

BIOLOGICAL ASSESSMENT

**EAGLE RIDGE MARKET
P201200304; APN 0315-231-17**

SAN BERNARDINO COUNTY, CALIFORNIA
(USGS Moonridge, CA Quad.; Township 2 North, Range 2 East, Section 19)

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EXECUTIVE SUMMARY

Concerns have been raised by California Department of Fish and Wildlife (CDFW) in a letter dated April 16, 2014 regarding potential impacts on the Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) (UTS). The UTS is listed as a Federal and State endangered species. Populations of the species have been documented approximately 0.9 miles north of the proposed project; however, populations of the species may be present in other channels and ponds closer to the site during above-average precipitation years (USFWS, 1999). The following sections provide a discussion of the impact analysis performed for this project as it related to the UTS.

The proponent is requesting approval of a proposed project which will include a convenience store (6,793 square feet), gas station, and a care-taker residence. The site is 0.9-acres in size and is located at the southeast corner of State Highway 38 (Greenspot Blvd.) and State Lane in San Bernardino County (Township 2 North, Range 2 East, Section 19). The site supports a moderately dense forest community dominated by ponderosa pine (*Pinus ponderosa*), with a few pinyon pines (*P. monophylla*) and California juniper (*Juniperus californica*) also scattered throughout the property. Dominant annuals included bluegrass (*Poa glauca*), rock cress (*Arabis sp.*), and wire grass (*Juncus sp.*).

In order to address the concerns and comments of CDFW, as well as the local residents, the site was further evaluated to assess the drainage channel directly west and north of the site, existing site conditions, and potential impacts to stickleback populations. The field investigations were performed on April 28, 2014 from approximately 0700 to 1530 hours. The site, which is 0.9-acres in size and is located in a developed portion of the Big Bear Lake area, does not support any sensitive habitats such as streams and wetlands, nor were any wildlife corridors identified on the property.

1.0 PROJECT AND PROPERTY DESCRIPTION

The proponent is requesting approval of a proposed convenience store (6,793 square feet), gas station, and care-taker residence on a 0.9-acre parcel at the southeast corner of State Highway 38 (Greenspot Blvd.) and State Lane Drive (The SE ¼ of the SE ¼ of the NE ¼ of Section 19, Township 2 North, Range 2 West, of the SBM, State of California) located in San Bernardino County (Figures 1, 2, and 3). The property is located at an elevation of approximately 6,800 feet (MSL) with a slight slope to the east. An initial survey was conducted in January 2013; however, additional biological surveys were performed on April 28, 2014 to further evaluate the site and to assess potential impacts. No other alternative sites were evaluated by the project proponent.

Soils consisted of sandy loam with a few gravels and small rocks present. The site is bordered on the west by State Highway 38, on the south and east by existing single family dwellings, and on the north by vacant land (Figure 4). The USGS Moonridge Quadrangle does not show any blueline channels on the site and no drainage channels or streams bisect the site based on field work conducted in April 2014. A small swale about 30 feet in length and about six inches does occur along the western edge of the site; however, this swale does not connect with any off-site channels nor does it direct any significant water flows on-site.

A blueline stream channel is located west of the site and ends at Highway 38 south of the subject property (Figure 2). The stream flows intersect Highway 38 and are contained in a ditch along the west side of the highway. Water flows are directed in a northerly direction and enter a catch basin located immediately south of the intersection of Highway 38 and State Lane which directs water under Highway via a culvert. Water flows from the culvert under Highway 38 for a distance of about 120 feet within the highway right of way, and is directed into another culvert located under State Lane. This culvert directs water in a northerly direction into a channel north of the subject property. Off-site stream flows do not enter or cross the site. Based on the absence of any stream channels on the site and the fact that no off-site channels will be altered by the proposed project, a Lake and Stream Alteration Permit (LSA) will not be required by CDFW.

No wildlife corridors bisect the property and no sensitive wildlife species were observed during the biological surveys conducted on January 17, 2013 or during the updated field investigations performed on April 28, 2014. Weather conditions during the April 2014 surveys consisted of winds of 0 to 5 mph, temperatures ranging from the mid 50's to mid 70's (°F), with 0 to 5 percent cloud coverage. The site is undisturbed and supports a moderately dense ponderosa pine (*Pinus ponderosa*) community with some pinyon pines (*P. monophylla*) and California junipers (*Juniperus californica*) also present (Figure 3). A few shrubs were also noted including sagebrush (*Artemisia tridentata*), rabbitbrush (*Chrysothamnus* sp.), cinquefoil (*Potentilla* sp.), and grasses such as brome (*Bromus* sp.), and bluegrass (*Poa* sp.). Table 2 provides compendium of all plant species observed during the field investigations. See Section 4.0 for discussion of the general biological resources.

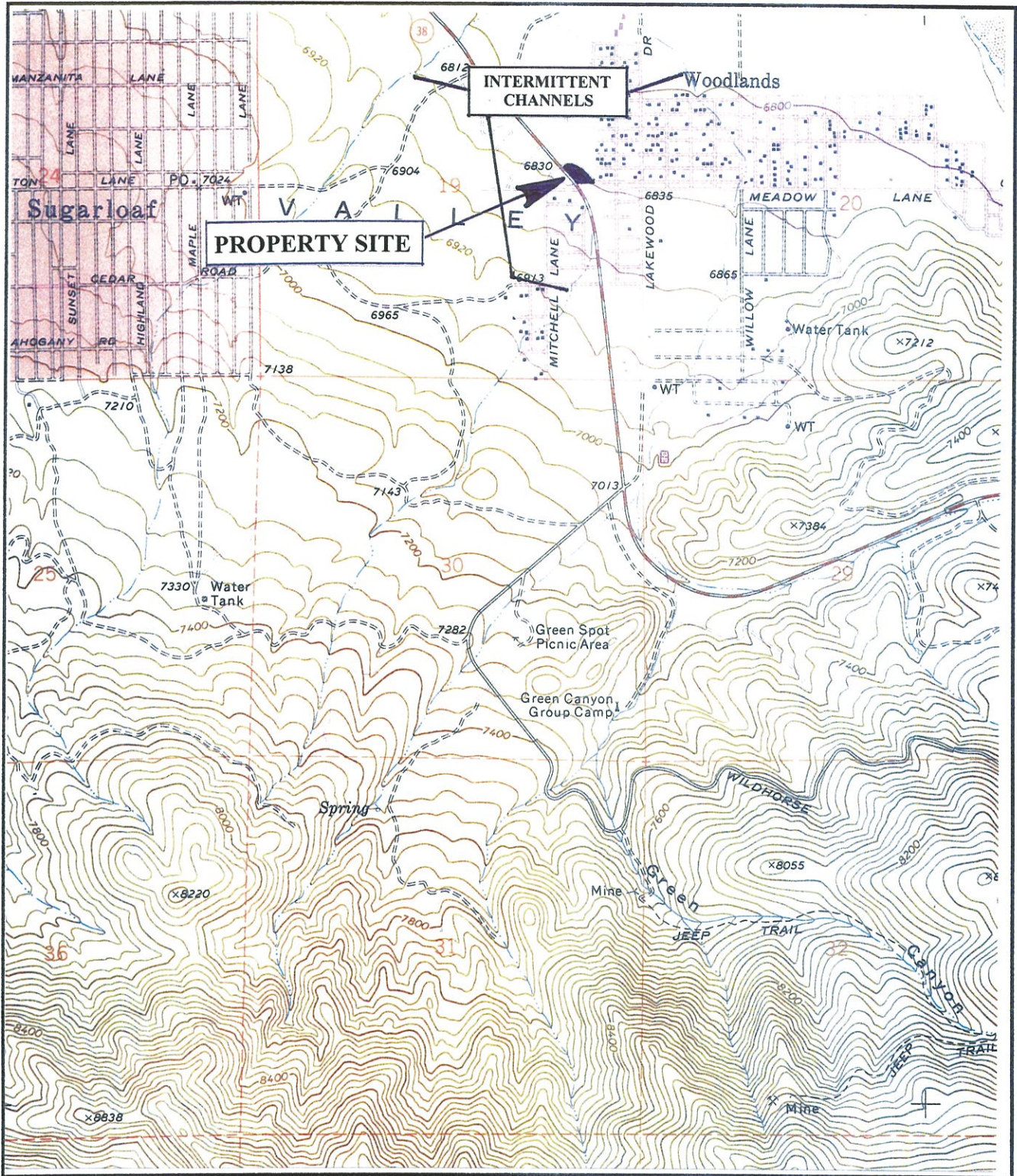


FIGURE 2
PROJECT LOCATION
(Erwin Lake Market)
 (Source: USGS: Moonridge, CA Quad., 1970)





CENTER OF SITE LOOKING EAST



CENTER OF SITE LOOKING NORTH

FIGURE 3
SITE PHOTOGRAPHS
(EAGLE RIDGE MARKET)



CENTER OF SITE LOOKING WEST



CENTER OF SITE LOOKING SOUTH

FIGURE 3, cont.
SITE PHOTOGRAPHS
(EAGLE RIDGE MARKET)

2.0 BACKGROUND DATA REVIEW

2.1 UNARMORED THREESPINE STICKLEBACK (*Gasterosteus aculeatus williamsoni*)

The following overview for the stickleback has been excerpted from the 5-Year Review Plan prepared by the U.S. Fish and Wildlife Service (USFWS) in 2009 (USFWS, 2009)

Species Overview

Threespine stickleback (*Gasterosteus aculeatus*) are mostly freshwater anadromous fish found throughout much of the Northern Hemisphere, and are streamlined fish, usually not exceeding 6 cm (2.4 in) standard length (USFWS, 2009; Moyle, 2002). Miller and Hubbs (1969) recognized three subspecies of threespine stickleback on the Pacific Coast of North America including: (1) fully plated threespine stickleback (*Gasterosteus aculeatus*), (2) low or partially plated threespine stickleback (*Gasterosteus aculeatus microcephalus*), and (3) unplated or unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*).

The UTS is distinguished from other sticklebacks by the number of lateral plates, and other characters used to distinguish the UTS from other threespine sticklebacks include: short dorsal and pelvic spines, rounded pectoral and caudal fins, a less streamlined body, reduced denticulation of the spines, and reduced size of the ascending branch of the pelvic girdle (Baskin 1974). The UTS was first described by Girard (1854) based on a collection from “Williamson’s Pass,” known today as Soledad Canyon, Los Angeles County, California. The UTS inhabits slow-moving reaches or quiet-water microhabitats of streams and rivers, and it feeds primarily on benthic insects, small crustaceans and snails, and to a lesser degree on flatworms, nematodes, and terrestrial insects (Moyle 2002). The UTS reproduces throughout the year, with the least breeding activity occurring from October to January (Baskin 1974). Reproduction occurs in areas with adequate aquatic vegetation (e.g. watercress) (*Rorippa spp.*) and filamentous algae (*Cladophora spp.*) and slow-moving water, where males establish and vigorously defend territories.

In 2008, approximately 8 acres of property at Shay Meadows (including Motorcycle Pond and areas connecting it to Shay Pond) was acquired through a 2002 Section 6 recovery land acquisition grant and are currently held in conservation by CDFW (USFWS, 1999). The Department of Water and Power, City of Big Bear Lake (DWP) and the Big Bear Community Services District (CSD) acquired approximately 2 acres underlying Shay Pond, referred to as “Shay Creek UTS preservation lands” (USFWS, 1999). As a term and condition of a special use permit for Water Collection and Conveyance Facilities in the Baldwin Lake Watershed, San Bernardino National Forest, San Bernardino County, California, CSD is contractually obligated to provide water to maintain a minimum 20-gallon-per-minute outflow from Shay Pond (USFWS, 1999).

Location of Unarmored Threespine Stickleback in Project Area

Based on data from the USFWS (2009) and from the CDFW Natural Diversity Data Base (CNDDDB, 2014), populations of stickleback have historically inhabited Shay Creek in a spring area (i.e., Motorcycle Pond) near the corner of Cascade Street and Hatchery 10 Road extending down to Baldwin Lake which is connected to Shay Pond via Shay Creek (USFWS, 2009). Shay Creek is generally a perennial stream, which is fed by several springs. The UTS were discovered in Shay Creek after the species was listed as endangered (U.S. Forest Service, 2001). The Shay Creek vicinity includes Shay Pond, Sugarloaf Pond, Juniper Springs, Motorcycle Pond, Shay Creek, Wiebe Pond, and Baldwin Lake (See Figures [back of report] for population locations.). The Shay Creek vicinity population is unique in that it occurs at a high elevation, about 6,700 ft above sea level, while all other UTS populations inhabit streams below 3,000 ft.

The Shay Creek populations undergo major fluctuations due to expansions and contractions of their habitat due to frequent drought conditions in Southern California. The U.S. Forest Service documented a catastrophic reduction in population levels in Shay Creek and Baldwin Lake in 1985 and 1986 due to reduction in water levels (USFS, 2001). Some UTS did survive this episode in Shay Pond and Wiebe Pond. However, by 1990, UTS were thought to only exist in Shay Pond according to Malcolm (1992) since Shay Pond is maintained by supplemental water from the Big Bear City Community Service District. Above average rainfall in the mid-1990's help re-establish water in Baldwin Lake which helped in the expansion of populations of UTS beyond Shay Creek and Shay Pond.

2.2 OTHER SENSITIVE SPECIES

Based on a literature review, a search of USFWS and CDFW data bases, and a search of the California Natural Diversity Database (CNDDDB), it was determined that the site is located within the distribution of other sensitive wildlife species including California spotted owl (*Strix occidentalis occidentalis*), southern rubber boa (*Charina umbratica*), and flying squirrel (*Glaucomys sabrinus*). In addition, bald eagles (*Haliaeetus leucocephalus*) have been observed in association with Baldwin Lake about two miles to the north (CNDDDB, 2013). There are numerous sensitive habitats located throughout the Big Bear Lake area, and numerous sensitive plants have also been recorded in the region. According to the CNDDDB (2014), there are twenty-four sensitive plants within a five mile radius of the property; although, the 0.9-acre site is not expected to support any sensitive plants. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980). Table 1 (Appendix A) provides a detailed summary of the sensitive species listed above and Section 5.0 provides a discussion of potential impacts to these sensitive species.

3.0 METHODOLOGIES

Vegetation and Wildlife

General biological surveys were conducted on April 28, 2014 during which Randall C. Arnold, Jr. (Senior Biologist, RCA Associates LLC) and Patricia Moore (Senior Botanist, RCA Associate LLC) walked meandering transects (i.e., “transects of opportunity”) throughout the site and in adjacent areas (i.e., zone of influence) from 0700 to 1530 hours. During the surveys, data was collected on the plant species present on the site and in the immediate surrounding area and the wildlife observed were recorded. Plants were identified in the field; however, those species that were not identifiable were collected and taken back to the lab for further identification. Birds were identified by visual observations and sound; whereas, mammals occurring in the area were identified by scats, tracks, burrows, or direct observations. All plants and animals detected during the field investigations were recorded and are provided in compendium Tables 2 & 3 (Appendix A). During the field investigations the site was also evaluated for the presence of any sensitive habitats (e.g., wetlands, streams, etc.) and wildlife corridors.

The surrounding area was also evaluated for the presence of drainage channels which could potentially collect any water flows from the site and direct water to the north where populations of the stickleback are located. In addition to the biological assessment performed by RCA Associates, LLC, a hydrological analysis was performed by Mr. Jerry Miles in order to address the hydrological concerns raised in the CDFW letter of April 16, 2014, and has been submitted under separate cover. The results of the hydrological study are also summarized in Section 5.0.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The site supports a pine forest typical of the area dominated by ponderosa pine (*Pinus ponderosa*) with a few California junipers (*Juniperus californica*) and pinyon pine (*P. monophylla*) also present. Shrubs were limited to a few Great Basin sagebrush (*Artemisia tridentata*), cinquefoil (*Potentilla* sp.), and rabbitbrush (*Chrysothamnus* sp.). Dominant annuals included bluegrass (*Poa glauca*), rock cress (*Arabis* sp.), and wire grass (*Juncus* sp.). A few other perennials and annuals were noted along the edge of the site and are provided in Table 2.

Birds observed during the field investigations were limited to ravens (*Corvus corax*) and stellar jays (*Cyanocitta stelleri*). Common mammals occurring in the area included cottontail (*Sylvilagus bachmani*) and Merriam's chipmunk (*Eutamias merriami*). Tables 2 and 3 (Appendix A) provide a compendium of the species observed and those species which are common to the area. No distinct wildlife corridors were identified on the site or in the immediate surrounding area. Some nesting activity was noted among the stellar jays observed on the site; however, no nests were identified in any of the on-site trees. Figure 4 provides an aerial view of the site and the surrounding area.



Figure 4
Biological Resources Map
(Eagle Ridge Market, P201200304)



5.0 IMPACTS

A hydrological study was performed by J. Miles, P.E. for the project and has been submitted under separate cover. However, some of the analysis presented in the hydrological study has been utilized in analyzing potential impacts to the UTS.

5.1 Potential Impacts to the Unarmored Threespine Stickleback

One of the main concerns is potential impacts to the UTS due to potential pollution of off-site channels. However, according to the hydrological study (Miles, 2014), “On-site flows will be contained on-site and treated by on-site BMP’s in an effort to contain pollutants, trash and sediments generated by the proposed use. The on-site 100 year 1-hour storm flows generated will be captured and contained in an off-site BMP underground retention basin and allowed to percolate. A proposed concrete swale along the subject site’s westerly boundary will conduct any off-site flows northerly, in an effort to keep off-site flows from entering the site” (Miles, 2014). Based on the analysis conducted by Miles (2014), on-site flows will be contained and will not enter the off-site channel north of the site. By controlling on-site water flows, as well as preventing off-site flows from entering the site during storm events, the possibility of any on-site contaminants (i.e., gasoline leaks, fuel spills) entering the channel to the north and eventually impacting UTS north of the site is expected to be negligible.

In addition, controlling all on-site water flows and using on-site BMP’s to contain all pollutants, trash, and sediments, the proposed project is not expected to have any impacts in altering hydrologic flows in the area. Consequently, the habitat suitability of the wet meadow system downstream of the site, which supports populations of the UTS, will not be impacted by the proposed project.

Toxic Spills Along Roadways

Concerns have also been raised regarding possibility of toxic spills along the various roadways in the area surrounding the subject property due to traffic accidents. Any spills which may occur due to accidents, etc. along Highway 38, State Lane Drive, or other roads in the immediate area could have a direct impact on UTS populations if any toxic substances manage to reach the existing UTS populations. However, such occurrences are beyond the control of the project proponent. In addition, impacts which may occur to the local hydrology and groundwater during such accidents are beyond the scope of this report. As discussed above, the proponent will implement all necessary State, Federal and local requirements to control all on-site contaminants.

Threats Specific to Shay Creek

The encroachment of emergent wetland vegetation has been gradually reducing open-

water habitat in Shay Pond and may be limiting the UTS population (USFWS, 1999). The pond has been cleaned out at irregular intervals by personnel from the Service, U.S. Forest Service, and CDFW. In addition, Shay Creek and its pools, including Shay Pond, are located in close proximity to developed areas and near an unpaved road; consequently, this location is potentially threatened by eutrophication and/or pollution from nuisance flows contaminated by horse manure (USFWS, 1999). Development of properties continues in areas adjacent to the creek and its pools, and this activity could potentially result in the eventual the loss of the creek (USFWS, 1999).

The UTS also continues to be threatened by agricultural, industrial, and municipal water pollution; channelization and other habitat modifications associated with urbanization; stream flow alterations caused by water diversion; groundwater pumping; introduction of competing and predatory species; hybridization with partially armored threespine stickleback; drought; and stochastic extinction (USFWS, 1999). Consequently, UTS continues to be threatened with extinction throughout all or a significant portion of its range.

5.2 Impacts to Other Sensitive Species

There are several other sensitive species which have been documented in the general area and these species are discussed below.

Southern Rubber Boa

The Southern rubber boa is typically found in association with active streams and wet meadows in the Big Bear area. There are no documented populations in the immediate area surrounding the property, and the species is not expected to occur on the site based on the absence of suitable habitat. In addition, the species is unlikely to inhabit the channel directly north of the site since the channel infrequently has water present. The proposed project is not expected to impact the species. (Note: Specific location information has been suppressed by CDFW in the interest of protecting the species.).

Flying Squirrel

Flying squirrels are year-long residents of coniferous habitat and the species has been documented in the general area (CDFW, 1990). The species, which utilizes tree cavities for nesting, is typically found in habitats close to water since squirrels normally require drinking water, especially during summer months (CDFW, 1990). The trees present on the site were evaluated for the presence of any cavities which could be utilized by squirrels; however, no such cavities were observed nor were any squirrels seen during the April 2014 field investigations. Based on the results of the investigations, the proposed project will not impact any populations of the flying squirrel.

California Spotted Owl

Spotted owls inhabit dense, old growth forest and in Southern California the species is normally found in association with oak and oak-conifer habitats (CDFW, 1990). Owls use multi-layered canopy cover for roosting and locates its nests in tree cavities or in the tops of large trees. Spotted owls are not expected to inhabit the site. This conclusion is based on the small size of the site, its presence in a developed area, and the absence of suitable habitat (oak-conifer habitat) and suitable nesting cavities.

Bald Eagle

Bald Eagles occur in the Big Bear area primarily as winter migrants (CDFW, 1990). Eagles typically require large bodies of water where their main prey (fish) is readily available. Eagles normally nest in large, old growth trees with open branchwork (CDFW, 1990). Numerous observations of bald eagles have been documented in the area, primarily in relation to Big Bear Lake and Baldwin Lake (CNDDDB, 2014). The site does not provide suitable nesting trees or roosting areas for the species, and the proposed project is not expected to have any impact on the species.

Sensitive Plants

There are numerous sensitive plants which have been documented in the Big Bear area, and the majority of these species are normally found in wet meadows, along streams and lakes, and in certain upland habitats (e.g., sagebrush, pinyon-juniper habitats, etc.) (CNDDDB, 2014). As mentioned above, about twenty-five sensitive plants have been documented within about 5-miles of the site; however, site does not support habitats typically associated with most of the sensitive plants in the region. Therefore, it is very unlikely any sensitive plant species inhabit the site and the project is not expected to impact any sensitive species.

5.3 Cumulative Impacts

The proposed project is not expected to have any adverse cumulative impacts on the biological resources in the general area based on the existing conditions on the property. The site does not support any sensitive species nor are there any riparian habitats, wetlands, or any other aquatic habitats present on the site. There are no wildlife corridors bisecting the property, and no sensitive habitats are present in immediate adjacent areas. The various rare communities in the region (e.g., wet meadows, streams, lakes, ponds, etc.) are not expected to be indirectly or directly impacted by the project. There are no rare communities immediately adjacent to the site and as noted above, the project will meet all required regulations to minimize potential impacts to the surrounding natural communities and sensitive species.

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TABLES

CNDDDB Sensitive Species List

Table 1 - Federal and State Listed Species and State Species of Special Concern Occurring Within Approximately Five Miles of the Site. (Fed; E = Endangered; SSC = Species of special concern; S = Sensitive species; CNDDDB = California Natural Diversity Data Base; CNPS: California Native Plant Society)

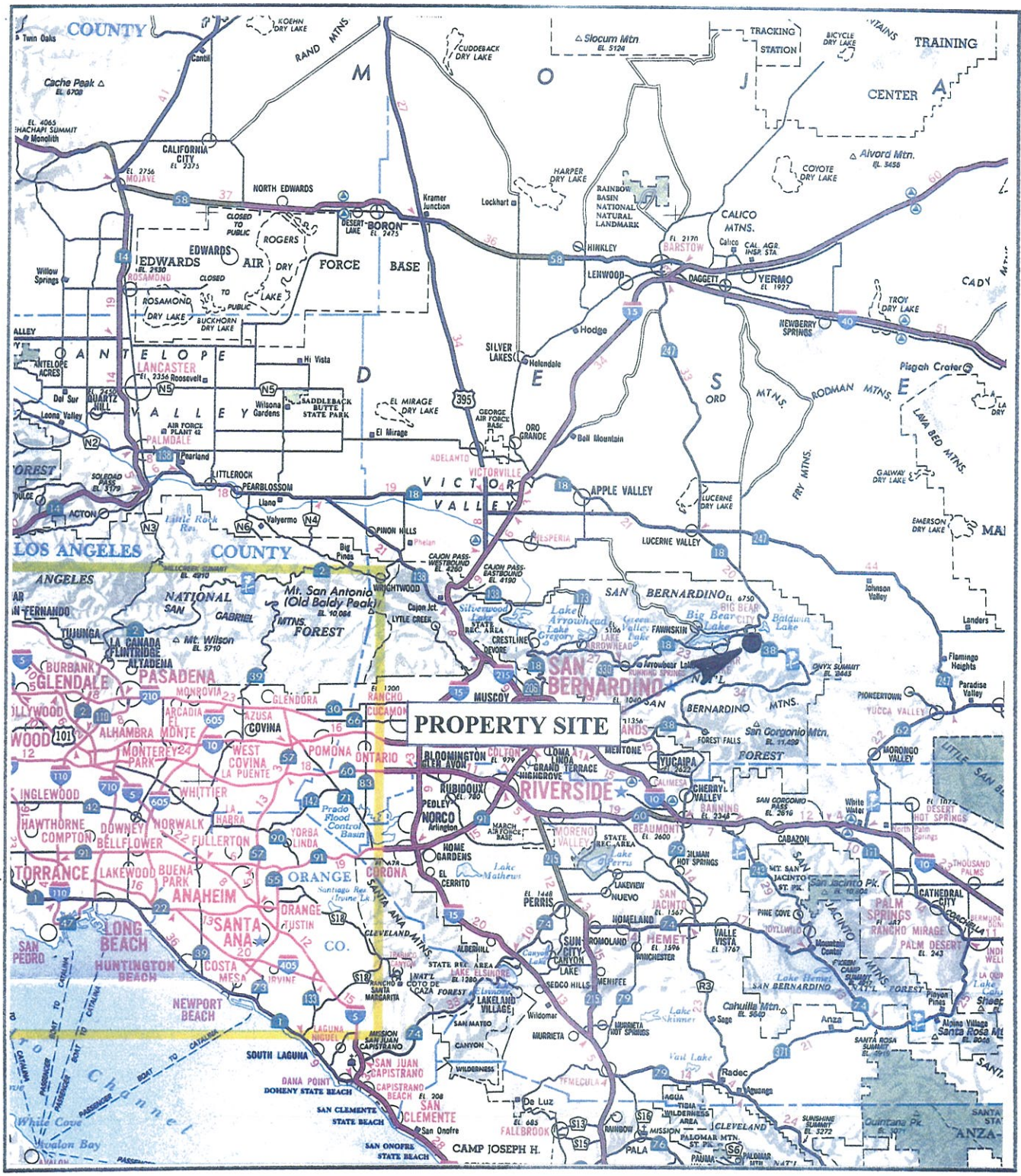
Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Southern rubber boa (<i>Charina umbratica</i>)	Fed: None State: T	Coniferous forest	Site not expected to support any populations of the species due to its small size the absence of any documented populations in surrounding area.	No additional surveys or mitigations proposed.
Flying squirrel (<i>Glaucomys sabrinus</i>)	Fed: None State: None CDFG: SSC	Coniferous forest	Site not expected to support populations of the species.	“
California spotted owl (<i>Strix occidentalis occidentalis</i>)	Fed: None State: None CDFG: SSC	Coniferous forest	None observed during the surveys and site is not expected to support populations of the species.	“
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Fed: Delisted State: E	Normally associated with lakes, rivers, and aquatic areas where prey is available.	None observed during the surveys and site is not expected to support any nesting/roosting activities due to small size and absence of aquatic habitats.	“
Unarmored threespine stickleback (<i>Gasterosteus aculeatus williamsoni</i>)	Fed: E State: E	Lakes	Site does not support suitable habitat for the species.	“
Cushenbury milk-vetch (<i>Astragalus albens</i>)	Fed: E State: None CNPS: List 1B.1	Gravelly soils; pinyon-juniper woodlands	Site not expected to support populations of species.	“
San Bernardino milk-vetch (<i>Astragalus bernardinus</i>)	Fed: None State: None CNPS: 1B.1	Stony washes; pinyon-juniper woodlands.	Site not expected to support populations of the species.	“
Big Bear Valley milk-vetch (<i>Astragalus lentiginosus var. sierra</i>)	Fed: None State: None CNPS: 1B.1	Sagebrush scrub	Site does not support suitable habitat	“
Big Bear Valley Woolypod (<i>Astragalus leucolobus</i>)	Fed: None State: None CNPS: 1B.2	Sagebrush scrub	Site does not support suitable habitat.	“
Pinyon Rockress (<i>Boechera dispar</i>)	Fed: None State: None CNPS: 2.34	Pinyon-juniper woodlands.	Site does not support suitable habitat.	“

Table 1: continued

Parishis Rockkress (<i>Boechera parishis</i>)	Fed: None State: None CNPS: 1B.2	Dry, rocky slopes.	Site does not support suitable habitat.	No additional surveys or mitigations proposed.
Shockley's Rockkress (<i>Boechera Shockleyi</i>)	Fed: None State: None CNPS: 2.2	Pinyon-juniper woodlands.	Site does not support suitable habitat for species.	
Palmer's mariposa lily (<i>Calochortus palmeri var palmeri</i>)	Fed: None State: None CNPS: 1B.2	Meadows and moist habitats.	Site does not support suitable habitat for species.	"
Ash-gray paintbrush (<i>Castilleja cinerea</i>)	Fed: None State: None CNPS: 1B.2	Coniferous forest.	Site not expected to support populations of the species.	"
San Bernardino Mt. owl's clover (<i>Castilleja lasiorhyncha</i>)	Fed: None State: None CNPS: 1B.2	Meadows; yellow-pine forests.	Site does not support suitable habitat for species.	"
San Bernardino Mountains dudleya (<i>Dudleya abramsii ssp. affinis</i>)	Fed: None State: None CNPS: 1B.2	Chaparral to pine forests.	Site not expected to support populations of the species.	"
Big Bear Valley Sandwort (<i>Eremogone ursina</i>)	Fed: T State: None CNPS: 1B.2	Pebble plains; pinyon-juniper woodlands.	Site does not support suitable habitat for species.	"
Parish's Daisy (<i>Erigeron parishii</i>)	Fed: T State: None CNPS: 1B.1	Joshua tree woodlands.	Site does not support suitable habitat.	"
Southern Mountain Buckwheat (<i>Eriogonum kennedyi var. austromontanum</i>)	Fed: T State: None CNPS: 1B.2	Gravelly slopes and ridges.	Site does not support suitable habitat for the species.	"
Baldwin Lake linanthus (<i>Linanthus killipii</i>)	Fed: None State: None CNPS: 1B.2	Pinyon juniper woodland.	Site not expected to support the species.	"
San Bernardino Mtn. monkeyflower (<i>Mimulus exiguus</i>)	Fed: None State: None CNPS: 1B.2	Moist habitats.	Site does not support suitable habitat for the species.	"
San Bernardino Ragwort (<i>Packera bernardina</i>)	Fed: None State: None CNPS: 1B.2	Rocky slopes; yellow-pine forests.	Site does not support suitable habitat for species.	"
San Bernardino bluegrass (<i>Poa atropurpurea</i>)	Fed: E State: None CNPS: 1B.2	Meadows and grassy slopes.	Site does not support suitable habitat for the species.	"
Bear Valley Pyrocoma (<i>Pyrocoma uniflora var. gossypina</i>)	Fed: E State: None CNPS: 1B.2	Moist alkaline meadows.	Site does not support suitable habitat for the species.	"
Bird-fowl checkerbloom (<i>Sidalcea pedata</i>)	Fed: E State: E CNPS: 1B.1	Wet meadows.	Site does not support suitable habitat for the species.	"
San Bernardino aster (<i>Symphotrichum defoliatum</i>)	Fed: None State: None CNPS: 1B.2	Grasslands; disturbed areas.	Site does not support suitable habitat for species.	"

California dandelion (<i>Taraxacum californicum</i>)	Fed: E State: None CNPS: 1B.1	Moist meadows.	Site does not support suitable habitat.	“
Slender-petaled thelypodium (<i>Thelypodium stenopetalum</i>)	Fed: E State: E CNPS: 1B.1	Stony slopes.	Site does not support suitable habitat for the species.	No additional surveys or mitigations proposed.
Cushenbury Ovalifolium (<i>Eriogonum ovalifolium</i> var. <i>vineum</i>)	Fed: E State: None CNPS: 1B.1	Sagebrush scrub; pinyon-juniper woodland.	Site does not support suitable habitat for the species.	“

FIGURES

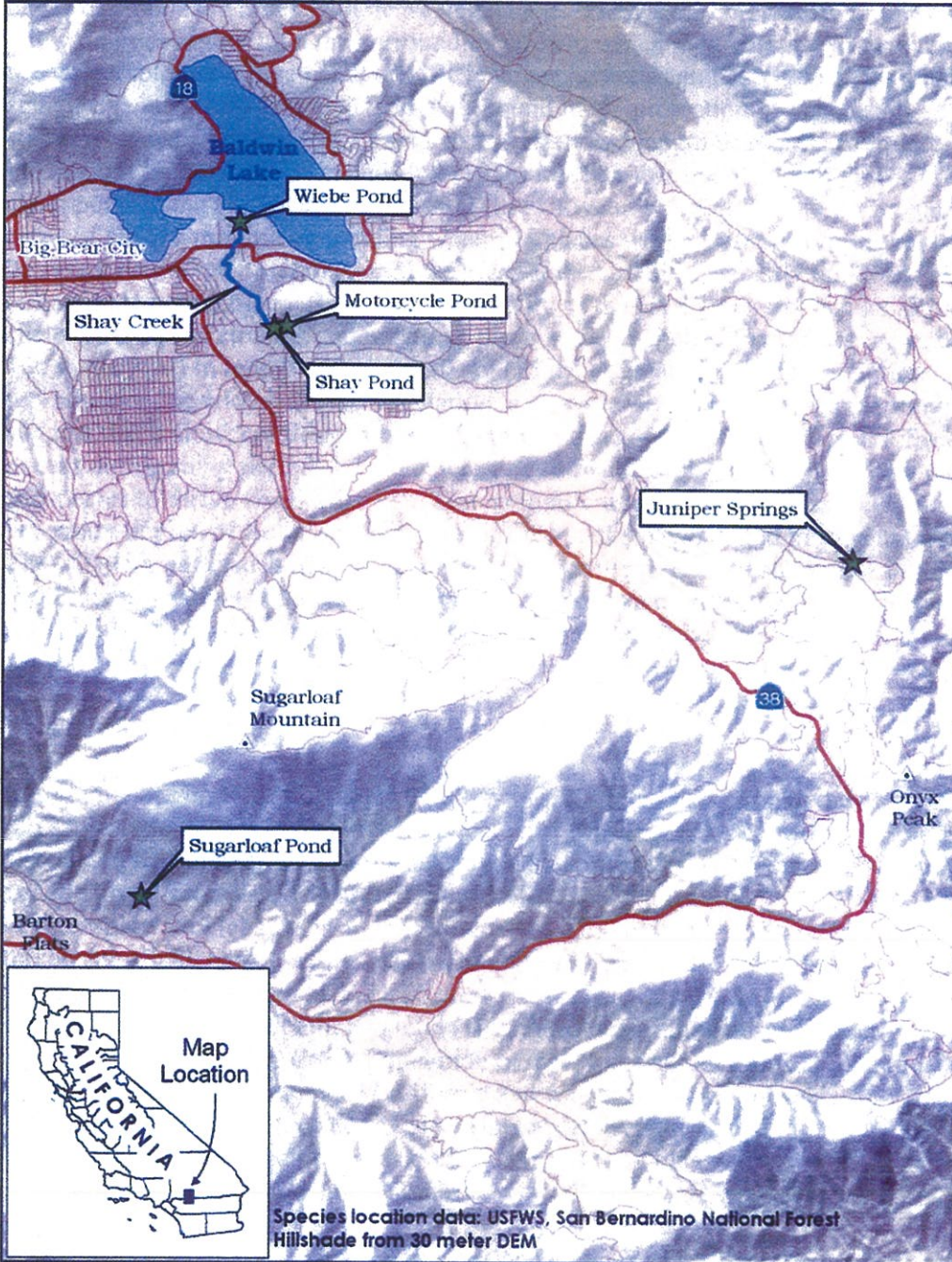


VICINITY MAP

(Eagle Ridge Market; P201200304; APN 0315-231-17)
 (Source: USGS Moonridge, CA Quadrangle, 1970)



Populations of Unarmored Threespine Sticklebacks in the Vicinity of Shay Creek



★ Extant UTS Populations

— Roads

— Lakes

U.S. Fish & Wildlife Service
Ventura Fish & Wildlife Office
May, 2009

Prepared for the 2009 5-year status review

SITE PHOTOGRAPHS



CULVERT UNDER HIGHWAY 38 LOOKING WEST



CATCH BASIN ALONG HIGHWAY 38 WEST OF SITE

PHOTOGRAPHS OF DRAINAGE CHANNELS IN AREA
(EAGLE RIDGE MARKET)



PHOTOGRAPH OF SMALL DRAINAGE SWELL ON SITE
(EAGLE RIDGE MARKET)

Appendix A

Flora and Fauna Compendium Tables

Table 2 - Plants observed on the site in April 2014 and known to occur in the immediate surrounding area.

Common Name	Scientific Name	Location
Ponderosa pine	<i>Pinus ponderosa</i>	On-site & off-site
California juniper	<i>Juniperus californica</i>	"
Pinyon pine	<i>Pinus monophylla</i>	"
Sagebrush	<i>Artemisia sp.</i>	"
Brome grass	<i>Bromus sp.</i>	"
Panicum grass	<i>Panicum sp.</i>	"
Cinquefoil	<i>Potentilla sp.</i>	"
Great basin sage	<i>Artemisia tridentata</i>	"
Antelope bush	<i>Purshia tridentata</i>	"
Blue spruce	<i>Picea pungens</i>	"
Bluegrass	<i>Poa glauca</i>	"
Rock cress	<i>Arabis sp.</i>	"
Wooly pod	<i>Astragalus sp.</i>	"
Phoenicaulus	<i>Phoenicaulus sp.</i>	"
Wire grass	<i>Juncus sp.</i>	"
Rabbitbrush	<i>Chrysothamnus sp.</i>	"
Alpine daisy	<i>Erigeron vagus</i>	"
Willow herb	<i>Epilobium sp.</i>	"
Cliff fendlerbush	<i>Fendlera rupicola</i>	"
Evening primrose	<i>Oenothera sp.</i>	"
Tansy mustard	<i>Descurania</i>	"
Lupine	<i>Lupinus sp.</i>	"
Phlox	<i>Phlox sp.</i>	"
Yarrow	<i>Achilla lanulus</i>	"

Table 3 - Wildlife observed on the site and those species expected to occur in surrounding area.

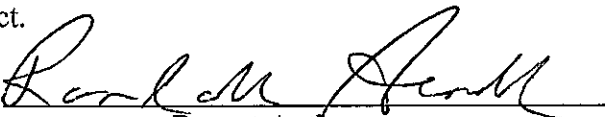
Common Name	Scientific Name	Location
Common raven	<i>Corvus corax</i>	On-site and in the surrounding area.
Stellar jay	<i>Cyanocitta stelleri</i>	"
Cottontail	<i>Sylvilagus bachmani</i>	Tracks observed.
Merriam's chipmunk	<i>Eutamias merriami</i>	May occur in area.
California ground squirrel	<i>Spermophilus beecheyi</i>	"
Coyotes	<i>Canis latrans</i>	"
Song sparrow	<i>Melospiza melodia</i>	"
Rock dove	<i>Columba livia</i>	"
Great horned owl	<i>Bubo virginianus</i>	"
Mountain chickadee	<i>Poecile gambeli</i>	"
White-breasted nuthatch	<i>Sitta carolinensis</i>	"

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which were identified on the site during the one-day survey or which are known to occur in the region. It should also be noted, that the surveys were performed in January due to project time constraints.

Appendix B
Certification

CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 5-9-2014 Signed: 
Report Author

Field Work Performed By: Randall Arnold
Senior Biologist

Field Work Performed By: Patricia Moore
Senior Botanist