Pseudacris regilla*) and western spadefoot (*Spea hammondi*). The duration of the larval period restricts CTS breeding to large vernal pools, vernal playas, and large ponds. Compared to the western toad (*Bufo boreas*) or western spadefoot, CTS are poor burrowers and require subterranean refuges constructed by other animals such as the California ground squirrel (*Spermophilus beecheyi*), valley pocket gopher (*Thomomys bottae*), and/or other burrowing mammals for occupancy during their non-breeding season (Jennings and Hayes 1994, USFWS 2005).

Salamanders spend the dry season, which comprises most of the year, within these burrows (USFWS 2004b). Although CTS are often considered to be in a state of dormancy (aestivation), during the period in which they occupy these burrows, evidence suggests that salamanders may remain active while within their burrows (S. Sweet in litt. In USFWS 2004b).

Juvenile CTS have been observed to disperse up to 2.59 kilometers (1.6 miles) from breeding pools to upland areas (Austin and Shaffer 1992). Adults have been observed up to 2 km (1.3 miles) from breeding ponds. Trenham *et al.* (2001) observed CTS moving up to 670 m (2,198 feet) between breeding ponds in Monterey County. Similarly, Shaffer and Trenham (2005) found that 95 percent of CTS resided within 630 m (2,067 feet) of their breeding pond at Jepson Prairie in Solano County.

The distance between occupied upland habitat and breeding sites depends on local topography and vegetation, and the distribution of California ground squirrel or other rodent burrows (Stebbins 2003). Adults emerge from upland sites on rainy nights during fall and winter rains to feed and migrate to breeding ponds (Stebbins 2003, Shaffer *et al.* 1993). Adults use the same migratory routes between breeding pools and upland burrows year after year (Petranka 1998, Loredo *et al.* 1996). Metamorphosed juveniles leave the breeding sites in late spring or early summer and migrate to small mammal burrows (Zeiner *et al.* 1988, Shaffer *et al.* 1993, Loredo *et al.* 1996). Like adults, juveniles may emerge from burrows to feed during nights of high relative humidity (Storer 1925, Shaffer *et al.* 1993) before settling in their selected upland sites for the summer months. While most CTS rely on rodent burrows for shelter, some individuals may utilize soil crevices as temporary shelter during upland migrations (Loredo *et al.* 1996).

#### **4.2.5 Occurrence on the Project Site and in the General Vicinity**

Neither adults nor larval CTS have been observed on the project site during any of the site visits; however, protocol level surveys were not conducted. The most recent version of the California Natural Diversity Database (CNDDDB) was checked for locality records within 10 km (6.2 miles) of the project site. The closest known record, approximately 1.0 mile away, is CNDDDB occurrence #566 (3 adults in a stream channel south of Highway 12 in January 2001). Several

occurrences were found within a 5-mile radius of the project site. These are summarized in Table 1 and mapped on Figure 4. As can be seen from Figure 4, the majority of CTS records are located between 2 and 5 miles west of the project site.

Table 1. CTS occurrence records in the project area (Source: CNDDDB 2011)

<b>CNDDDB Occurrence No.</b>	<b>USGS 7.5' Topographic Quadrangle</b>	<b>County</b>	<b>Date</b>	<b>Approximate Distance from Project Site</b>	<b>Observation Notes</b>
47	Wallace	Calaveras	1974	approx. 3.7 miles south of project site	Larvae found on Burson Road, one mile north of Highway 26
51	Wallace	San Joaquin	1974	approx. 5 miles west of project site	Along Highway 12, 2 miles west of Wallace
56	Wallace	Calaveras	1974	approx. 3 miles south of project site	~100 larvae found on east side of Burson Road, 2 miles north of Highway 26; habitat was oak woodland with seasonal drainage features and a stock pond
566	Wallace	Calaveras	Jan. 2001	approx. 1.0 mile west of project site	3 adults observed in pools in old stream channel on south side of Highway 12; threatened by bullfrogs in settling pond
567	Wallace	Calaveras	April 1990	approx. 2.1 miles south of project site	Individuals collected from a pond 0.1 mile west of Burson Road and 0.5 mile north of Southworth Road junction, 5 miles southeast of Wallace; deposited at UC Davis
586	Wallace	Calaveras	April 1990	approx. 2 miles southeast of project site	Observed in pond approx. 0.7 mile north of the Burson Road/ Highway 26 intersection
667	Wallace	Calaveras	Nov. 1983	approx. 2 miles southeast of project site	Found west of Valley Springs on Highway 12 near Bear Creek indicating that CTS was probably migrating to upland habitat
795	Wallace	Calaveras	April 2004	approx. 2.8 miles west of project site	Dead adult CTS found in large, deep vernal pool located within blue oak woodland at top of ridge surrounded by rangeland and ranchettes, approx. one mile east of Wallace
1014	Wallace	Calaveras	Feb. 2007	approx 3.5 miles northwest of project site	Adults and juveniles observed in unnamed reservoir, 0.7 mile ENE of Wallace in steep terrain within oak woodland; stock ponds nearby
1040	Wallace	Calaveras	Mar. & April 2006	approx. 2.5 miles northwest of project site	Larvae observed in large vernal pool ~1.3 miles east of Wallace, with Pacific treefrog, western spadefoot, and bullfrog

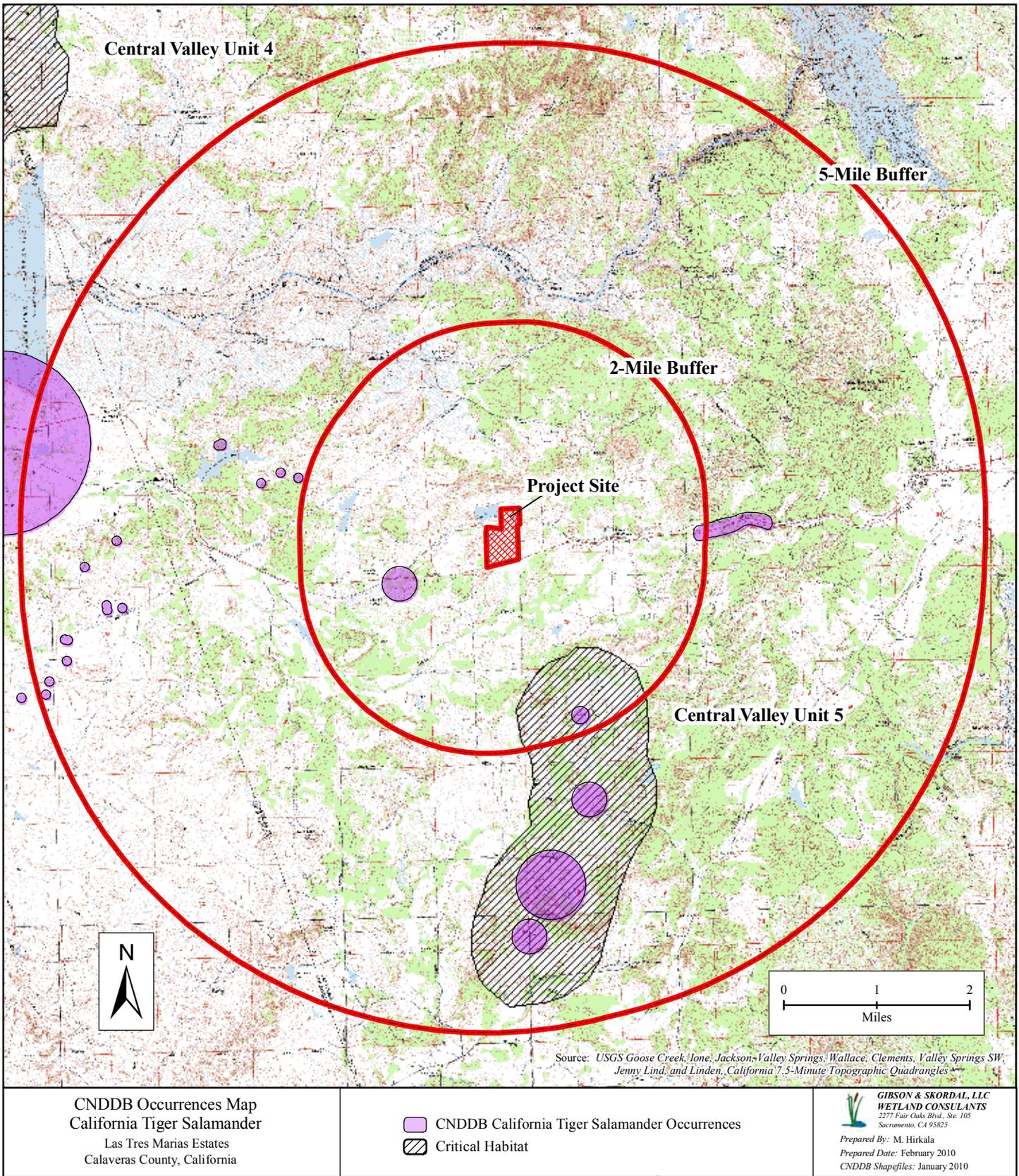


Figure 4. Locations of California Tiger Salamander in the Project Area

## **5.0 IMPACTS AND ENVIRONMENTAL COMPLIANCE**

### **5.1 IMPACT ASSESSMENT**

Based on the opinions of several biologists who have visited the project site, including staff from the USFWS Sacramento Fish and Wildlife Office (Jeremiah Karuzas, Arnold Roessler, Christopher Nagano, and Brian Peterson), the project site provides marginal upland habitat for CTS, low quality breeding habitat, and is likely used by CTS during overland migration. The following factors support this assessment: 1) CTS are known to occur within dispersal distance of the project site (see Figure 3), 2) stock ponds that are present on adjacent properties may provide suitable breeding habitat, 3) the project site contains suitable non-breeding habitat, and 4) a small portion of the site (within Lot #7) contains rodent burrows that provide subterranean retreats for individuals. Therefore, the proposed project is likely to result in take of this species.

Following informal consultation with the USFWS during 2009, the landowner revised the subdivision layout to reduce potential impacts on CTS by incorporating the following changes:

1. The number of lots in the subdivision was reduced by one --- from 16 to 15.
2. Sofia Court was relocated in Lots #8 and #14 to avoid wetland swales.
3. The driveway on Lot #9 was relocated to the west portion of the lot.
4. Lot #7 is now 9 acres in size due to a combining of two lots. This was done to preserve suitable upland burrow habitat in the eastern portion of the lot. Because the minimum parcel size in this part of Calaveras County is 5 acres, this lot will not be able to be split in the future.
5. Lot #15 is 26.57 acres in size and includes the stock pond. The designated building envelope is approximately 3 acres and the driveway encompasses approximately 2 acres. The remaining 21.62± acres will be designated as open space on the recorded subdivision map.

The County Board of Supervisors approved the landowner's tentative map on June 21, 2011. Upon receipt of the take permit from the USFWS, the owner will retain the services of an attorney familiar with planned unit developments to draft a set of deed restrictions prior to any lots being sold. The deed restrictions will be modeled after those that have already been approved by the USFWS. Examples of deed restrictions include the types of fencing that will be permitted, designated building envelopes within each lot, and any additional restrictions on specific lots due to topography or open space buffers, and bylaws.

The final map, to be approved by the County Planning Department, will show the approved building envelopes and it will be the responsibility of the Planning Department, by and through implementation of its computerized permit tracking system, to ensure that all structures are built within that envelope only.

With the changes described above, avoidance and minimization measures that have been incorporated into the project design, and the retention of open space on approximately 50 percent of the project site, the proposed project may affect, but is unlikely to adversely affect CTS. CTS

will be able to continue using the project site as an overland migration corridor once the project has been constructed.

## **5.2 DIRECT AND INDIRECT EFFECTS**

Direct and indirect effects to CTS, including impacts to potential upland habitat are expected to be minimal. No evidence of CTS occupancy on the project site has been observed during any of the site visits although no focused surveys were conducted for this species. Although the project site is located in a geographic area that is known to support CTS, the aquatic habitats on-site do not represent potential breeding habitat and the adjacent uplands provide only marginal supporting habitat. Individuals that migrate overland across the project site would not be prevented from continuing to do so following project completion. No formidable barriers would be created by construction of the proposed subdivision because of the open space corridors that will be maintained within the subdivision and the restrictions on the types of fencing and other buildings that will be permitted.

Even though approximately 2.25 acres of upland habitat will be lost by construction of the internal roads and infrastructure, and additional upland habitat will be lost to construct private residences, these lands are considered marginal for CTS occupation. None of the aquatic features on the project site will be disturbed as part of the proposed project and approximately 50 percent of the entire project site will remain as open space. The building envelopes on each lot have been specifically created to occupy the least environmentally sensitive areas. The loss of upland resulting from the proposed project is not expected to affect the survival of CTS in this portion of its range.

Indirect effects to CTS may also include the changes in the landscape resulting from increased human occupancy of the area, increased internal roadways and vehicular traffic, use of herbicides on individual parcels, and the increased number of domestic pets which may harbor diseases detrimental to CTS. All of these changes can have varying degrees of adverse effects on individual CTS that may be traveling across the project site during migration to and from breeding habitats. Increased vehicular traffic and pets, such as dogs and cats, may be responsible for increased mortality whereas herbicides can degrade upland habitat and potential breeding habitat if they wash downslope into the swales and seasonal wetlands on-site. These actions would not be covered under the landowner's incidental take permit.

In a June 2007 letter to the Calaveras County Planning Department (page 2), the USFWS encouraged the County to “ .... work with project applicants to develop project proposals that minimize the potential effects of development projects on the California tiger salamander, by minimizing the footprint of the projects, including large connected areas of open space preserve that are contiguous with other open space areas and by carefully evaluating the known and potential habitat for California tiger salamander in the region. The design of proposed projects should maintain large areas of suitable habitat for the California tiger salamander, including suitable breeding habitat, upland habitat, and movement corridors, which are interconnected to other occurrences of the species in the County.” The landowner has followed the approach recommended by the USFWS in its 2007 letter.

### **5.3 CUMULATIVE EFFECTS**

Indirect effects resulting from the project (discussed above) also relate to cumulative effects of development within this portion of the County. With each new subdivision or other development there are more roads, increased traffic, increased use of herbicides, and additional domestic animals residing in the area. All of these effects add to cumulative effects that may affect CTS.

### **5.4 EFFECTS ON CRITICAL HABITAT**

The project site is not located within designated critical habitat for CTS and no effects to critical habitat are expected as a result of the proposed project or implementation of the HCP.

## 6.0 TAKE OF THE COVERED SPECIES

According to the USFWS (in a letter dated March 31, 2009) the project site provides marginal upland habitat for CTS. However, because there are known CTS occurrences within dispersal distance of the project site, the fact that adjacent stock ponds located off-site provide potentially suitable breeding habitat, and the project area contains suitable non-breeding habitat, it is likely that the project area is utilized by CTS during overland migration. Therefore, the proposed project is likely to result in take of this species.

Because protocol surveys have not been conducted for CTS on the project site, it is not possible to quantify the exact number of individuals that could be taken by the proposed subdivision. Therefore, the applicant is requesting take coverage for all CTS within the entire project site (108.76± acres).

Because there is no evidence of CTS occurring on the project site, and the fact that there are no known occurrences of CTS within the immediately vicinity (within a one-mile radius), the level of take is expected to be low and have negligible effects on the species' overall survival. The percentage of the species habitat on the project site relative to the species entire geographic range is very small, and its relative importance to the species, both regionally and throughout its range, is thought to be minor.

The maximum levels of take of CTS anticipated to occur under the HCP, and hereby authorized by its associated Section 10(a)(1)(B) permit, are as follows:

Any CTS that may be taken (killed, injured, harmed, or harassed) and/or its habitat within the boundaries of the 108.76±-acre project site during the following covered activities ---

- 1) any grading, earthmoving, and construction operations including, but not limited to use of heavy equipment, vegetation removal, compaction of soils and burrows, and any permanent loss of habitat as a result of development of infrastructure including, but not limited to roads, driveways, fences, buildings, installation of utilities, wells, drainage, septic, and irrigation systems; and
- 2) any activities undertaken to manage or enhance habitat for CTS.

This incidental take limit is subject to full implementation of all mitigation measures, as described in Section 7.0. If this take limit is exceeded, the landowner and future lot owners shall cease all grading and construction operations and contact the USFWS immediately.

## **7.0 MITIGATION MEASURES**

### **7.1 USFWS CONSERVATION GUIDELINES**

The USFWS and California Department of Fish and Game (CDFG) (2003) have established interim guidance on site assessment and field surveys for determining presence or a negative finding of the CTS; however, mitigation for an individual project's impacts can be accomplished through the purchase of credits at a USFWS-approved conservation bank. However, other means of compensation are acceptable including avoidance, on-site preservation, or establishment of a conservation easement. The USFWS evaluates each project separately to determine impacts on the species and the type and amount of mitigation that is necessary to compensate for project-related impacts to CTS. If the USFWS requires the purchase of credits at a mitigation bank, the bank's operator is then responsible for all future reporting and maintenance of appropriate habitat on the site.

This project has already undergone preliminary informal consultation with USFWS and CDFG staff. The subdivision lot layout has been designed to avoid the most suitable CTS upland habitat and will retain all on-site wetlands and other aquatic resources. No off-site mitigation is proposed because approximately 50 percent of the project site will be maintained as open space and large ribbons of connectivity will remain that are contiguous with other open space areas north and south of Highway 12. Most of the northernmost lot, which includes the large pond and consists of 26.57 acres, will be left as open space. The project's design will preserve CTS movement corridors, which are interconnected to CTS occurrence data, in this portion of the County.

### **7.2 MITIGATION PLAN**

Mitigation for the loss of CTS upland habitat has been incorporated into the redesign of the project by retaining almost 50 percent of the project area as open space. Light grazing of undeveloped areas and vacant lots will continue under the direction of the landowner. No off-site mitigation is proposed.

### **7.3 AVOIDANCE AND MINIMIZATION MEASURES**

Although no specific set of avoidance and minimization measures have been prepared by the USFWS for construction projects within potential CTS habitat, the landowner has reduced potential adverse effects on CTS upland habitat by making several modifications to the original project design, at the direction of USFWS staff. These avoidance and minimization measures include:

- 1) Changing the lot layout to avoid the most suitable upland habitat and other sensitive areas that may be used by CTS,
- 2) Combining two 5-acre lots (former Lots 7 and 9) into one large lot,

- 3) Redrawing building envelopes,
- 4) Relocating proposed driveways to avoid sensitive areas that may be used by CTS,
- 5) Protecting approximately 54 of the 108.76± acres as conservation areas, including CTS migration corridors,
- 6) Implementing deed restrictions that will govern the proposed subdivision prior to the sale of any lots, and
- 7) Subjecting each new owner to the constraints on the recorded map regarding building envelopes and open space as they obtain their building permit.

Additional avoidance and minimization measures that may be necessary during construction include restrictions on the timing of grading and other activities that involve heavy equipment so that work does not take place during the rainy season (typically during the winter and early spring months, but subject to precipitation) when heavy equipment can cause the collapse of subterranean burrows that may provide shelter during CTS overland migration. It is during the winter and spring rains that adult salamanders are more likely to be moving overland to and from breeding sites. Earthwork would be permitted during the winter season if conditions were dry due to lack of rainfall.

Nighttime construction on the project site will be prohibited. All grading and earthwork will take place during daylight hours.

Strict speed limits on internal roads of no more than 15 miles per hour will be imposed on vehicular traffic during the construction phase. This is especially important if vehicles are traveling on the project site during the early morning or evening hours, as this is when CTS are most active.

Standard erosion control measures will be implemented around stock ponds and other wetlands to prevent sedimentation and runoff from construction sites from entering these areas and to prevent potential contamination of aquatic resources, which may serve as breeding areas for CTS.

Prior to startup, environmental awareness training will be provided to all workers so that they are knowledgeable about CTS. This training will include the following: a physical description of CTS and its habitat requirements; a discussion of documented occurrences in the general area; an explanation of the legal status and implications of working under a federal Section 10(a)(1)(B) permit; and a discussion of measures being taken to reduce impacts to the species during grading and site preparation.

A permitted individual will be available during the initial stages of construction and site preparation activities to handle and relocate CTS, if any are found. Individuals will be relocated to the nearest small mammal burrow or crevice outside the work area.

Deed restrictions will be recorded against the title of individual lots, copies will be filed with the Calaveras County Planning Department and the final map will contain designations of specific

building envelopes within each lot. When future lot owners apply to the County for planning, grading, or building permits, the County's computerized land development tracking system will alert all departments of the existence and location of the approved building envelopes so that building permits are not issued for areas outside the building envelope.

## **8.0 PLAN IMPLEMENTATION**

### **8.1 BIOLOGICAL GOALS AND OBJECTIVES**

*Goal 1. Conserve and protect CTS habitat within the permit area.*

Objective 1. Permanently protect 54 acres of potential CTS habitat within the permit area by identifying open space corridors as part of the approved map and designating specific building envelopes that are recorded by the County. Protected areas that will remain undeveloped include the large pond in the northernmost parcel and likely CTS movement corridors throughout the project site. Deed restrictions to be recorded against the title of the individual lots will prevent unauthorized construction in the open space corridors.

Objective 2. Retain, in their present form, all aquatic features that may constitute CTS breeding habitat on the project site by including these features in the open space corridors.

Objective 3. Continue light grazing within the permit area to prevent vegetation from growing too high and becoming a fire hazard.

*Goal 2. Minimize “take” of CTS that may be in underground burrows during construction.*

Objective 1. Ensure that a qualified biologist, permitted to handle CTS, will be available during the initial stages of construction and site preparation to capture and relocate CTS, if any are found. Individuals will be relocated to the nearest small mammal burrow or crevice outside the work area.

### **8.2 RESPONSIBILITIES**

As specified in the USFWS Habitat Conservation Planning Handbook (1996b), an Implementing Agreement (IA) is not typically required for low-effect HCPs unless requested by the permit applicant. Mr. San Bartolome understands that he is responsible for implementing this HCP in accordance with the specifications for mitigation and funding.

### **8.3 SCOPE**

The project area is the *Las Tres Marias Estates* project site, as described in Section 2.0 of this HCP. This HCP covers activities only within the 108.76±-acre project site. All mitigation will occur on-site and has been partially accomplished by redesign of the original subdivision plan in conjunction with the USFWS, Sacramento Fish and Wildlife Office.

## **8.4 PLAN DURATION**

Mr. San Bartolome seeks a 10-year permit from the USFWS to cover those activities associated with subdividing his property into 15 lots. The 10-year permit term is requested to accommodate any unforeseen delays in scheduling and the downturn in the local economy. It will likely take many years to sell and develop all of the individual lots, especially in today's economy. Mr. San Bartolome has been working on this subdivision since 2002 and has experienced numerous delays due to unforeseen circumstances, including the listing of CTS as a federally and state threatened species, changes in the County Planning Department staff, changes in County regulations, ongoing discussions with the USFWS, and changes in its staff. It is unlikely that all of the lots can be developed within a shorter time frame, especially under current market conditions. The permit will expire at the end of 10 years and/or once Mr. San Bartolome has fulfilled all of his obligations as contained in the HCP.

## **8.5 MONITORING**

Monitoring under an HCP has three components: 1) Effects Monitoring (making sure that the amount and impact of take post-project is what was analyzed in the HCP); 2) Effectiveness Monitoring (were the avoidance and minimization measures and the mitigation that were specified effective), and 3) Compliance Monitoring (were the avoidance and minimization measures and required mitigation successfully completed).

Initial monitoring of the project site will be undertaken by a qualified biologist possessing knowledge of CTS and their movements. The first monitoring visit to establish baseline conditions will be conducted following approval of the final subdivision map and issuance of the incidental take permit and prior to any ground disturbance on the project site. A photo log of baseline conditions will be completed to provide comparisons for future monitoring efforts as build out occurs. Any aquatic sampling (e.g., dip netting) that is undertaken will be conducted by an individual possessing the necessary permits for handling CTS. Baseline data will be collected prior to the initial ground disturbance.

Future monitoring will be conducted upon the sale of individual lots as construction progresses to ensure that individual owners are in compliance with the deed restrictions and incidental take permit, or until all of the lots have been developed.

### **8.5.1 Reporting**

Monitoring reports will be provided to the USFWS as lots are developed and conditions on-site are changed. The reports will assess habitat conditions as they pertain to CTS, provide progress reports on the condition of the open space corridors, assess the condition of the aquatic habitats, presence of CTS, grazing schedules, and any problems encountered. Because the lots will be sold and developed over several years it is not possible to set up a schedule for monitoring reports to be submitted to the USFWS at the present time. The first monitoring report will be submitted 2 years following the development of the first lot. At a minimum, additional monitoring reports will be submitted at the end of years 5 and 10.

### **8.5.2 Adaptive Management**

In preparing a management plan for habitat within the open space areas, it must be acknowledged that there will undoubtedly be future developments in habitat and species management that may affect how the Plan Goal is met. This Plan can only provide guidance for adopting new technologies or practices as they are developed. Ultimately, the biological monitor in conjunction with the Resource Agencies, must determine the appropriate management decision for a given situation. Before considering any management action, the biologist must consider the Plan Goal, which is to ensure that the protected aquatic and upland habitats within the open space are maintained in such condition such that they will continue to provide suitable movement corridors for CTS. If a condition arises which is not specifically addressed by this plan, the biologist may, upon review and approval by the Resource Agencies, adopt different techniques or procedures than originally described.

## **8.6 MANAGEMENT**

Currently, light grazing of the open space and undeveloped areas is proposed to control vegetation height and invasive species. This will be a continuation of what is currently being done by the landowner to control vegetation while minimizing the use of herbicides. To date, no CTS have been reported from the project site. Subsequent monitoring, in variable rainfall years, will be used to assess the presence of CTS and the long-term viability of habitat for this species. Significant changes in habitat or species utilization over the next few years may trigger adjustments in land management or adaptive management practices.

## **8.7 FUNDING**

The project proponent is responsible for the full cost of obtaining an incidental take permit under section 10(a)(1)(B) of the ESA and adhering to all conditions imposed by the USFWS to do so. These include, but are not limited to, hiring an attorney that specializes in planned unit developments to draft a set of deed restrictions pursuant to those that have been approved by the USFWS. These will govern future residential development on the project site, setting up language to protect the 54 acres of conservation areas, including the pond, and formalizing the agreement with the USFWS regarding the protection of open space areas.

The project proponent, an individual, intends to retain ownership of the adjacent 23-acre parcel to the east where he currently resides. He will be responsible for paying all costs related to management and reporting requirements for the life of the permit. He has been the sole funding source since 2002 when he began this undertaking and has been responsible for all consulting studies, reports, document preparation, and fees related to this project.

The landowner is not proposing to purchase credits at an off-site USFWS-approved conservation bank. All of the mitigation/compensation for the loss of CTS habitat will occur on-site.

## 9.0 CHANGED AND UNFORESEEN CIRCUMSTANCES

Section 10 regulations [50 CFR 17.22 (b)(2)(iii)] require that an HCP specify the procedures to be used for dealing with unforeseen circumstances that may arise during the implementation of the HCP. In addition, the Habitat Conservation Plan Assurances ("No Surprises") Rule [50 CFR 17.21 (b)(5)-(6) and 17.22(b)(5)-(6); 63 F.R. 8859] defines "unforeseen circumstances" and "changed circumstances" and describes the obligations of the permittee (Luis San Bartolome) and the USFWS.

The purpose of the Assurances Rule is to provide assurances to non-federal landowners participating in habitat conservation planning under the ESA that no additional land restrictions or financial compensation will be required for species adequately covered by a properly implemented HCP, in light of unforeseen circumstances, without the consent of the permittee. "Changed circumstances" means changes in circumstances affecting a species or geographic area covered by the conservation plan that can reasonably be anticipated by plan developers and the USFWS and that can be planned for (e.g., the listing of a new species, or fire or other natural catastrophic events in areas prone to such events). The policy defines "unforeseen circumstances" as changes in circumstances that affect a species or geographic area covered by the HCP that could not reasonably be anticipated by plan developers and the USFWS at the time of the plan's negotiation and development and that result in a substantial and adverse change in status of the covered species.

In determining whether any event constitutes an unforeseen circumstance, the USFWS shall consider, but not be limited to, the following factors: size of the current range of the affected species; percentage of range adversely affected by the HCP; percentage of range conserved by the HCP; ecological significance of that portion of the range affected by the HCP; level of knowledge about the affected species and the degree of specificity of the species conservation program under the HCP; and whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

If the USFWS determines that the unforeseen circumstance will affect the outcome of the HCP, additional conservation and mitigation measures may be necessary. Where the HCP is being properly implemented and an unforeseen circumstance has occurred, the additional measures required of the permittee must be as close as possible to the terms of the original HCP and must be limited to modifications within any conserved habitat area or to adjustments within lands or waters that are already set aside in the HCP's operating conservation program. Additional conservation and mitigation measures shall not involve the commitment of additional land or financial compensation or restrictions on the use of land or other natural resources otherwise available for development or use under the original terms of the HCP without the consent of the permittee. Letters between the USFWS and the permittee shall document resolution of the situation.

Thus, in the event that unforeseen circumstances adversely affecting CTS occur during the term of the permit, Mr. San Bartolome would not be required to provide additional financial mitigation or implement additional land use restrictions above those measures specified in this HCP, provided that the HCP is being properly implemented. This HCP expressly incorporates by reference the permit assurances set forth in the Habitat Conservation Plan Assurances ("No

Surprises") Rule adopted by the USFWS and published in the Federal Register on February 23, 1998 (50 CFR Part 17). Except as otherwise required by law or provided for under the HCP, including those provisions regarding changed circumstances, no further mitigation for the effects of the proposed project on CTS may be required from a permittee who is properly implementing the terms of the HCP and the permit. The HCP will be properly implemented if the commitments and provisions of the HCP and the permit have been or are being fully implemented by the permittee and the appropriate deed restrictions.

If a new species that is not covered by the HCP but that may be affected by activities covered by the HCP is listed under the ESA during the term of the Section 10 permit, the USFWS may consider this to be a changed circumstance. In such case, the Section 10 permit will be re-evaluated by the USFWS and the HCP-covered activities may be modified, as necessary, to ensure that the activities covered under the HCP are not likely to jeopardize or result in take or adverse modification of any designated critical habitat of the newly listed species. The landowner, Luis San Bartolome, shall implement the modifications to the HCP covered activities identified by the USFWS as necessary to avoid the likelihood of jeopardy to or take or adverse modification of the designated critical habitat of the newly listed species. Mr. San Bartolome shall continue to implement such modifications until such time as he has applied for, and USFWS has approved, an amendment to the Section 10 permit, in accordance with applicable statutory and regulatory requirements, to cover the newly listed species, or until the USFWS notifies Mr. San Bartolome in writing that the modifications to the HCP covered activities are no longer required to avoid the likelihood of jeopardy or adverse modification of designated critical habitat of the newly listed species.

As to other potential changed circumstances (e.g., fire, flood, insect infestation, plant diseases, earthquake, or other natural disaster), the duration of the permit (i.e., 10 years) makes the occurrence of any such circumstance within the permit period unlikely. Wildfires are not common in this area. The only significant fire in the last 10 years occurred about 5 years ago and burned approximately 1,000 acres between Camanche Parkway and Valley Springs. It was started by a burning motorhome on the side of the road and rapidly spread due to dry conditions. Any fire that affects the on-site open space during the permit term, would be considered a changed circumstance and Mr. San Bartolome will ensure that the site is revegetated and continues to provide habitat for CTS.

There has been no flooding in the project area within recent history; Camanche Reservoir was constructed for flood control and water supply and is about 2.5 miles north of the project site. Even if the dam failed it would be unlikely to affect the project site due to the hilly terrain in between. Therefore, if a flood occurred within the next 10 years, or within the life of the permit, it would be considered an unforeseen circumstance.

If, after the expiration of the permit, there were any changed or unforeseen circumstances the individual lot owners would be responsible for their properties. For example, the open space areas would be allowed to revegetate following a natural disaster, such as a fire or flood. It would not be the responsibility of the project proponent or individual lot owners to re-create pre-existing conditions on the project site.

## **10.0 PERMIT AMENDMENT/RENEWAL PROCESS**

### **10.1 PERMIT AMENDMENTS**

At this time there is no reason to expect that an amendment to the take permit will be needed to complete the development of the proposed subdivision. However, during the specified permit period an amendment of the Section 10(a) permit for the project would be required for any change in the following:

- a) significant revision of the permit area boundary or substantial changes to the lot layout
- b) the listing under the ESA of a new species not currently addressed in the HCP that may be taken by project activities;
- c) modification of any important project action or mitigation component under the HCP, including funding, that may significantly affect authorized take levels, effects of the project, or the nature or scope of the mitigation programs; and
- d) any other modification to the project likely to result in significant adverse effects to CTS not addressed in the original HCP, USFWS Findings, and/or permit application.

Amendment of the Section 10(a) permit would be treated in the same manner as an original permit application. Permit amendments typically require a revised HCP, a permit application form and application fee, an Implementing Agreement, a NEPA document, and a 30-day public comment period if it is a low-effect HCP. However, the specific documentation needed in support of a permit amendment may vary, depending on the nature of the amendment. If the permit amendment qualifies as a low-effect HCP, an Implementing Agreement and NEPA document would not be required. If the amendment were to involve an Environmental Assessment the public comment period would be 60 days. If the amendment were to involve an Environmental Impact Statement the public comment period would be 120 days.

### **10.2 HCP AMENDMENTS**

This HCP may, under certain circumstances, be amended without amending the associated permit or decision documents, provided that such amendments are of a minor or technical nature and that the effect on the species involved and the levels of take resulting from the amendment are not significantly different than those described in the original HCP. Examples of minor amendments to the HCP that would not require a permit amendment include, but are not limited to:

- minor revisions to the HCP's plan area or boundaries;
- minor changes to the language contained in the deed restrictions;
- minor revisions to the building envelopes within the individual lots that do not result in additional take; and
- minor changes to the USFWS-approved open space areas on the project site.

To amend the HCP with or without amending the permit, Mr. San Bartolome or his representative must submit to the USFWS, in writing, a description of:

- the proposed amendment;
- an explanation of why the amendment is necessary or desirable; and
- an explanation of why he believes the effects of the proposed amendment would not be significantly different than those described in the original HCP.

If the USFWS concurs with Mr. San Bartolome's proposal, it shall authorize the HCP minor amendment in writing and the amendment shall be considered effective upon the date of written authorization by the USFWS. All other amendments will be treated as major amendments. A major amendment would require the submittal of a revised HCP, a new permit application form (and \$100 fee), and the preparation of an appropriate environmental review document in accordance with the National Environmental Policy Act (which would be subject to all applicable public notice and comment requirements, a revised Findings, and revised biological opinion).

### **10.3 PERMIT RENEWAL**

The Section 10(a)(1)(B) permit may be renewed without the issuance of a new permit, provided that the permit is renewable, and that biological circumstances and other pertinent factors affecting CTS are not significantly different than those described in the original HCP. To renew the permit, Mr. San Bartolome shall submit to the USFWS, in writing at least 30 days prior to its expiration:

- a request to renew the permit;
- reference to the original permit number;
- certification that all statements and information provided in the original HCP and permit application, together with any approved HCP amendments, are still true and correct, and inclusion of a list of changes;
- a description of any take that has occurred under the existing permit; and
- a description of any portions of the project still to be completed, if applicable, or what activities under the original permit the renewal is intended to cover.

If the USFWS concurs with the information provided in the request, it may renew the permit consistent with permit renewal procedures required by Federal regulation (50 CFR 13.22). If Mr. San Bartolome submits a renewal request and the request is on file with the issuing USFWS office at least 30 days prior to the permit's expiration, the permit shall remain valid while the renewal is being processed, provided the existing permit is renewable. However, neither the landowner nor his contractors may take listed species beyond the quantity authorized by the original permit. If Mr. San Bartolome fails to file a renewal request within 30 days prior to permit expiration, the permit shall become invalid upon expiration.

## **10.4 PERMIT TRANSFER**

Although the sale or transfer of ownership of the individual lots may occur during the life of the permit, deed restrictions required by the USFWS will be in place prior to the sale of any lots. The landowner plans to retain the largest lot (26.57 acres) that supports the pond. If the project site should change ownership for any reason before the subdivision process has been completed, a new permit application, permit fee, and an agreement signed by the new property owner stating that he or she understands all of the prior conditions that encumber the property shall be submitted to the USFWS. The new owner(s) will commit to all requirements regarding the take authorization and mitigation obligations of this HCP unless otherwise specified in this agreement and agreed to in advance with the USFWS. Once the deed restrictions are in place, the County Planning Department has granted its final approval of the subdivision, the lots are sold, and all permit conditions have been met, the project proponent will have no further obligations. Management of the open space areas will occur in perpetuity by the individual property owners as a condition of their ownership.

## **11.0 ALTERNATIVES CONSIDERED**

### **11.1 ALTERNATIVE #1: NO ACTION**

Under the No-Action Alternative, development of the Las Tres Marias Estates subdivision would not occur and the landowner would not implement a CTS low-effect HCP or receive a Section 10(a) incidental take permit from the USFWS. The project site would remain undeveloped and would likely continue to be used for grazing and open space. Leaving the project site in its current state would also result in an unnecessary financial burden on the landowner. He has invested a substantial amount of time, money, and other resources into gaining approval of this small subdivision over the past 10 years and his proposed project is consistent with the County's zoning ordinances. The landowner has also agreed to preserve approximately 50 percent of the project site as open space/wildlife habitat and has redesigned the project to address concerns by USFWS staff regarding CTS. If he were to sell the property to a developer, the new landowner may not be inclined to preserve this much property, but could opt entirely for off-site mitigation through the purchase of credits at an agency approved bank. Off-site mitigation and total site build out may result in greater impacts to CTS and other wildlife species. For these reasons, the No-Action Alternative has been rejected.

### **11.2 ALTERNATIVE #2: REDUCED TAKE**

The Reduced Take Alternative would reduce the number of residential lots. Instead of 15 lots the subdivision could be redesigned to support fewer lots with larger acreages (e.g., 10 lots). In general, biological impacts, including the loss of CTS upland habitat, associated with this alternative would still result, but would be reduced in magnitude. Due to the relatively small project site dimensions, the County's zoning ordinance of a minimum 5-acre parcels, and infrastructure that would be required to be put in place by the landowner (e.g., roads, power) any further reduction in the number of lots would impose a great financial burden on the landowner. He has already given up one lot and combined it with another to preserve suitable upland burrow habitat in the eastern portion of one of the lots that may be used by CTS during overland migration and has agreed to preserve approximately 50 percent of the project site as open space.

While larger expanses of open space might remain on-site under this alternative, the likelihood of increased use of the site by CTS is unlikely. The upland portion of the project site provides marginal habitat at best and the aquatic features on-site are unlikely to support CTS. This alternative would still require a Section 10(a)(1)(B) permit to be issued by the USFWS. Even though this alternative would result in larger lot size and slightly less vehicular traffic due to the reduced number of homeowners, the gains in reduction of take of the covered species and reduced modification of the habitat for the covered species would not be significant. For these reasons, the Reduced Take Alternative was rejected.

### **11.3 ALTERNATIVE #3: PROPOSED ACTION**

Under the Proposed Action Alternative, the landowner would subdivide his property into 15 separate lots as described in Section 2.0. The Proposed Action Alternative would require the

issuance of a Section 10(a)(1)(B) permit to allow development of the subdivision. Although the project would result in the loss of upland habitat where the new residences would be built, the most suitable upland habitat would be preserved into a network of corridors that would still allow individual CTS to move through the site. Effects to CTS would be minimal due to the reconfiguration of the lots and the travel corridors that have been maintained for overland migration. Under this alternative approximately 54 acres of the project site would be preserved as open space. Therefore, the Proposed Action is the preferred alternative.

## 12.0 REFERENCES

- Anderson, P.R. 1968. The reproductive and developmental history of the California tiger salamander. Master's thesis, Department of Biology, Fresno State College, Fresno, CA.
- Austin, C.C. and H.B. Shaffer 1992. Short, medium, and long-term repeatability of locomotor performance in the tiger salamander, *Ambystoma californiense*. *Functional Ecology* 6:145-153.
- Calaveras County. 1996. Calaveras County General Plan. December 9, 1996.
- California Department of Fish and Game, Biogeographic Data Branch, California Natural Diversity Database. 2011. State and Federally Listed Endangered and Threatened Animals of California. November 2011.
- California Department of Fish and Game. 2011. California Natural Diversity Database. Computer search of the Wallace and surrounding USGS 7.5-minute topographic quadrangles.
- Jennings, R.M., and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final report submitted to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA: Contract 8023. 255 pp.
- Loredo, I., D. Van Vuren, and M.L. Morrison. 1996. Habitat use and migration behavior of the California tiger salamander. *Journal of Herpetology* 30: 282-285.
- Miriam Green Associates. 2010. Las Tres Marias Estates Initial Study and Mitigated Negative Declaration. Prepared for Calaveras County Planning Department, San Andreas, CA. June 22, 2010. Revised September 3, 2010.
- Petranka, J.W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D. C. xvi +587 pp
- Quad Knopf, Inc. 2007a. Delineation of the waters of the United States for Las Tres Marias Estates subdivision, Calaveras County, California. Prepared for Luis San Bartolome. December 2007. 9 pp + appendices.
- Quad Knopf, Inc. 2007b. California tiger salamander site assessment for the proposed Las Tres Marias subdivision, Calaveras County, California. Prepared for Luis San Bartolome. August 2007. 6 pp.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third edition Houghton Mifflin Company, Boston, MA. 533 pp.
- Storer, T.I. 1925. A synopsis of the amphibia of California. University of California Publications in Zoology 27:60-71.
- Shaffer, H.B. and S. Stanley. 1991. Final report to California Department of Fish and Game; California tiger salamander surveys, 1991: Contract FG9422. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA.
- Shaffer, H.B., R.N. Fisher, and S.E. Stanley. 1993. Status report: the California tiger salamander (*Ambystoma californiense*). Final report for the California Department of Fish and Game. 36 pp.

- Shaffer, H.B. and P.C. Trenham. 2005. *Ambystoma californiense*. Pages 1093-1102 In: M.J. Lannoo (ed.). Status and Conservation of U.S. Amphibians. Volume 2: Species Accounts. University of California Press, Berkeley, CA.
- Trenham, P.C., W.D. Koenig and H.B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the salamander *Ambystoma californiense*. *Ecology* 82:3519-3530.
- U.S. Fish and Wildlife Service. 1980. Listing the California tiger salamander as a threatened species with critical habitat. *Federal Register* 45:52803-52807.
- U.S. Fish and Wildlife Service. 1984. Recovery plan for the California tiger salamander. Portland, OR. 62 pp.
- U.S. Fish and Wildlife Service. 2004. Endangered and threatened wildlife and plants; determination of threatened status for the California tiger salamander; and special rule exemption for existing routine ranching activities; final rule. *Federal Register* 50(17): 47212-47248.
- U.S. Fish and Wildlife Service. 2005. Endangered and threatened wildlife and plants; designation of critical habitat for the California tiger salamander, central population; final rule. *Federal Register* 70:48379-49458.
- U.S. Fish and Wildlife Service. 2009. Endangered and threatened wildlife and plants; designation of critical habitat for the Sonoma County Distinct Population Segment of the California tiger salamander. *Federal Register* 74:41662-41673.
- U.S. Fish and Wildlife Service and California Department of Fish and Game. 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander. October 2003. 12 pp.
- U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1996b. Habitat conservation planning handbook. Washington, DC.
- Zeiner, D.C., W.F. Laudenslayer Jr. and K.E. Mayer, eds. 1988. California's wildlife, Volume 1, amphibians and reptiles. California Department of Fish and Game, Sacramento, CA.

# APPENDIX A

COPIES OF CORRESPONDENCE BETWEEN THE USFWS AND PROJECT PROPONENT