

# Biological Resource Assessment

Riverfront Development  
City of Oroville, Butte County, California

May 2005



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## Summary of Findings and Conclusions

As requested, Gallaway Consulting, Inc. performed a biological survey of the Riverfront biological survey area (BSA) in Oroville, Butte County, California. The survey was conducted on March 28 and 29, 2005 to determine the presence of sensitive biological resources within the project area and to determine if these resources would be impacted by the proposed project. Eight (8) blue elderberry (*Sambucus mexicana*) shrubs, including two with Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB) exit holes, occur within the BSA. Although elderberry is not a special-status species, it provides habitat for the VELB, a federally threatened species. If construction is expected to occur with 100 feet of the elderberry plants, formal consultation with the US Fish and Wildlife Service (USFWS) is required. The BSA is immediately adjacent to the Feather River, which supports special-status spring-run and fall-late fall-run Chinook salmon (*Oncorhynchus tshawytscha*) and Central Valley steelhead (*Oncorhynchus mykiss*); therefore, before any project-related activities occur that may potentially affect these species, the proponent will consult with NOAA-Fisheries. Suitable nesting and foraging habitat for raptors occurs onsite; therefore, a pre-construction raptor survey should be conducted April-May, or prior to construction activities, to determine whether or not nesting raptors occur in, or in close proximity to, the project area. If nesting raptors are found within, or in close proximity to the BSA, appropriate mitigation or avoidance measures will be required per the California Department of Fish and Game (DFG). One riparian corridor, aligned north to south, occurs near the western border of the BSA. Riparian habitat is identified as a sensitive natural community in the City of Oroville's Conservation, Open Space and Parks Element of the General Plan and is also under the jurisdiction of the DFG. Before construction occurs that may impact Waters of the US including wetlands, the project proponent will obtain a water quality certification from the Regional Water Quality Board (Clean Water Act, Section 401), and a US Army Corps of Engineers Nationwide or Individual permit (Clean Water Act, Section 404). If the project will 1) divert, obstruct or change the natural flow of the bed, bank, or channel of any river, stream or lake; 2) use materials from a streambed; or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled flaked or ground pavement into any river, stream, or lake, a DFG permit will be required, which is contingent on successfully completing the California Environmental Quality Act (CEQA) process.

## I. Introduction

As requested, Gallaway Consulting, Inc. performed a biological survey of the Riverfront BSA in Oroville, Butte County, California (**Figure 1**). The BSA is located within the Fernandez Land Grant in the SW1/4 of Section 13, T19N R4B in the Oroville USGS 7.5' quadrangle. The field survey was conducted on March 28 and 29, 2005 to determine the presence of sensitive natural resources and to determine if these resources would be impacted by the proposed project. Jody Gallaway, biologist, and Christiana Conser, botanist, performed the field survey. Residential development is planned for the approximately 37-ac site.

## II. Survey Methods

### *Consultation with State and Federal Agencies*

#### **Special-status Species**

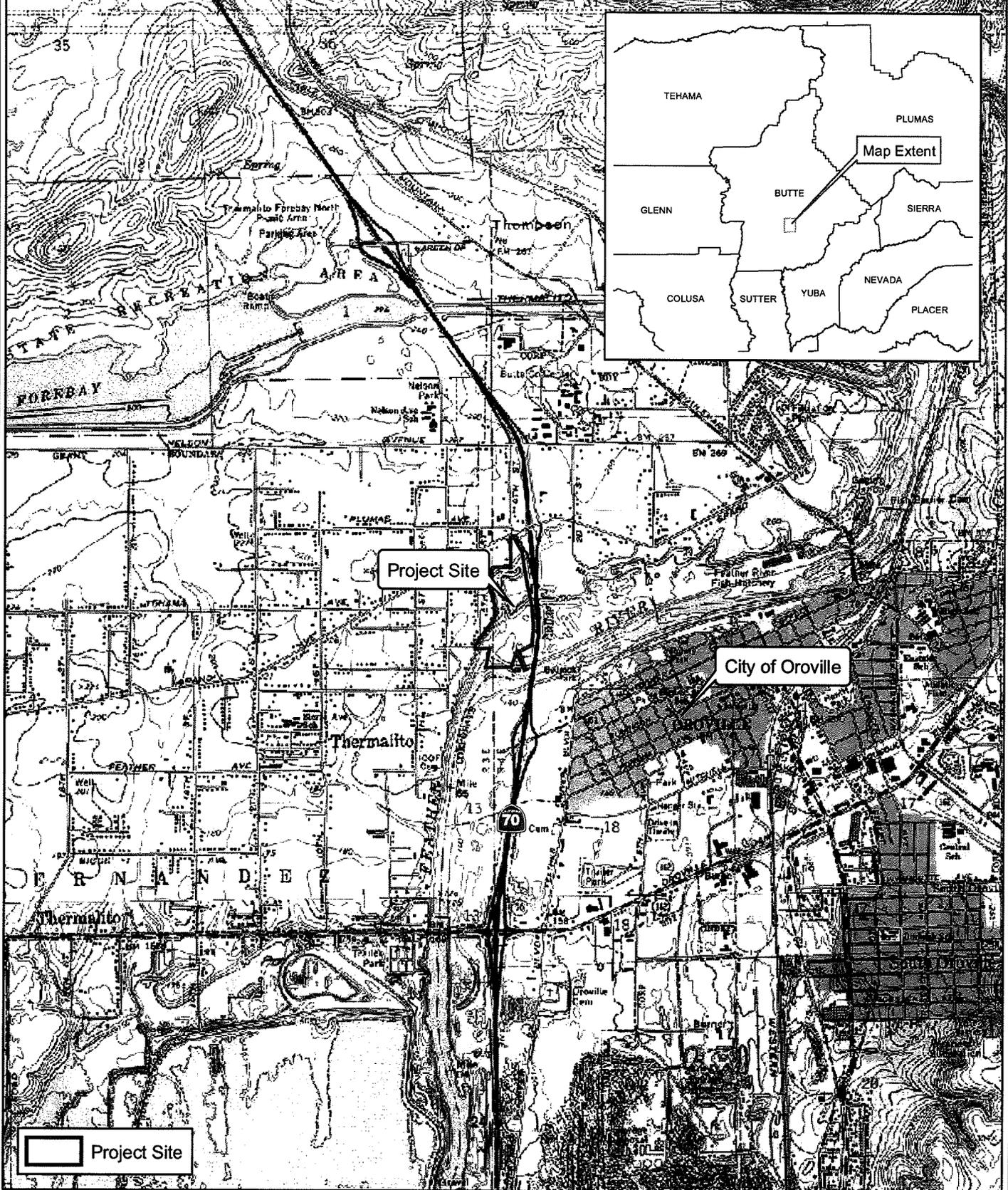
Gallaway Consulting, Inc. consulted both the USFWS and California Natural Diversity Database (CNDDDB), a positive-sighting database managed by the DFG, to identify special-status species occurring, or potentially occurring within a 1-mile radius of the BSA.

The results of the search included species falling into one of the following categories (see **Appendix A** for a complete listing by USGS quadrangle):

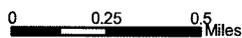
- Designated as rare, threatened, endangered, proposed or candidates for listing by the state or federal governments (ESA, 50 CFR 17.12 for listed plants and various notices in the Federal Register, California ESA, 14 CCR 670.5)
- Listed as Species of Concern by state or federal governments
- Included on the California Native Plant Society (CNPS) List 1A, 1B, and 2 (Skinner and Pavlik, 2002).
- Plants and wildlife that meet the definitions of rare or endangered species under the California Environment Quality Act (CEQA) (State CEQA Guidelines, Section 15380).

#### **Sensitive Natural Communities**

Gallaway Consulting, Inc. consulted the CNDDDB to identify sensitive natural communities occurring within a 1-mile radius of the BSA. The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological values and because the remaining occurrences are vulnerable to elimination. For this study, the term "sensitive natural community" includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA.



City of Oroville, Butte County, CA  
Map Date March, 30 2005



**GALLAWAY**  
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Figure 1.

Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special-status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands.

### *Natural Heritage Specimens*

Natural heritage specimens include individual native tree specimens from sensitive natural communities that are  $\geq 24$ " diameter at breast height (dbh). As the larger, more mature members of their communities they provide important structural habitat characteristics and account for the greatest proportion of community propagation—both important to ecological sustainability.

### **Sensitive Species of Concern**

Sensitive Species of Concern are unlisted species that have the potential for listing under state and/or federal ESA's if negative population trends continue. By considering them early in the planning process, problems can be avoided if these species are listed before the completion of a project.

### **Critical Habitat**

In addition to potentially occurring special-status wildlife and plant species, we determined whether or not USFWS-designated critical habitat occurs onsite. When the USFWS lists a species as threatened or endangered under the Federal Endangered Species Act (ESA), areas of habitat considered essential to its conservation and survival may be designated as *critical habitat*. These areas may require special consideration and/or protection due to their ecological importance. Although critical habitat may be designated on state or private lands, activities on them are not restricted unless there is federal involvement or direct impacts to listed species are expected.

### **Waters of the United States, Including Wetlands**

The US Army Corps of Engineers (COE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into jurisdictional waters of the United States, under Section 404 of the Clean Water Act. The term "Waters of the United States" is an encompassing term that includes "wetlands" and "Other Waters." Wetlands have been defined for regulatory purposes as follows: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Wetland Training Institute 1987). Other Waters of the United States are seasonal or perennial water

bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (i.e., hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4).

### *Field Surveys*

On March 28 and 29, 2005, a biological resource survey was conducted using north-south transects spaced 50 meters apart to cover the prescribed BSA. Jody Gallaway, biologist and Christiana Conser, botanist, conducted the biological resource survey to determine the presence of sensitive biological resources within the project area and to determine if these resources would be impacted by the proposed project.

### *Habitat Characterization*

By incorporating collected field data and interpreting aerial photos, we characterized habitat within the BSA using a classification system based on *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Mapping was performed to identify the habitats potentially impacted by future development and to more accurately assess impact significance level, mitigation effectiveness, and habitat value.

## **III. Results**

### *Environmental Setting*

The BSA is located immediately adjacent to the Feather River in Oroville, California in the foothills of the northern Sierra Nevada. Topography is characterized by rolling hills with project elevation ranging from 140-200 feet above sea level. One intermittent drainage conveys water north to south near the west boundary of the site. Three open ponds occur onsite that have been used for gravel extraction in the past. These ponds provide optimal habitat for the western pond turtle (*Clemmys marmorata*) and marginal habitat for the California red-legged frog (*Rana aurora draytonii*). In addition, the BSA contains habitat for several sensitive bird species and nesting raptors. Vegetative communities occurring onsite include blue oak woodland interspersed with valley foothill riparian and annual grassland. The average annual precipitation is approximately 29 inches, and the average annual air temperature is about 75° F. Surrounding land use consists of residential commercial development.

### *Special-status Species*

Eight blue elderberry shrubs, including two with VELB exit holes, were found within riparian habitat in the BSA (**Figure 2**). Although elderberry is not a special-status species, it provides habitat for the VELB, a federally threatened species. Out of 40 stems  $\geq 1$ " in diameter at ground height counted, 29 (73%) were 1-3", 6 (15%) were 3-5" and 5 (12%) were  $>5$ ". Three (3) of the elderberry stands were inaccessible due to dense vegetation and steep slopes and were not



Project Site  
○ Elderberry Bush



Extent of project site provided by City of Oroville.  
Date of Aerial Photo March 2002  
Map date April 27, 2005

0 100 200 400 Feet



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Figure 2.

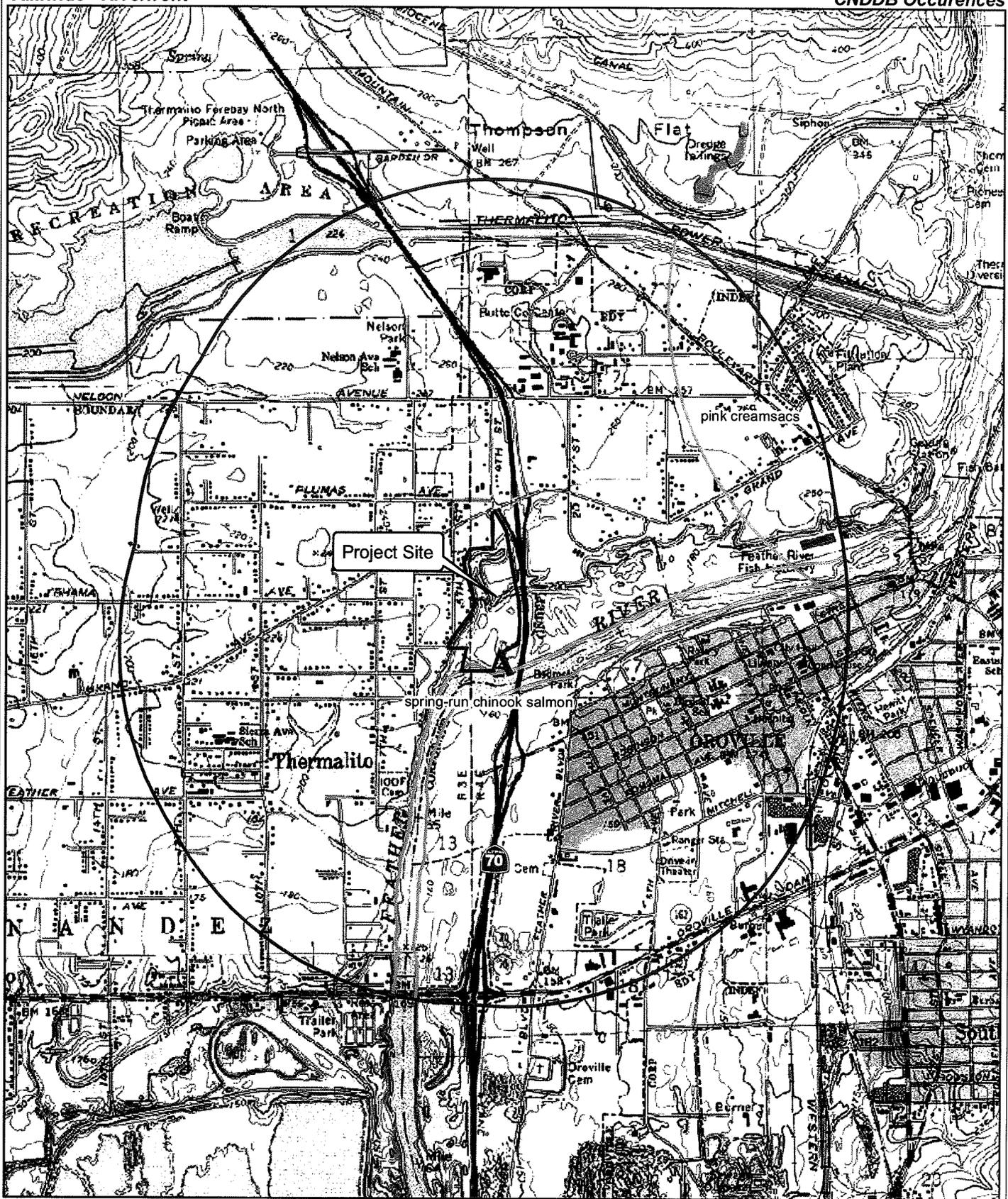
surveyed. Overall, elderberry stands within the BSA were in good health. We detected a total of six (6) emergence holes within the BSA with evidence of VELB found on 25% of the mapped elderberry stands (Table 1). Only clean-cut holes of the proper size and shape were considered to be evidence of VELB habitation. Eroded and/or weathered holes, or holes enlarged by birds or other insects were frequently encountered, but were usually unverifiable. Insects that live and feed in dead wood, such as termites, bostrichid beetles, and ants, often invade old, dead branches and trunks and damage evidence of prior VELB presence (USFWS 1991).

Although surveys were conducted during the time of year when adult beetles would be present (March – early June), no adult beetles were observed. The physical condition of the elderberry plants varied from poor to good. Table 1 summarizes the results of the survey.

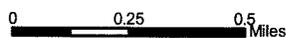
**Table 1. Number of elderberry stems and emergence holes found within Riverfront BSA, Oroville, CA.**

Shrub ID	Location	Exit Holes on Shrub		Number of Stems		
		Y/N	Qty	1-3"	3-5"	>5"
1	Riparian	Not Accessible				
2	Riparian	Not Accessible				
3	Riparian	Not Accessible				
4	Riparian	N	0	3	0	0
5	Riparian	Y	4	8	4	2
6	Riparian	N	0	1	2	3
7	Riparian	N	0	3	0	0
8	Riparian	Y	2	14	0	0

In addition, two federal species of special concern were observed within the BSA including western pond turtle, and Nuttall's woodpecker (*Picoides nuttallii*) as well as a nesting pair of great horned owls (*Bubo virginianus*). Four (4) other special-status species including spring-run and fall- late fall-run Chinook salmon, Central Valley steelhead, and pink creamsacs (*Castilleja rubicundula*) are known to occur within a 1-mile radius of the BSA, but were not found within the BSA (Figure 3). A summary of special-status species known to occur, or with the potential of occurring in the BSA, that could potentially be affected by project activities is presented in Table 2.



-  Project Site
-  1 Mile Buffer of Project Site
-  CNDDB



**GALLAWAY**  
CONSULTING, INC.

Figure 3.

Table 2. Special-status species that occur, or may occur within the BSA

Common Name (Scientific Name)	Status Fed/State/ CNPS	Associated Habitats	Potential for Occurrence
<b>SENSITIVE NATURAL COMMUNITIES</b>			
<b>NORTHERN HARDPAN VERNAL POOL</b>	USFWS- Critical Habitat	Associated with low- to mid-elevation seasonally flooded depressions on impermeable soils.	Not known to occur onsite
<b>GREAT VALLEY COTTONWOOD RIPARIAN FOREST</b>	DFG Protected	Associated with low- to mid-elevation perennial and intermittent streams. Composed of broad-leaved, winter deciduous trees, with Cottonwood the dominant species.	<u>Known to occur on site</u>
<b>GREAT VALLEY WILLOW SCRUB</b>	DFG- Protected	Associated with low- to mid- elevation perennial and intermittent streams.	<u>Known to occur on site</u>
<b>NORTHERN BASALT FLOW VERNAL POOL</b>	USFWS- Critical Habitat	Associated with low- to mid-elevation seasonally flooded depressions on impermeable soils.	Not known to occur onsite
<b>NORTHERN VOLCANIC MUD FLOW VERNAL POOL</b>	USFWS- Critical Habitat	Associated with low- to mid-elevation seasonally flooded depressions on impermeable soils.	Not known to occur onsite
<b>PLANTS</b>			
<b>AHART'S DWARF RUSH</b> ( <i>Juncus leiospermus</i> var. <i>ahartii</i> )	FSC, CNPS 1B	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools / vernal mesic areas.	Not known to occur; no suitable habitat
<b>FOX SEDGE</b> ( <i>Carex vulpinoidea</i> )	CNPS 2	Marshes and swamps, riparian woodland	Moderate; suitable habitat present onsite
<b>SLENDER ORCUTT GRASS</b> ( <i>Orcuttia tenuis</i> )	FT, SE CNPS 1B	Vernal pools and swales	Not known to occur; no suitable habitat
<b>GREENE'S TUCTORIA</b> ( <i>Tuctoria greenei</i> )	FE, CNPS 1B	Vernal pools.	Not known to occur; no suitable habitat
<b>FOUR ANGLED SPIKERUSH</b> ( <i>Eleocharis quadrangulata</i> )	CNPS 2	Marshes and swampy areas	Not known to occur onsite
<b>BUTTE COUNTY GOLDEN CLOVER</b> ( <i>Trifolium jokerstii</i> )	FSC, CNPS 1B	Valley and foothill grassland, vernal pools.	Not known to occur onsite; not observed during surveys
<b>RED BLUFF DWARF RUSH</b> ( <i>Juncus leiospermus</i> var. <i>leiospermus</i> )	FSC, CNPS 1B	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools / vernal mesic areas.	Not known to occur onsite; no suitable habitat
<b>PINK CREAMSACS</b> ( <i>Castilleja rubicundula</i> )	CNPS 1B, CSC	Valley and foothill grassland.	Moderate; known to occur within 1 mile
<b>ROSE-MALLOW</b> ( <i>Hibiscus lasiocarpus</i> )	CNPS 2	Marshes and swamps	Not known to occur onsite; no suitable habitat
<b>BUTTE COUNTY MEADOWFOAM</b> ( <i>Limnanthes floccosa</i> ssp. <i>californica</i> )	FE, SE, CNPS 1B	Valley and foothill grassland, vernal pools.	Not known to occur; no suitable habitat

<b>Common Name</b> ( <i>Scientific Name</i> )	<b>Status</b> Fed/State/ CNPS	<b>Associated Habitats</b>	<b>Potential for Occurrence</b>
<b>ADOBE LILY</b> ( <i>Fritillaria pluriflora</i> )	FSC, CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland	Not known to occur; no suitable habitat
<b>RECURVED LARKSPUR</b> ( <i>Delphinium recurvatum</i> )	FSC, CNPS 1B	Chenopod scrub, cismontane woodland, valley and foothill grassland	Not known to occur onsite; no suitable habitat
<b>ROUND-LEAVED FILAREE</b> ( <i>Erodium macrophyllum</i> )	CNPS 2	Cismontane woodland, valley and foothill grassland	Not known to occur onsite; no suitable habitat
<b>FERRIS'S MILK-VETCH</b> ( <i>Astragalus tener ferrisiae</i> )	FSC	Meadows and seeps, valley and foothill grassland	Not known to occur onsite; no suitable habitat
<b>BUTTE COUNTY CALYCADENIA</b> ( <i>Calycadenia oppositifolia</i> )	SLC	Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland	Not known to occur onsite; no suitable habitat
<b>MAMMALS</b>			
<b>GREATER WESTERN MASTIFF BAT</b> ( <i>Eumops perotis californicus</i> )	FSC, CSC	Common species of low elevations in California. Crevices in steep cliff faces or in the roof eaves of buildings of two or more stories (needs vertical faces to take flight).	Moderate; suitable nesting and foraging habitat present onsite.
<b>LONG-EARED MYOTIS BAT</b> ( <i>Myotis evotis</i> )	FSC	Roosts in hollow trees under loose bark, abandoned houses, caves, and mines. Uncommon; prefers coniferous habitats.	Not known to occur; no suitable roosting sites present onsite
<b>PALE TOWNSEND'S BIG-EARED BAT</b> ( <i>Plecotus townsendii pallescens</i> )	FSC, CSC	Once common species of low elevations in California in mesic habitats. Roosts in barns, attics of large buildings, caves, and mines	Moderate; suitable nesting and foraging habitat present onsite.
<b>PACIFIC WESTERN BIG-EARED BAT</b> ( <i>Plecotus townsendii townsendii</i> )	FSC, CSC	Barns, attics of large buildings, caves, and mines.	Not known to occur; no suitable roosting sites present onsite
<b>SMALL-FOOTED MYOTIS BAT</b> ( <i>Myotis ciliolabrum</i> )	FSC	Caves, mine tunnels, and abandoned buildings in relatively arid woody and brush upland areas near surface water.	Not known to occur; no suitable roosting sites present onsite
<b>FRINGED MYOTIS BAT</b> ( <i>Myotis thysanodes</i> )	CSC	Roosts in caves, mines, buildings, and crevices; forages over open habitats; prefers wooded habitats above 3500 ft.	Not known to occur; no suitable roosting sites present onsite
<b>LONG-LEGGED MYOTIS BAT</b> ( <i>Myotis volans</i> )	CSC	Roosts in rock crevices, buildings, under tree bark, in snags, mines and caves; prefer wooded, higher-elevation, montane habitats.	Not known to occur; no suitable roosting sites present onsite
<b>YUMA MYOTIS BAT</b> ( <i>Myotis yumanensis</i> )	FSC, CSC	Woodland and forested areas, large buildings and abandoned mine tunnels within one-half mile of a surface water source; abandoned swallow nests under bridges.	Not known to occur; no suitable roosting sites present onsite
<b>BIRDS</b>			
<b>TRICOLORED BLACKBIRD</b> ( <i>Agelaius tricolor</i> )	FSC, CSC	Emergent wetlands with tall, dense cattails or tules, but also thickets of willow, blackberry, and wild rose habitats.	Not known to occur; no suitable habitat

<b>Common Name</b> ( <i>Scientific Name</i> )	<b>Status</b> Fed/State/ CNPS	<b>Associated Habitats</b>	<b>Potential for Occurrence</b>
<b>BANK SWALLOW</b> ( <i>Riparia riparia</i> )	SE	Requires vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, and the ocean for nesting. Forages over grasslands, shrubland, savannah, wetlands, orchards and open riparian areas	Not known to occur; no suitable habitat
<b>NORTHERN HARRIER</b> ( <i>Circus cyaneus</i> )	CSC	meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands	Not known to occur; no suitable habitat
<b>BALD EAGLE</b> ( <i>Haliaeetus leucocephalus</i> )	ST	Requires large, old-growth trees or snags in remote, mixed stands near large or perennial, water bodies	Not known to occur; no suitable habitat
<b>WESTERN YELLOW-BILLED CUCKOO</b> ( <i>Coccyzus americanus occidentalis</i> )	FC, SE	Densely foliated, deciduous trees and shrubs, especially willows	Not known to occur; no suitable habitat
<b>WHITE-TAILED KITE</b> ( <i>Elanus caeuleus</i> )	CSC	Inhabits herbaceous and open stages of most habitats in Valley Grassland habitats.	Not known to occur; no suitable habitat
<b>FERRUGINOUS HAWK</b> ( <i>Buteo regalis</i> )	FSC, CSC	Foothills or prairies on low cliffs, cut banks, shrubs, trees, or other elevated structures.	Not known to occur; no suitable habitat
<b>AMERICAN PEREGRINE FALCON</b> ( <i>Falco peregrinus anatum</i> )	SE	Ledges of cliffs, tall buildings, occasionally in hollow trees near wetlands or open water bodies.	Not known to occur; no suitable habitat present
<b>OAK TITMOUSE</b> ( <i>Baeolophus inornatus</i> )	FSC	Open mixed hardwood and mixed hardwood conifer woodlands. Will forage and breed in riparian areas.	Low; minimal suitable habitat present onsite
<b>PRAIRIE FALCON</b> ( <i>Falco mexicanus</i> )	FSC	Nests in scrapes on sheltered ledges of a cliffs overlooking large, open areas; open terrain for foraging	Not known to occur; no suitable habitat
<b>NUTTALL'S WOODPECKER</b> ( <i>Picoides nuttallii</i> )	FSC	Forages mostly in oak and riparian deciduous habitats; nests mostly in riparian habitat in dead (occasionally live) trunk or limb of willow, sycamore, cottonwood, or alder; rarely in oaks; Frequents a mix of deciduous riparian and adjacent oak habitats. Requires snags and dead limbs for nest excavation.	<b><u>Known to occur on site</u></b>
<b>SWAINSON'S HAWK</b> ( <i>Buteo swainsoni</i> )	SE	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures.	Not known to occur; no suitable habitat
<b>WESTERN BURROWING OWL</b> ( <i>Athene cucularia hypugea</i> )	CSC	Open grasslands and chaparral at lower elevations.	Not known to occur; no suitable habitat
<b>LOGGERHEAD SHRIKE</b> ( <i>Lanius ludovicianus</i> )	FSC, CSC	In lowlands and foothills. Prefers open habitat with scattered trees, shrubs, and posts.	Moderate; suitable nesting and foraging habitat present onsite.
<b>LAWRENCE'S GOLDFINCH</b> ( <i>Carduelis lawrencei</i> )	FCS	Open woodland or shrubland with a nearby source of water.	Low; minimal suitable habitat present onsite

<b>Common Name</b> ( <i>Scientific Name</i> )	<b>Status</b> Fed/State/ CNPS	<b>Associated Habitats</b>	<b>Potential for Occurrence</b>
<b>LEWIS' WOODPECKER</b> ( <i>Melanerpes lewis</i> )	FCS	Open, deciduous and conifer habitats with brushy understory, and scattered snags for nesting.	Not known to occur; no suitable habitat
<b>LITTLE WILLOW FLYCATCHER</b> ( <i>Empidonax traillii brewsteri</i> )	SE	Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows. Dense willow thickets are required for nesting and roosting.	Moderate; suitable habitat present onsite "Migration only"
<b>RUFOUS HUMMINGBIRD</b> ( <i>Selasphorus rufus</i> )	CSC	Uses riparian areas, open woodlands, chaparral, mountain meadows, and other habitats rich in nectar-producing flowers, including gardens and orchards.	Low; minimal suitable habitat present onsite
<b>CALIFORNIA THRASHER</b> ( <i>Toxostoma redivivum</i> )	CSC	Frequents chaparral habitat with dense canopy and openings next to the ground. Also uses similar riparian thickets, especially with California blackberry and California wild grape.	Not known to occur; no suitable habitat
<b>FISH</b>			
<b>CENTRAL VALLEY SPRING RUN CHINOOK SALMON</b> ( <i>Oncorhynchus tshawytscha</i> )	FT, ST	Occurs in drainages within the Sacramento and San Joaquin watersheds including the Feather River.	<b><u>High; known to occur immediately adjacent to the BSA</u></b>
<b>CENTRAL VALLEY STEELHEAD</b> ( <i>Oncorhynchus mykiss</i> )	FT	Occurs in drainages within the Sacramento and San Joaquin watersheds including the Feather River.	<b><u>High; known to occur immediately adjacent to the BSA</u></b>
<b>CENTRAL VALLEY FALL/LATE FALL- RUN CHINOOK SALMON</b> ( <i>Oncorhynchus tshawytscha</i> )	FC	Occurs in drainages within the Sacramento and San Joaquin watersheds including the Feather River.	<b><u>High; known to occur immediately adjacent to the BSA</u></b>
<b>REPTILES &amp; AMPHIBIANS</b>			
<b>WESTERN POND TURTLE</b> ( <i>Clemmys marmorata</i> )	FSC, CSC	Permanent or nearly aquatic habitats by slow moving waters with abundant aquatic vegetation.	<b><u>Known to occur on site</u></b>
<b>GIANT GARTER SNAKE</b> ( <i>Thamnophis gigas</i> )	FT, ST	Extremely aquatic, rarely found away from water, and forages in the water for food.	Not known to occur; no suitable habitat
<b>WESTERN SPADEFOOT TOAD</b> ( <i>Spea hammondi</i> )	FCS	Grasslands with shallow temporary pools; washes, playas, and floodplains of rivers.	Not known to occur; no suitable habitat
<b>CALIFORNIA RED-LEGGED FROG</b> ( <i>Rana aurora draytonii</i> )	FT, CSC	Ponds and small reservoirs, but may also be found along lakeshores and in marshy areas.	Low; marginal breeding habitat present onsite.
<b>CALIFORNIA HORNED LIZARD</b> ( <i>Phrynosoma coronatum frontale</i> )	FSC	Inhabits open country, especially sandy areas, washes, flood plains and wind-blown deposits in a wide variety of habitats.	Not known to occur; no suitable habitat

<b>Common Name</b> ( <i>Scientific Name</i> )	<b>Status</b> Fed/State/ CNPS	<b>Associated Habitats</b>	<b>Potential for Occurrence</b>
<b>FOOTHILL YELLOW-LEGGED FROG</b> ( <i>Rana boylei</i> )	FSC	Aquatic. Prefers gravelly or sandy streams with sunny banks and open woodlands nearby.	Not known to occur; no suitable habitat
<b>INVERTEBRATES</b>			
<b>VALLEY ELDERBERRY LONGHORN BEETLE</b> ( <i>Desmocerus californicus dimorphus</i> )	FT, ST	Within stems of blue elderberry bushes ( <i>Sambucus mexicana</i> ).	High; suitable habitat present onsite
<b>VERNAL POOL FAIRY SHRIMP</b> ( <i>Branchinecta lynchi</i> )	FT	Northern hardpan vernal pools	Not known to occur; no suitable habitat
<b>VERNAL POOL TADPOLE SHRIMP</b> ( <i>Lepidurus packardii</i> )	FE	Northern hardpan vernal pools	Not known to occur; no suitable habitat
<b>CALIFORNIA LINDERIELLA</b> ( <i>Linderiella occidentalis</i> )	FE	Northern hardpan vernal pools	Not known to occur; no suitable habitat

**Sources:**

- CNDDDB, California Department of Fish & Game, November 2003.
- *Restoring Central Valley Streams: A Plan for Action*, California Department of Fish & Game, 1993.
- California Native Plant Society (CNPS). 2003. Inventory of Rare and Endangered Plants (online edition). Rare Plant Scientific Advisory Committee, David P. Tibor, convening editor. CNPS. Sacramento, CA.
- California Department of Fish & Game website.
- US Fish and Wildlife Service, Sacramento Office website.
- NMFS (NOAA) website.
- California Partners in Flight, Point Reyes Bird Observatory, website.

<b>CODE DESIGNATIONS</b>
<b>FE</b> = Federally-listed Endangered
<b>FT</b> = Federally-listed Threatened
<b>FPT</b> = Federally Proposed Threatened
<b>FPD</b> = Federally Proposed Delisted
<b>FC</b> = Federal Candidate Species
<b>FSC</b> = Federal Species of Concern
<b>SLC</b> = Species of Local Concern
<b>FD</b> = Federal Delisted
<b>SE</b> = State-listed Endangered
<b>ST</b> = State-listed Threatened
<b>SPT</b> = State Proposed Threatened
<b>CSC</b> = California Species of Concern
<b>CNPS 1B</b> = Rare or Endangered in California and Elsewhere
<b>CNPS 1A</b> = Plants presumed extinct in California
<b>CODE DESIGNATIONS</b>
<b>CNPS List 2</b> = Rare, threatened, or endangered in California, but more common elsewhere.

## **Special-status species known or expected to occur in the BSA**

### Spring-Run Chinook Salmon

Status: Federal and State Threatened

Spring-run Chinook salmon were historically the second most abundant run of Central Valley Chinook salmon. Adults returning to spawn ascended the tributaries to the upper Sacramento River, including the Pit, McCloud, and Sacramento Rivers. They also occupied Cottonwood, Battle, Antelope, Mill, Deer, Stony, Big Chico, and Butte Creeks, and the Feather, Yuba, American, Mokelumne, Stanislaus, Tuolumne, Merced, San Joaquin, and Kings Rivers (Yoshiyama et al 2001). Spring-run Chinook salmon, similar to steelhead, migrate into headwater streams where cool, well-oxygenated water is available year-round.

Current surveys indicate that remnant, non-sustaining spring-run Chinook salmon populations may be found in Cottonwood, Battle, Antelope, and Big Chico Creeks (Yoshiyama et al 2001). More sizeable, consistent runs of naturally produced fish are found in Mill, Deer, and Butte Creeks. The Feather River Fish Hatchery sustains the spring-run population on the Feather River, but the genetic integrity of that run is questionable (Yoshiyama et al 2001). Feather River water has been diverted to Butte Creek for many years. However, the degree of straying of Feather River spring-run Chinook salmon into Butte Creek is unknown. Spring-run Chinook salmon may occur in the Yuba River; however, the size of the run and the level of possible hybridization with fall-run Chinook salmon are unknown. No spring-run Chinook salmon occur in the San Joaquin River or any of its tributaries.

On March 9, 1998, NOAA Fisheries issued a proposed rule to list spring-run Chinook salmon, and on September 16, 1999, NOAA Fisheries listed spring-run Chinook salmon as threatened. NOAA Fisheries designated critical habitat for spring-run Chinook salmon of February 16, 2000. On February 5, 1999, the California Fish and Game Commission listed spring-run Chinook salmon as threatened under the California ESA.

Spring-run Chinook tend to spawn almost exclusively in the low flow channel. Spawning would occur in the riffles at either end of the riverbend pool because the pool does not provide suitable spawning habitat. The pool provides resting habitat for adult salmon and rearing habitat for juvenile salmon.

### Fall-and late Fall-Run Chinook Salmon

Status: Federal Candidate

Fall-run Chinook salmon were historically the most abundant run of Central Valley Chinook salmon (Fisher 1994). They occupied the entire Sacramento and San Joaquin River drainages, but the numbers were reduced beginning in the mid 1900's as a result of commercial fishing, blockage from historical spawning and rearing habitat, water-flow fluctuations, unsuitable water temperatures, and reduction of habitat quality. The fish currently inhabit river reaches downstream of major dams on Central Valley Rivers, including the Sacramento, Feather, Yuba, American, Mokelumne, Stanislaus, Tuolumne, and Merced, as well as smaller tributaries to the Sacramento River and the Delta.

On March 9, 1998, NOAA Fisheries issued a proposed rule to list fall-run Chinook salmon as threatened, but on September 16, 1999, NOAA Fisheries determined that they did not warrant being listed as threatened and downgraded them to candidate status. NOAA Fisheries indicated that the Central Valley fall-run and late fall-run Chinook salmon is a single evolutionary significant unit (ESU). They are discussed together in this section even though there are some differences in life history for the two runs. There is no state protection for fall-run Chinook salmon.

After 2 to 4 years of maturation in the ocean, adult Chinook salmon return to their natal freshwater streams to spawn. Adult fall-run Chinook salmon migrate upstream into the Feather River between mid-September and December, with peak migrations occurring between October and November. Newly emerged fry remain in shallow, lower velocity edge waters, particularly where debris congregates and makes the fish less visible to predators.

Juvenile fall-run and late fall-run Chinook salmon rear from January to June. Occurrence of fall-run peaks between February and May. Cover, space, and food are necessary components of fall-run Chinook salmon rearing habitat. Suitable habitat includes areas with in stream and overhead cover in the form of undercut banks, downed trees, and large, overhanging tree branches. The organic materials that form fish cover also help provide sources of food, such as aquatic and terrestrial insects. Once the fry emerge from the gravel, they typically spend little time rearing in the river. The emigration period is generally December through June, with the peak sometime between January and March (DWR unpublished data). A small number of fall salmon (5,000-15,000) may continue to rear in the river throughout the summer. Spawning could occur in the riffles on either side of the Riverbend Pool.

Central Valley Steelhead  
Status: Federal Threatened

The Central Valley steelhead ESU is listed as threatened, and critical habitat was designated to include rivers and streams of the Sacramento-San Joaquin River system. Most steelhead adult's ascend the Feather River from September through January, where spawning takes place rather quickly. Spawning would occur in the riffles at either end of the Riverbend Pool or in other riffle areas. It is presumed that soon after spawning, those that survive the journey return to the ocean. It is currently unknown how long adult steelhead stay in the Feather River after spawning and what their post-spawning mortality is. Soon after emerging from the gravel, a small percentage of the fry appear to emigrate. The remainder of the population appears to remain in the river for at least six months to 1 year. Little data exists on the residence time of juvenile steelhead in the Feather River and studies are currently underway by the Department of Water Resources to gather more information on juvenile rearing and emigration behavior.

The Feather River also appears to have a run of steelhead that migrates into the river in the spring and recent studies (DWR unpublished data) indicate that at least some spring and summer spawning is occurring in the low flow channel. Steelhead spawning could occur in the riffles on either side of the Riverbend Pool and the pool provides resting habitat for steelhead.

Valley Elderberry Longhorn Beetle  
Status: Federal Threatened

The VELB is characterized by a somewhat elongate, cylindrical body with long antennae, often more than 2/3 of the body length. Males range in length from about 1/2 to nearly 1 inch (measured from the front of the head to the end of the abdomen) with antennae about as long as their bodies. Females are slightly more robust than males, measuring about 3/4 to 1 inch, with somewhat shorter antennae. Adult males have red-orange elytra (wing covers) with four elongate spots. The red-orange fades to yellow on some museum specimens. Adult females have dark colored elytra. There are four stages in the animal's life: egg, larva, pupa and adult. The species is nearly always found on, or close to, its host plant, blue elderberry. Females lay their eggs on the bark. Larvae hatch and burrow into the stems. The larval stage may last two years, after which the larvae enter the pupal stage and transform into adults. Adults are active from March to June, when they are actively feeding and mating.

Research suggests that suitable habitat includes shrubs that have stems  $\geq 1.0$  inch or greater in diameter at ground level. Use of the plants by VELB is rarely apparent. Frequently, the only exterior evidence of the shrub's use by the beetle is an exit hole created by the larva just before the pupal stage.

The beetle's current distribution is patchy throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield. The beetle appears to be only locally common, found in population clusters that are not evenly distributed across the Central Valley (USFWS 1984).

California Red-legged Frog  
Status: Federal Threatened and State Species of Special Concern

The California red-legged frog is a federal threatened species and state Species of Special Concern (DFG 2004) and inhabits quiet pools of streams, marshes, and occasionally ponds. The frog occurs west of the Sierra-Cascade crest and along the Coast Ranges, usually below 1200 m (3936 ft). Eggs are deposited in permanent pools attached to emergent vegetation and the species requires permanent or nearly permanent pools for larval development, which takes 11 to 20 weeks. The red-legged frog is highly aquatic and prefers shorelines with extensive vegetation.

Western Pond Turtle  
Status: Federal and State Species of Special Concern

The western pond turtle is a federal and state Species of Special Concern (DFG 2004). It is uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest at elevations from sea level to 1830 m (6000 ft). The species is associated with permanent or nearly permanent water in a wide variety of habitat types. Sexual maturity is thought to be attained in about eight years. They lay clutches of 3-11 hard-shelled eggs from April to August. Hatchlings emerge in about 12 weeks. Turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks.

## Raptors

Raptors in the orders Falconiformes (hawks, eagles, and falcons) and Strigiforms (owls) are protected in varying degrees under California Fish and Game Code, Section 3503.5, the Migratory Bird Treaty Act as well as state and federal ESA and CEQA. The BSA contains suitable nesting and foraging habitat for several raptor species. A nesting pair of great-horned owls were found on the site.

## *Sensitive Natural Communities*

### **Valley-foothill Riparian**

Valley-foothill riparian is a sensitive natural community by DFG that occurs within the BSA immediately adjacent to an intermittent creek, Other Waters (OW) 01, located in close proximity to the western boundary of the BSA.

Impacts to this resource would be considered significant under CEQA because riparian habitat is considered a sensitive natural community as it provides important habitat for a large variety of common and special-status wildlife species. The stands of riparian forest that occur within the project area also qualify as wetlands subject to COE jurisdiction under Section 404 of the Clean Water Act. Any fill activities in these stands may require a permit from the COE (as described under Potential Impacts and Mitigation Section).

The western side of the riparian corridor was not accessible to survey due to steep slopes and dense vegetation. This area does not contain suitable habitat for blue elderberry shrubs because it is found beneath a closed-canopy. This area may not be suitable for construction because of the steep slopes.

### **Blue Oak Woodland**

Blue oak woodland is a DFG-designated sensitive natural community that occurs within the northwest quadrant of the BSA. Oak woodlands are rapidly disappearing in California, and as defined in CEQA, further elimination would result in significant adverse impacts. California Department of Fish and Game has designated blue oak woodlands as a "threatened" natural community (State Rank 3.2). Impacts to this resource would be considered significant under CEQA because blue oak woodland is considered a sensitive natural community as it provides important habitat for a large variety of common and special-status wildlife species.

## *Waters of the United States, Including Wetlands*

One (1) seasonal wetland, five (5) riparian features and three (3) ponds were delineated within the survey area. One riparian drainage, aligned north to south, borders the project area near the western border and is considered to be a jurisdictional wetland under the COE. In addition, there is one (1) seasonal wetland located adjacent to the riparian drainage. The Feather River runs along the southern border of the BSA. The COE, under Section 404 of the Clean Water Act,

regulates both wetlands and Other Waters of the United States. Filling of wetlands, drainages, and Other Waters of the United States requires various permits from regulatory agencies and potential mitigation. Permitting requirements and potential mitigation do not necessarily constitute an insurmountable constraint to development. The information supplied in this report is neither comprehensive enough nor supported by sufficient data to be adequate for submittal to the COE for verification. Refer to the Riverfront Development Draft Delineation of Waters of the United States (Gallaway 2005) for more detailed information.

### *Habitat Characterization*

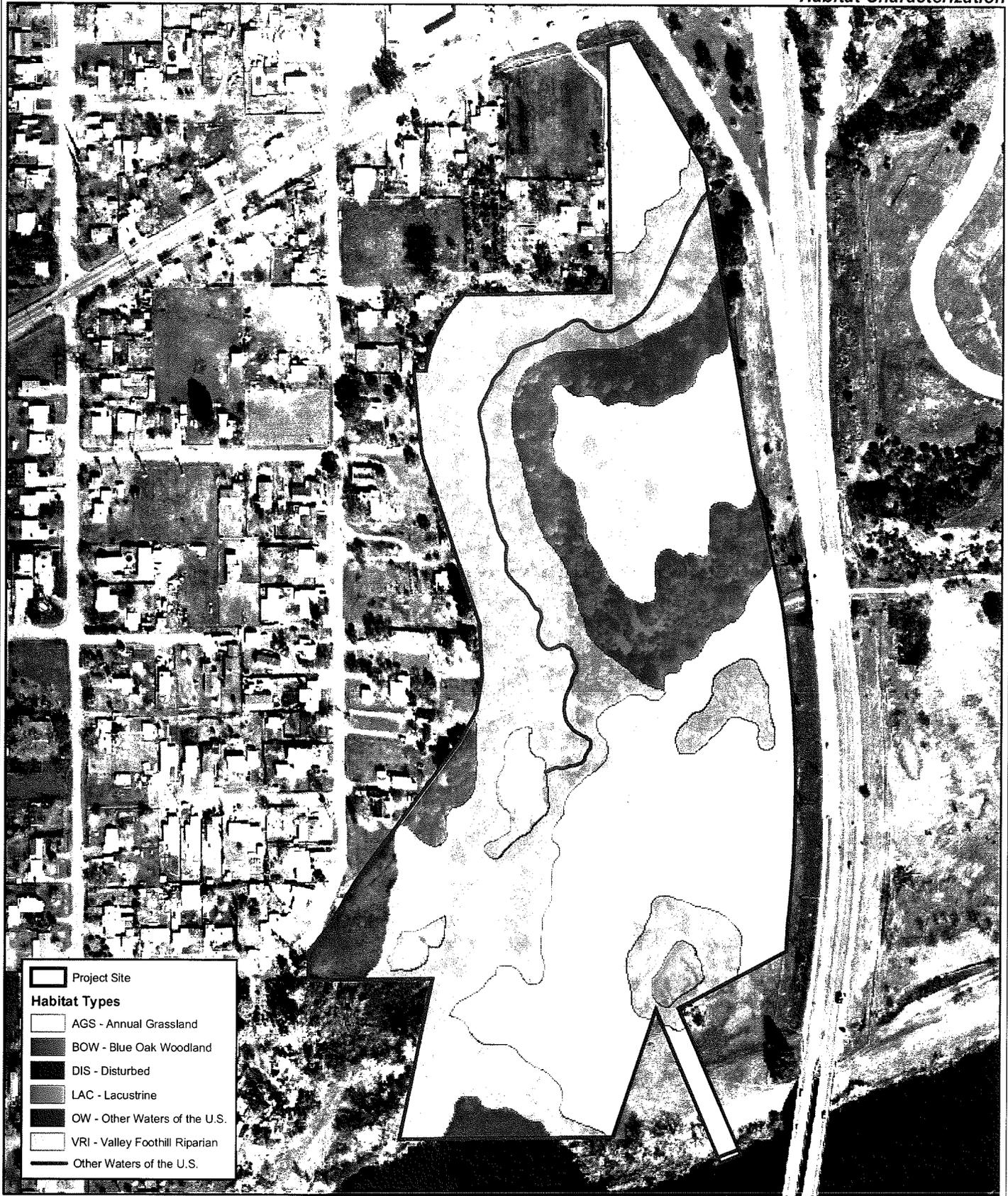
We mapped the extent of all habitat types and other biological resources including waters of the United States that may be impacted by the proposed project using a classification system based on *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988) (Figure 4). The following habitat types occur within the BSA:

#### **Blue Oak Woodland**

These woodlands generally have an overstory of scattered trees, but the canopy can be nearly closed on better quality sites. Blue oak is the dominant species comprising 85-100 % of the trees present. Common associates in the canopy include interior live oak and valley oak. Associated shrub species include poison oak, California coffeeberry, buckbrush, holly-leaved redberry, California buckeye and manzanita. The ground cover usually consists of annual grasses. According to Mayer and Laudenslayer (1988), with the exception of riparian habitat, hardwood habitats including blue oak woodlands provide breeding habitat for more wildlife species than any other habitat in California. Mayer and Laudenslayer (1988) estimated in 1980 that these woodlands provide important breeding habitat for over 29 amphibian and reptile species, 57 bird species and 10 mammal species. Bird species include primary and secondary cavity nesters and insectivores such as acorn woodpeckers, Nuttall's woodpecker, northern flickers, American kestrel, western screech owl, ash-throated flycatcher, western wood-peewee, plain titmouse, Bewick's wren and Hutton's vireo. Reptiles and amphibians common to this habitat include western toad, Pacific tree frog and gopher snake. Common mammals include black-tailed deer, raccoon, Virginia opossum and dusky-footed wood rat (Mayer and Laudenslayer 1988).

#### **Annual Grassland**

Introduced annual grasses are the dominant plants species in this habitat. These include wild oats, soft chess, ripgut brome, red brome, wild barley and foxtail fescue. Common forbs include broadleaf filaree, redstem filaree, turkey mullein, true clovers, popcorn flower, and many others (Mayer and Laudenslayer 1988). Annual grassland occupies what was once pristine native grassland. The native grassland likely consisted of climax stands of perennial bunchgrasses with annual species existing as climax communities on drier alluvial plains. Species composition is greatly influenced by seasonal and annual fluctuations in weather patterns. Many wildlife species use annual grasslands for foraging including the western fence lizard, common garter snake, western rattlesnake, black-tailed rabbit, California ground squirrel, Botta's pocket gopher, western harvest mouse, California vole, badger, coyote, foxes and deer. Common birds known



 Project Site

**Habitat Types**

 AGS - Annual Grassland

 BOW - Blue Oak Woodland

 DIS - Disturbed

 LAC - Lacustrine

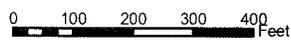
 OW - Other Waters of the U.S.

 VRI - Valley Foothill Riparian

 Other Waters of the U.S.



Project boundary derived from  
City of Oroville parcel data.  
Date of Aerial March 2002  
Map Date April 28, 2005



**GALLAWAY**  
CONSULTING, INC.

Figure 4.

to breed in annual grasslands include the burrowing owl, short-eared owl, horned lark, western meadowlark, turkey vulture, northern harrier, American kestrel, black-shouldered kite and prairie falcon.

### **Valley Foothill Riparian**

This habitat-type occurs as two separate contiguous strips located near the northern and southern boundaries of the BSA. Riparian habitats provide food, water, migration and dispersal corridors, and escape, nesting and thermal cover for a very high density of California's wildlife (Mayer and Laudenslayer 1988). Mayer and Laudenslayer (1988) report that more than 50 reptiles and amphibian species, 147 bird species and 55 mammal species occur in the California's Central Valley riparian communities. Dominant vegetation in the canopy includes cottonwood, California sycamore, and valley oak (Mayer and Laudenslayer 1988). Subcanopy tree species include white alder, boxelder, and Oregon ash. Typical understory plants include California wild grape, wild rose, California blackberry, blue elderberry, poison oak, buttonbrush and willow. The herbaceous layer consists of sedges, rushes, grasses, miner's lettuce, Douglas sagewort, poison-hemlock and hoary nettle. Characteristic wildlife includes egrets, herons, ducks, raptor species, swallows, bats, broad-footed mole, western gray squirrel, striped skunk, ringtail and raccoon.

## **IV. Potential Impacts and Mitigation**

### *Valley Elderberry Longhorn Beetle*

Eight (8) large blue elderberry shrubs, two containing VELB exit holes, were found in the BSA (**Figure 2**). These plants provide suitable habitat for VELB, a federally listed species. As exit holes were observed, VELB presence is assumed and the project applicant will be required to follow the USFWS Valley Elderberry Longhorn Beetle Guidelines (1999). Per the guidelines, complete avoidance (i.e., no adverse impacts) may be assumed when a 100-foot buffer is established and maintained around elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. As a protective measure, all bushes within the BSA should be fenced during the course of construction and clean-up to prevent disturbance.

The USFWS must be contacted if encroachment within the 100 feet buffer is expected. Similarly, consultation with the USFWS is necessary if elderberry bushes containing stems measuring 1.0 inch or greater in diameter at ground level will be disturbed.

### *Chinook Salmon and Steelhead*

Central Valley Chinook salmon and steelhead are protected in varying degrees under state and federal ESAs. If any construction, storm water discharge or in-stream work is expected to occur that will affect the Feather River, consultation with National Marine Fisheries Service (NOAA-Fisheries) will be required. To minimize impacts during construction, NOAA-Fisheries would

likely require all work to be completed during the summer (July 1 to October 1) when there are low waters and little chance of a large precipitation event. In addition, they will likely require spill prevention and other protective measures.

#### *California red-legged frog*

Albeit low, there is the potential for this project to adversely affect California red-legged frogs, a federally listed threatened species, by altering marginally suitable pond habitat within the BSA. Before any construction occurs that negatively impacts pond habitat onsite, a qualified biologist hired by the contractor and approved by the USFWS should accurately assess California red-legged frog status in the vicinity of the project area according to Guidance on Site Assessment and Field Surveys for California Red-legged Frogs (USFWS 1997). If the initial site assessment does not support the presence of California red-legged frogs, no further mitigation is necessary. If the initial site assessment does support presence and California red-legged frogs are detected during surveys, the USFWS should be consulted and mitigation measures required by the USFWS implemented.

#### *Western Pond Turtle*

The western pond turtle, a federal and state Species of Special Concern (DFG 2004), was observed in the BSA. It is the goal of USFWS and DFG to maintain viable populations of this species as declining population levels, limited ranges, and/or continuing threats have made them increasingly vulnerable to regional extirpation. The western pond turtle requires the protection of suitable nesting sites and the reduction of mortality in the younger age groups to maintain viable populations. The BSA currently provides suitable habitat and the proposed action has the potential of impacting this species. Protocol-level surveys may be required to assess the potential impact to this species. Species of Concern are those that have the potential for listing under state and/or federal ESA's if negative population trends continue. By considering them early in the planning process, problems can be avoided if listing occurs before the completion of a project.

#### *Raptors*

Raptors in the orders Falconiformes (hawks, eagles, and falcons) and Strigiforms (owls) are protected in varying degrees under California Fish and Game Code, Section 3503.5, the Migratory Bird Treaty Act, and CEQA. The BSA currently provides suitable nesting and foraging habitat for several of these species and the proposed action has the potential of impacting nesting raptors. A nesting pair of great-horned owls was observed in the BSA. Direct take of active nests, eggs, or birds are prohibited by DFG and measures must be taken to minimize disturbance. Therefore, a qualified wildlife biologist should conduct a pre-construction raptor survey during April-May, or prior to construction activities, to determine the presence/absence of nesting raptors in the BSA. Should nesting raptors be observed, appropriate spatial and temporal buffers will be required by DFG. In addition, larger trees (i.e.,  $\geq 12''$  dbh) to be removed should be removed between September 1 and March 1 to ensure that active raptor nests are not removed as a result of construction related activities.

### *Blue Oak Woodland*

Proposed and future developments, and their infrastructure needs, may result in the elimination of contiguous blue oak woodland onsite. Oak woodlands are rapidly disappearing in California, and as defined in CEQA, further elimination would result in a significant adverse impact. DFG has designated blue oak woodland as a “threatened” natural community in California (State Rank 3.2). The proposed project will be subject to the provisions of the Oroville’s Tree Preservation Ordinance, which requires the preservation of as many oak trees within the BSA as is practicable and necessitates a tree survey.

The proposed action has the potential to impact all of the oak trees found in the blue oak woodland and riparian habitat. Significant oak woodlands are protected under the City of Oroville General Plan and the City of Oroville’s Tree Preservation Ordinance. As required by Policy 6.11z3, a tree management and preservation report shall be required for development sites with significant oak woodlands. A significant oak woodland is considered to be a site of 1 acre or larger with an oak tree canopy cover greater than 20%, or any portion of a site greater than one acre with 20% oak canopy cover that is a contiguous part of a larger woodland area. The City requires a tree inventory be completed and a Tree Management and Preservation Report be prepared by a certified arborist. The report should contain plans on how the project will avoid or minimize disturbance of the existing oak woodlands. Preservation of healthy, mature oaks is a priority and maintenance of oak woodland corridors is the preferred method of mitigation. Individual oaks unavoidably lost due to development are required to be replaced with native genetic stock oak seedlings at ratios of 5:1, 3:1, and 1:1 for trees measuring 6 inches or greater in diameter, 3 to 6 inches in diameter, and less than 3 inches in diameter, respectively.

### *Valley Foothill Riparian Habitat*

Disturbance to existing riparian habitat onsite should be avoided to the greatest extent possible through the implementation of setbacks of enough area to adequately protect the resource (20 feet from edge) (City of Oroville’s General Plan). Where complete avoidance is not feasible, disturbance of riparian forest should be minimized. Fencing and protective measures should be installed to inform construction workers or other persons of the presence of sensitive biological resources. Before construction occurs that may impact Waters of the US (including jurisdictional riparian habitat), a water quality certification permit from the Regional Water Quality Board (Clean Water Act, Section 401), the Army Corps of Engineers section 404, and final approval by DFG. The permits are contingent on successfully completing the CEQA process.

## **V. Regulatory Framework**

The following laws and regulations were identified as possible constraints to development within the BSA based on the identified resources:

### **Federal Endangered Species Act**

The USFWS and National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) (formerly the National Marine Fisheries Service or NMFS) have jurisdiction over species listed as threatened or endangered under Section 9 of the federal ESA. The ESA protects listed species from harm, or take, which is broadly defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct”. Under section 7 of the ESA, a federal agency must consult with the USFWS and NOAA Fisheries if the agency’s action may affect a threatened or endangered species and/or its critical habitat under the authority of each agency.

### **California Endangered Species Act**

California Department of Fish and Game has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Game Code. Section 2080 prohibits the take of a species listed by DFG as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effects on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with DFG and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that DFG coordinate consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.

### **Clean Water Act, Section 404**

The COE and the U.S. Environmental Protection Agency regulate the placement of dredged or fill material into “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP's) are general permits issued to cover particular fill activities. All NWP's have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

### **Clean Water Act, Section 401**

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fill material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (CVRWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the CVRWQCB. The CVRWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

### **California Fish and Game Code, Sections 1601-1607**

Under the California Fish and Game Code, Sections 1601-1607, DFG regulates projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify DFG and enter into Streambed Alteration Agreement with them.

Section 1601 of the California Fish and Game Code requires a state or local governmental agency or public utility to notify DFG before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, DFG issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

### **California Fish and Game Code, Section 3503.5**

Under the California Fish and Game Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

## **Migratory Bird Treaty Act**

The MBTA (16 United States Code [USC] 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorized the U.S.

Secretary of the Interior to protect and regulate the taking of migratory birds. The MBTA sets seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10).

## **City of Oroville**

The project will require complete compliance with CEQA and the City of Oroville will serve as the lead agency. As such, the City will conduct an environmental review, which will include a review of all studies conducted in compliance with CEQA, and the creation and adoption of appropriate mitigation measures. The applicant will be required to conform with the Biological Resources Element of the City of Oroville General Plan, which protects sensitive biological resources, and requires the documentation of all impacts to native oak trees, oak tree protection measures, conforming to the waterway corridor setback requirement, riparian habitat protection, and mitigation. Other discretionary permits issued by the City may include a grading permit.

## VI. References Consulted

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**Appendix A**  
USFWS and CNDDDB Special-status Species Lists for  
Riverfront Subdivision BSA and Surrounding Area

**(Only in Hard Copy)**

**United States Department of the Interior****FISH AND WILDLIFE SERVICE**

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825



March 28, 2005

Document Number: 050328035427

Christiana Conser  
Gallaway Consulting, Inc.  
7 Sierra Nevada Court]  
Chico, CA 95928

Subject: Species List for Vallawide VELD

Dear: Ms. Conser

We are sending this official species list in response to your March 28, 2005 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested. You have stated that this list is for consultation with the Fish & Wildlife Service.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed, candidate and special concern species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be June 26, 2005.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at [sacramento.fws.gov/es/branches.htm](http://sacramento.fws.gov/es/branches.htm).

**Endangered Species Division**

**Federal Endangered and Threatened Species that Occur in  
or may be Affected by Projects in the Counties and/or  
U.S.G.S. 7 1/2 Minute Quads you requested**

Document Number: 050328055838

Database Last Updated: March 16, 2005

**Quad Lists**

**OROVILLE (576D)**

**Listed Species**

*Invertebrates*

- Critical habitat, vernal pool invertebrates (X)
- Branchinecta conservatio* - Conservancy fairy shrimp (E)
- Branchinecta lynchi* - vernal pool fairy shrimp (T)
- Desmocerus californicus dimorphus* - valley elderberry longhorn beetle (T)
- Lepidurus packardi* - vernal pool tadpole shrimp (E)

*Fish*

- Hypomesus transpacificus* - delta smelt (T)
- Oncorhynchus mykiss* - Central Valley steelhead (T)
- Oncorhynchus tshawytscha* - Central Valley spring-run chinook salmon (T)
- Oncorhynchus tshawytscha* - winter-run chinook salmon (E)

*Amphibians*

- Rana aurora draytonii* - California red-legged frog (T)

*Reptiles*

- Thamnophis gigas* - giant garter snake (T)

*Birds*

- Haliaeetus leucocephalus* - bald eagle (T)

*Plants*

- Critical habitat, vernal pool plants (X)
- Limnanthes floccosa ssp. californica* - Butte County (Shippee) meadowfoam (E)

**Candidate Species**

*Fish*

- Acipenser medirostris* - green sturgeon (C)
- Oncorhynchus tshawytscha* - Central Valley fall/late fall-run chinook salmon (C)
- Oncorhynchus tshawytscha* - Critical habitat, Central Valley fall/late fall-run chinook (C)

**Species of Concern***Invertebrates*

*Cicindela hirticollis abrupta* - Sacramento Valley tiger beetle (SC)  
*Linderiella occidentalis* - California linderiella fairy shrimp (SC)

*Fish*

*Pogonichthys macrolepidotus* - Sacramento splittail (SC)  
*Spirinchus thaleichthys* - longfin smelt (SC)

*Amphibians*

*Rana boylei* - foothill yellow-legged frog (SC)  
*Spea hammondi* (was *Scaphiopus h.*) - western spadefoot toad (SC)

*Reptiles*

*Clemmys marmorata marmorata* - northwestern pond turtle (SC)  
*Phrynosoma coronatum frontale* - California horned lizard (SC)

*Birds*

*Agelaius tricolor* - tricolored blackbird (SC)  
*Athene cunicularia hypugaea* - western burrowing owl (SC)  
*Baeolophus inornatus* - oak titmouse (SLC)  
*Buteo regalis* - ferruginous hawk (SC)  
*Buteo Swainsoni* - Swainson's hawk (CA)  
*Carduelis lawrencei* - Lawrence's goldfinch (SC)  
*Chaetura vauxi* - Vaux's swift (SC)  
*Cypseloides niger* - black swift (SC)  
*Elanus leucurus* - white-tailed (=black shouldered) kite (SC)  
*Empidonax traillii brewsteri* - little willow flycatcher (CA)  
*Falco peregrinus anatum* - American peregrine falcon (D)  
*Grus canadensis tabida* - greater sandhill crane (CA)  
*Lanius ludovicianus* - loggerhead shrike (SC)  
*Melanerpes lewis* - Lewis' woodpecker (SC)  
*Numenius americanus* - long-billed curlew (SC)  
*Picoides nuttallii* - Nuttall's woodpecker (SLC)  
*Riparia riparia* - bank swallow (CA)  
*Selasphorus rufus* - rufous hummingbird (SC)  
*Toxostoma redivivum* - California thrasher (SC)

*Mammals*

*Corynorhinus (=Plecotus) townsendii pallescens* - pale Townsend's big-eared bat (SC)  
*Dipodomys californicus eximius* - Marysville Heermann's kangaroo rat (SC)  
*Euderma maculatum* - spotted bat (SC)  
*Eumops perotis californicus* - greater western mastiff-bat (SC)  
*Myotis ciliolabrum* - small-footed myotis bat (SC)  
*Myotis evotis* - long-eared myotis bat (SC)

*Myotis thysanodes* - fringed myotis bat (SC)  
*Myotis volans* - long-legged myotis bat (SC)  
*Myotis yumanensis* - Yuma myotis bat (SC)  
*Perognathus inornatus* - San Joaquin pocket mouse (SC)

**Plants**

*Calycadenia oppositifolia* - Butte County calycadenia (SLC)  
*Juncus leiospermus* var. *leiospermus* - Red Bluff (dwarf) rush (SC)  
*Trifolium jokerstii* - Butte County golden (=Jim's) clover (SLC)

**County Lists****Butte County****Listed Species****Invertebrates**

*Branchinecta conservatio* - Conservancy fairy shrimp (E)  
*Branchinecta lynchi* - Critical habitat, vernal pool fairy shrimp (X)  
*Branchinecta lynchi* - vernal pool fairy shrimp (T)  
*Desmocerus californicus dimorphus* - valley elderberry longhorn beetle (T)  
*Lepidurus packardi* - Critical habitat, vernal pool tadpole shrimp (X)  
*Lepidurus packardi* - vernal pool tadpole shrimp (E)

**Fish**

*Hypomesus transpacificus* - delta smelt (T)  
*Oncorhynchus mykiss* - Central Valley steelhead (T)  
*Oncorhynchus tshawytscha* - Central Valley spring-run chinook salmon (T)  
*Oncorhynchus tshawytscha* - Critical habitat, winter-run chinook salmon (E)  
*Oncorhynchus tshawytscha* - winter-run chinook salmon (E)

**Amphibians**

*Ambystoma californiense* - California tiger salamander (T)  
*Rana aurora draytonii* - California red-legged frog (T)

**Reptiles**

*Thamnophis gigas* - giant garter snake (T)

**Birds**

*Haliaeetus leucocephalus* - bald eagle (T)

**Plants**

*Chamaesyce hooveri* - Hoover's spurge (T)  
*Limnanthes floccosa ssp. californica* - Butte County (Shippee) meadowfoam (E)  
*Orcuttia pilosa* - hairy Orcutt grass (E)  
*Orcuttia tenuis* - slender Orcutt grass (T)  
*Tuctoria greenei* - Greene's tuctoria (=Orcutt grass) (E)

**Proposed Species****Amphibians**

*Rana aurora draytonii* - Critical habitat, California red-legged frog (Proposed) (PX)

**Candidate Species****Fish**

*Acipenser medirostris* - green sturgeon (C)  
*Oncorhynchus tshawytscha* - Central Valley fall/late fall-run chinook salmon (C)  
*Oncorhynchus tshawytscha* - Critical habitat, Central Valley fall/late fall-run chinook (C)

**Amphibians**

*Rana muscosa* - mountain yellow-legged frog (C)

**Birds**

*Coccyzus americanus occidentalis* - Western yellow-billed cuckoo (C)

**Mammals**

*Martes pennanti* - fisher (C)

**Species of Concern****Invertebrates**

*Anthicus sacramento* - Sacramento anthicid beetle (SC)  
*Cicindela hirticollis abrupta* - Sacramento Valley tiger beetle (SC)  
*Lindneriella occidentalis* - California lindneriella fairy shrimp (SC)

**Fish**

*Lampetra ayresi* - river lamprey (SC)  
*Pogonichthys macrolepidotus* - Sacramento splittail (SC)  
*Spirinchus thaleichthys* - longfin smelt (SC)

**Amphibians**

*Rana boylei* - foothill yellow-legged frog (SC)  
*Rana cascadae* - Cascades frog (SC)  
*Spea hammondi* (was *Scaphiopus h.*) - western spadefoot toad (SC)

**Reptiles**

*Clemmys marmorata marmorata* - northwestern pond turtle (SC)  
*Masticophis flagellum ruddocki* - San Joaquin coachwhip (=whipsnake) (SC)  
*Phrynosoma coronatum frontale* - California horned lizard (SC)

**Birds**

*Accipiter gentilis* - northern goshawk (SC)  
*Agelaius tricolor* - tricolored blackbird (SC)  
*Athene cunicularia hypugaea* - western burrowing owl (SC)  
*Baeolophus inornatus* - oak titmouse (SLC)  
*Botaurus lentiginosus* - American bittern (SC)  
*Branta canadensis leucopareia* - Aleutian Canada goose (D)  
*Buteo regalis* - ferruginous hawk (SC)  
*Buteo Swainsoni* - Swainson's hawk (CA)  
*Carduelis lawrencei* - Lawrence's goldfinch (SC)  
*Chaetura vauxi* - Vaux's swift (SC)  
*Cinclus mexicanus* - American dipper (SLC)  
*Contopus cooperi* - olive-sided flycatcher (SC)  
*Cypseloides niger* - black swift (SC)  
*Empidonax traillii brewsteri* - little willow flycatcher (CA)  
*Falco peregrinus anatum* - American peregrine falcon (D)  
*Grus canadensis tabida* - greater sandhill crane (CA)  
*Lanius ludovicianus* - loggerhead shrike (SC)  
*Melanerpes lewis* - Lewis' woodpecker (SC)  
*Otus flammeolus* - flammulated owl (SC)  
*Picoides albolarvatus* - white-headed woodpecker (SC)  
*Picoides nuttallii* - Nuttall's woodpecker (SLC)  
*Plegadis chihi* - white-faced ibis (SC)  
*Riparia riparia* - bank swallow (CA)  
*Selasphorus rufus* - rufous hummingbird (SC)  
*Sphyrapicus ruber* - red-breasted sapsucker (SC)  
*Strix occidentalis occidentalis* - California spotted owl (SC)  
*Toxostoma redivivum* - California thrasher (SC)

**Mammals**

*Corynorhinus (=Plecotus) townsendii pallescens* - pale Townsend's big-eared bat (SC)  
*Corynorhinus (=Plecotus) townsendii townsendii* - Pacific western big-eared bat (SC)  
*Dipodomys californicus eximius* - Marysville Heermann's kangaroo rat (SC)  
*Euderma maculatum* - spotted bat (SC)  
*Eumops perotis californicus* - greater western mastiff-bat (SC)  
*Lepus americanus tahoensis* - Sierra Nevada snowshoe hare (SC)  
*Myotis ciliolabrum* - small-footed myotis bat (SC)  
*Myotis evotis* - long-eared myotis bat (SC)  
*Myotis thysanodes* - fringed myotis bat (SC)  
*Myotis volans* - long-legged myotis bat (SC)  
*Myotis yumanensis* - Yuma myotis bat (SC)  
*Perognathus inornatus* - San Joaquin pocket mouse (SC)

**Plants**

*Agrostis hendersonii* - Henderson's bent grass (SC)

*Allium jepsonii* - Jepson's onion (SC)  
*Astragalus tener* var. *ferrisiae* - Ferris's milk-vetch (SC)  
*Atriplex cordulata* - heartscale (SC)  
*Atriplex depressa* - brittlescale (SC)  
*Atriplex minuscula* - lesser saltscale (SC)  
*Atriplex subtilis* - subtle orache (SLC)  
*Balsamorhiza macrolepis* var. *macrolepis* - big-scale (=California) balsamroot (SLC)  
*Botrychium ascendens* - upswep moonwort (SC)  
*Botrychium crenulatum* - scalloped moonwort (SC)  
*Calycadenia oppositifolia* - Butte County calycadenia (SLC)  
*Calystegia atriplicifolia* ssp. *buttensis* - Butte County morning-glory (SC)  
*Castilleja rubicundula* ssp. *rubicundula* - pink creamsacs (SLC)  
*Clarkia biloba* ssp. *brandegeae* - Brandegee's clarkia (SLC)  
*Clarkia gracilis* ssp. *albicaulis* - white-stemmed (=whitestem) clarkia (SLC)  
*Clarkia mosquinii* ssp. *mosquinii* - Mosquin's clarkia (SC)  
*Clarkia mosquinii* ssp. *xerophila* - Enterprise clarkia (SC)  
*Cypripedium fasciculatum* - clustered lady's-slipper (SC)  
*Fritillaria eastwoodiae* - Butte fritillary (SC)  
*Fritillaria pluriflora* - adobe lily (SC)  
*Juncus leiospermus* var. *ahartii* - Ahart's (dwarf) rush (SC)  
*Juncus leiospermus* var. *leiospermus* - Red Bluff (dwarf) rush (SC)  
*Lewisia cantelowii* - Cantelow's lewisia (SC)  
*Lupinus dalesiae* - Quincy lupine (SC)  
*Monardella douglasii* ssp. *venosa* - veiny monardella (SC)  
*Myosurus minimus* ssp. *apus* - little mousetail-(SC)  
*Paronychia ahartii* - Ahart's whitlow-wort (=Ahart's paronychia) (SC)  
*Penstemon personatus* - closed-lip (closed-throated) beardtongue (SC)  
*Rhynchospora californica* - California beaked-rush (SC)  
*Rupertia hallii* - Hall's rupertia (=Hall's California tea) (SLC)  
*Sagittaria sanfordii* - valley sagittaria (=Sanford's arrowhead) (SC)  
*Sedum albomarginatum* - Feather River stonecrop (SC)  
*Senecio* (=Packeria) *eurycephalus* var. *lewisrosei* - cut-leaved ragwort (SLC)  
*Sidalcea robusta* - Butte County sidalcea (=checkerbloom) (SC)  
*Silene occidentalis* ssp. *longistipitata* - Butte County catchfly (=long-stiped campion) (SC)  
*Trifolium jokerstii* - Butte County golden (=Jim's) clover (SLC)

**Key:**

(E) *Endangered* - Listed (in the Federal Register) as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed (in the Federal Register) for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Marine Fisheries Service. Consult with them directly about these species.

*Critical Habitat* - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(CA) Listed by the State of California but not by the Fish & Wildlife Service.

California Department of Fish and Game  
 Natural Diversity Database  
 OROVILLE USGS 7.5' QUAD

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS/R-E-D
1 <i>Castilleja rubicundula ssp. rubicundula</i> pink creamsacs	PDSCR0D482			G5T2	S2.2	1B/2-2-3
2 <i>Great Valley Cottonwood Riparian Forest</i>	CTT61410CA			G2	S2.1	
3 <i>Great Valley Willow Scrub</i>	CTT63410CA			G3	S3.2	
4 <i>Hibiscus lasiocarpus</i> rose-mallow	PDMAL0H0Q0			G4	S2.2	2/2-2-1
5 <i>Juncus leiospermus var. ahartii</i> Ahart's dwarf rush	PMJUN011L1			G2T1	S1.2	1B/3-2-3
6 <i>Juncus leiospermus var. leiospermus</i> Red Bluff dwarf rush	PMJUN011L2			G2T2	S2.2	1B/2-3-3
7 <i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered		G3	S2S3	
8 <i>Northern Basalt Flow Vernal Pool</i>	CTT44131CA			G3	S2.2	
9 <i>Oncorhynchus tshawytscha spring-run</i> spring-run chinook salmon	AFCHA0205A	Threatened	Threatened	G5T1Q	S1	
10 <i>Phrynosoma coronatum (frontale)</i> Coast (California) horned lizard	ARACF12022			G4T3T4	S3S4	SC
11 <i>Trifolium jokerstii</i> Butte County golden clover	PDFAB40310			G1	S1.2	1B/3-2-3

**Appendix B**  
List of Species of Vascular Plants Identifiable  
On March 28 and 29, 2005  
Riverfront, Oroville, CA

**(Only in Hard Copy)**

**List of Species of Vascular Plants  
Identifiable on 28 and 29 March, 2005  
Proposed Riverfront Housing Project,  
Oroville, Butte County, California**

<b><u>Scientific Name</u></b>	<b><u>Common Name</u></b>
<i>Aesculus californica</i>	California buckeye
<i>Agrostis heterophylla</i>	Annual agrosaris
<i>Ailanthus altissima</i>	Tree of heaven
<i>Amsinkia menziesii</i>	Rancher's fireweed
<i>Aristolochia californica</i>	Pipevine
<i>Artemesia douglasiana</i>	Mugwort
<i>Athysanus pusillus</i>	Fringe pod
<i>Avena barbata</i>	Slender wild oats
<i>Brassica</i> sp.	Wild mustard
<i>Briza minor</i>	Lesser quaking grass
<i>Bromus diandrus</i>	Ripgut brome
<i>Bromus horaceaceus</i>	Soft chess
<i>Bromus madritensis</i>	Foxtail chess
<i>Castelleja attenuata</i>	Valley tassels
<i>Cephalanthus occidentalis</i>	California button-willow
<i>Claytonia perfoliata</i>	Miner's lettuce
<i>Conium maculatum</i>	Poison hemlock
<i>Cyperus esculentus</i>	Yellow-nut sedge
<i>Datisca glomerata</i>	Durango-root
<i>Dichelostemma capitatum</i>	Blue dicks

**Scientific Name****Common Name***Echinochloa crus-galli*

Barnyard grass

*Erodium brachycarpum*

Storkbill

*Ficus carica*

Edible fig

*Galium* sp.

Bedstraw

*Hordeum murinum* var. *leporinum*

Hare barley

*Lemna* sp.

Duckweed

*Lolium multiflorum*

Italian ryegrass

*Lotus wranglelianus*

Trefoil

*Lupinus bicolor*

Miniature lupine

*Lupinus latifolius*

Broad-leaved lupine

*Lupinus nanus*

Sky lupine

*Marah* sp.

Wild cucumber

*Mimulus guttatus*

Seep monkey flower

*Olea europaea*

Olive

*Paspalum distichum*

Knotgrass

*Petrorhagia dubia*

Grass-pink

*Plagiobothrys* sp.

Popcorn flower

*Polygonum hydropiperoides*

Mild water-pepper

*Populus fremontii*

Poplar

*Potamogeton* sp.

Pondweed

*Rapistrum rugosum*

Wild turnip

*Robinia pseudoacacia*

Black locust

**Scientific Name**

*Quercus douglasii*

*Quercus kelloggii*

*Quercus lobata*

*Quercus wislizenii*

*Rubus discolor*

*Salix* sp.

*Salix laevigata*

*Sambucus mexicana*

*Stellaria media*

*Toxicodendron diversilobum*

*Triteleia laxa*

*Urtica dioica*

*Vicia americana*

*Vicia sativa*

*Vitis californica*

*Vulpia bromoides*

*Vulpia myuros*

**Common Name**

Blue oak

California black oak

Valley oak

Interior live oak

Himalayan blackberry

Willow

Red willow

Blue elderberry

Chickweed

Poison oak

Grass nuts

Slender nettle

American vetch

Garden vetch

California wild grape

Six-weeks fescue

Foxtail fescue

# **Attachment A**

Electronic Copy of Report on CD