Ozena Valley Ranch
Surface Mining Site Biological Resources Report, Ventura County, California

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Introduction

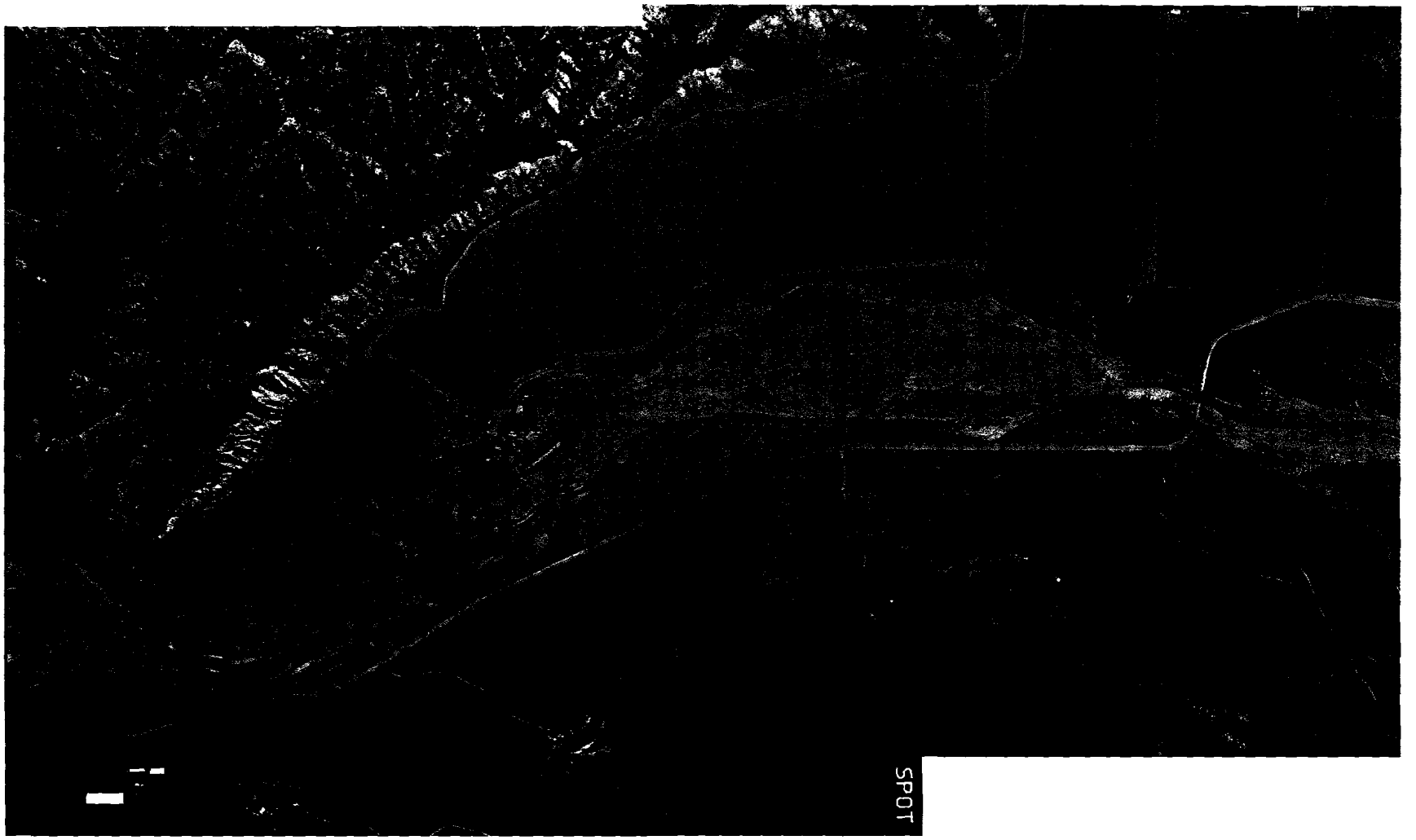
This report summarizes the results of year 2003 reconnaissance-level biological resources surveys conducted within and adjacent to the boundaries of the 155-acre Ozena Valley Ranch mine surface mining site (i.e., project site) in northern Ventura County, California (Figure 1). The project site is located immediately east of State Highway 33 and north of Lockwood Valley Road approximately one mile east of the intersection of these latter roadways. The entire project site was evaluated during the biological resources surveys to document evidence of special-status plants and wildlife, important wildlife habitat, and rare or sensitive vegetation communities that could be affected by mining of the riverbed.

Survey Methods

The project site was surveyed for special-status plant resources and rare or sensitive vegetation communities by Dr. Roy Woodward (plant ecologist) on April 25, 2003, while a survey for special-status wildlife species and important wildlife habitat was conducted by Michael Bumgardner (wildlife biologist) on May 1, 2003. MapTech's Terrain Navigator software was used to establish markers on the Reyes Peak United States Geologic Survey (USGS) 7.5-minute topographic quadrangle that correspond with the approximate corners of the project site. These markers were then downloaded to Garmin Etrex Global Positioning System (GPS) units and used as waypoints in the field to ensure that all areas within the project site were searched and evaluated. In addition, habitats located downstream of the project site (between the project site and State Highway 33 overcrossing of the Cuyama River were surveyed. Lastly, Michael Virgilio (Ozena Valley Ranch) conducted orientation at the project site for Dr. Woodward and Mr. Bumgardner prior to commencing the surveys.

The wildlife survey was conducted throughout the project site, but was particularly focused on the portions of the project site with the greatest potential to support local special-status species (i.e., low-flow channels of the river, adjacent higher river terraces, and man-made ponds). In addition, the wildlife survey was conducted during mid-spring when most local species are active, involved in reproductive activities, and therefore more likely to be observed and documented. The plant survey was also conducted throughout the project site, but was conducted in a manner that allowed potential identification of all observed species (either in the field or later after collection of specimens and comparison to appropriate taxonomic keys). All surveys were conducted on foot as random meander transects.

All vegetation types on the project site (including natural and agricultural types) have relatively discrete boundaries that are easily observed in the aerial photo for the site (Exhibit 1).



Project Site Boundary

SOURCE: *?????–Need source of/for aerial photograph;*
Bumgardner Biological Consulting, May 2003.

0 1/4 1/2 1

Scale In Miles

N

Figure 1
Aerial Photograph
of the Ozena Valley Ranch
Surface Mining Project Site

Therefore, vegetation types on the project site were classified at the vegetation series level (using the nomenclature of Sawyer and Keeler-Wolf, 1995), but were not mapped.

Analytical Methods

A standard nine-quadrangle California Natural Diversity Data Base/Rarefind 2 report was generated for the project site (i.e., query of the USGS 7.5-minute topographic quadrangle in which the project site is found as well as the immediate eight surrounding topographic quadrangles, viz. Reyes Peak and the surrounding Cuyama Peak, Apache Canyon, Rancho Nuevo Creek, San Guillermo, Sawmill Mountain, Lion Canyon, Wheeler Springs, and Old Man Mountain quads). The California Natural Diversity Data Base (CNDDB) contains records for special-status species, as well as sensitive natural communities, which have been reported to the CDFG. The Rarefind 2 report for the project site is provided in Appendix A. Each of the species identified in the Rarefind 2 report was then evaluated in terms of its likelihood of occurrence within the project site. This evaluation considered the known distribution and habitat requirements of the species such that one of the following findings was prepared:

- Known to Occur – species was observed within or immediately adjacent to the project site during the April-May, 2003 surveys or has previously been documented within the project site.
- High Potential – species has not been documented within or immediately adjacent to the project site, but should be expected on more than 50% of visits to suitable habitat in the project site during the appropriate season and time of day.
- Moderate Potential – species has not been documented within or immediately adjacent to the project site, but should be expected on less than 50% of visits to suitable habitat in the project site during the appropriate season and time of day.
- Low Potential – species has not been documented within or immediately adjacent to the project site nor is it likely to occur on the project site, but its presence cannot be completely discounted due to incomplete information on the taxon's distribution or habitat requirements.
- No Potential – species does not occur within the project site due to the lack of required habitat features for the species or the known range of the species is well defined and does not include the project site.

The findings for each of the species identified in the Rarefind 2 report are presented in this report.

Other sources of information on special-status species in California were subsequently reviewed given that the CNDDB is not inclusive of all special-status species that may occur in an area. A review of the CDFG's List of Special Animals (June 2003) and List of Special Plants (June 2003) was therefore conducted to determine if any special-status species not identified in the Rarefind 2 report have the potential to occur in the project

site. This review was based on the professional experience of Mr. Bumgardner and Dr. Woodward within the region and elsewhere in California, but also included review of other published sources of information on special-status species in California. These latter sources include the following:

- California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California, 6th Edition (2001).
- The Jepson Manual (Hickman, 1993).
- Central Coast Wildflowers (Coffeen, 1993).
- Shrubs and Trees of the Southern California Coastal Regions and Mountains (Dole and Rose, 1996).
- A flora of Kern County, California (Twisselmann 1967).
- Fish Species of Special Concern in California, 2nd Edition (Moyle et al., 1995).
- Amphibian and Reptile Species of Special Concern in California (Jennings and Hayes, 1994).
- The Distribution of the Birds of California (Grinnell and Miller, 1944).
- California's Wildlife Volume II Birds (Zeiner et al., 1990).
- Mammalian Species of Special Concern in California (Williams, 1986).
- Mammals of the Pacific States: California, Oregon, and Washington (Ingles, 1978).
- Bat species accounts prepared as course materials for *Ecology and Conservation of California Bats* offered through San Francisco State University's Sierra Nevada Field Campus.
- Bat Conservation International's website (http://www.batcon.org/).
- Recovery Plan for Upland Species of the San Joaquin Valley, California (USFWS, 1998).
- Southern California Mountains and Foothills Assessment: Habitat and Species Conservation Issues (Stephenson and Calcarone, 1999).

Species that are known or expected to occur in the vicinity of the project site were then further evaluated in this report.

Lastly, information on special-status species and other important biological resources from the United States Department of Agriculture Forest Service, Los Padres National Forest (Forest Service) was also reviewed since much of the land in the region is National Forest that is administered by the Forest Service. Michael Foster (Forest Botanist, Mount Pinos Ranger District, Los Padres National Forest, pers. comm. July 23, 2002) previously provided information on sensitive species known to occur in the Los Padres National Forest. This information was reviewed to determine if any of the Forest Service's listed sensitive species that are known to occur in eastern Santa Barbara or San Luis Obispo counties, northern Ventura County, or southwestern Kern County are known to occur in the vicinity of the project site. Species that are known from the vicinity of the project site were then further evaluated in terms of their known distribution and habitat requirements.

Vegetation Communities and Site Characteristics

The bed of the Cuyama River is the most prominent feature on the project site and largely defines the natural vegetation types in the area (see photos in Appendix B). The riverbed has a gentle gradient that declines from the southeast to the northwest and contains the lowest elevations on the project site. Alluvial terraces, up to six feet above the active river channel, exist along both of the river's banks in the vicinity of the project site. A series of higher terraces (some of which are currently farmed) rise from the first terrace located above the river, but these are mostly outside of the project site. There are remnants of gravel berms, some approximately 100 feet long and over 10 feet tall, which were established as flood control structures along the banks of the river. These berms, which appear to be highly eroded from high river flows, are generally well vegetated with native and exotic species including shrubs, forbs, and grasses.

The April 2003 plant survey identified more than 90 plant species on the project site (Appendix C). The winter of 2002/2003 did not provide exceptional rainfall in central California. However, storms occurred throughout as well as late into the season. This resulted in better than average flowering of annual species. Consequently, there was a high likelihood of finding annual or perennial special-status species that occur in the region during the April 2003 survey (when the local spring wildflowers were at their peak).

The vegetation types present on the project site are strongly influenced by the Cuyama River. Examination of color aerial photographs, characterization of the plant species composition, and examination of soil characteristics were utilized to identify the vegetation types on the project site. Vegetation classification systems are hierarchical (i.e., stands of vegetation can be classified into finer and finer divisions, as their precise species composition becomes known). For example, the highest level of classification may define areas as forests, while successively finer levels of classification identify more discrete vegetation associations (e.g., oak forest, blue oak forest, blue oak/interior live oak forest, blue oak/interior live oak/chaparral whitethorn/wild oats forest). The standard classification system for defining vegetation stands in California utilizes the second-to-lowest level, known as the "series" or "association" level, as defined in the Manual of California Vegetation (Sawyer and Keeler-Wolf, 1995).

The major vegetation series that is present on the project site within the Cuyama River bed, based on the Sawyer and Keeler-Wolf system, is the Scalebroom Series. This vegetation series is associated with the unfarmed terraces and in-channel portion of the project site and occupies approximately 95 percent of the non-farmed area of the site. The Scalebroom Series is dominated by scalebroom (*Lepidospartum squamatum*), woollystar (*Eriastrum densifolium*), and bush groundsel (*Senecio flaccidus*). Scalebroom accounts for over 50 percent of the total relative vegetation cover within the active river channel. Due to river dynamics and the effects of erosion, the size of and space between individual plants in the river channel appears to be inversely correlated with the velocities and frequency of inundation from flows in the river channel (i.e., plant size and density is greatest where flows occur on a less frequent basis). Many of the scalebroom shrubs on

the riverbank are over four feet in height and appear to be decades old, while the scalebroom in the bed of the river are typically less than two feet in height. A very good cryptogrammic crust also occurs on the soil surface of the unfarmed lower terraces, indicating that these areas have been undisturbed for many years. It should be noted that discussions with a local farmer indicated that the Cuyama River, even though it was flowing at the time of the survey, had not flooded in this area during the previous winter (the flowing river could easily be crossed by stepping across it at the time of the April survey).

Cropland occupies the higher terraces north of the project site. The major crop present during the April 2003 survey was hay. These croplands are irrigated, highly managed, and do not support native plants from the surrounding area.

The remainder of the project site can be categorized within one of four land cover classes:

- Disturbed Lands – this cover class includes roads and a building, truck scale, and stockpile area (across the river from the aggregate processing facility).
- Springs and Ponds – this cover class is characterized by a pond located immediately south of the aggregate processing facility and materials stockpile and small, discrete areas along the eastern bank of the river where runoff from pumped groundwater, and possibly natural springs, flows down the face of the alluvial terrace into the river bed over a distance of a few hundred feet. This area appeared to contain water throughout the year and contained lush vegetation at the time of the field survey while other areas were dry. The plant species in these wet seeps consist primarily of willows (*Salix* spp.) and cattail (*Typha domingensis*).
- Willow stands – willows (*Salix* spp.), mixed with a few white alders (*Alnus rhombifolia*), cottonwoods (*Populus fremontii* and *P. trichocarpa*), shepherdia (*Shepherdia argentea*), and buckthorn (*Rhamnus californica*), occur along the interface between the lower alluvial terrace and the bed of the river. These stands are generally healthy, and exhibit growth to over 30 feet in height. Some of the stands are fairly dense and difficult to walk through, and also contain a fair amount of driftwood/debris that has been captured during flood events.
- Big Sagebrush Series – this vegetation type is dominated by big sagebrush (*Artemisia tridentata*), desert bitterbrush (*Purshia glandulosa*), Indian ricegrass (*Achnatherum hymenoides*), mountain mahogany (*Cercocarpus betuloides*), and California desert tea (*Ephedra californica*). This vegetation type (on the project site) is a mixture of typical Big Sagebrush Series species and other mountain shrub communities, since big berry manzanita (*Arctostaphylos glauca*), chaparral yucca (*Yucca whipplei*), and coyote brush (*Baccharis pilularis*) also occur on the site. This vegetation type is found on the higher terraces beside the Cuyama River, typically in a fairly narrow band that is generally no greater than approximately 200 feet wide. Furthermore, it is located between Lockwood Valley Road to the south and agricultural fields to the north.

There has been a small amount of off-highway vehicle activity on the lowest terrace and in the riverbed on the project site, but this activity has not resulted in any significant effects to the natural vegetation. Also, cattle are grazed seasonally, and judging by tracks/scat appear to spend most of their time on the sagebrush dominated terraces where grasses are more common.

Wildlife Diversity

The wildlife survey within the project site resulted in the documentation of 1 species of amphibian, 4 species of reptiles, 44 species of birds, and 6 species of mammals on or immediately adjacent to the project site (Appendix C).

The only species of amphibian recorded during the survey was western toad (*Bufo boreas*). Larvae of this species were observed at three locations immediately downstream of the project site (within approximately 2,600 feet of the western boundary of the project site). The larvae were generally in dense aggregations in the deeper, slower portions of the low-flow or overflow channels of the river.

Three species of lizards were recorded during the survey. These species include side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), and California horned lizard (*Phrynosoma coronatum frontale*). Side-blotched lizard was recorded at several locations on and immediately adjacent to the project site. This species is relatively abundant and widespread within arid and semi-arid habitats in the southern half of California. Western whiptail and California horned lizard were observed downstream of the project site on a high terrace located on the northern bank of the river (approximately 1,300 feet north of the State Highway 33 overcrossing of the Cuyama River. These latter species are generally not as abundant as side-blotched lizard and have a patchier distribution within their range. Only one individual of each of these species was observed during the survey.

Southwestern pond turtle (*Clemmys marmorata pallida*) was observed within a small pond near the northern boundary of the project site. The pond is located immediately south of the aggregate-processing plant, along the northern bank of the river, and supports an emergent fringe of cattail (*Typha* sp.). The pond provides open water, refugia (in the cattails), and a small number of basking sites (on the northern bank of the pond). A total of four adult southwestern pond turtles were observed within this pond during the survey (see photo in Appendix C).

Other species of reptiles may also be present (particularly several species of snakes). However, most local snake species are secretive, in low densities, or active at night. Therefore, opportunities to observe these species during a reconnaissance-level survey were extremely limited.

Most of the bird species recorded during the survey represent year-round resident or nesting species. However, several migrant species that are only transient through the area were also observed. These latter species include western tanager (*Piranga ludoviciana*),

orange-crowned warbler (*Vermivora celata*), yellow warbler (*Dendroica petechia*), and (yellow-rumped warbler (*Dendroica coronata*).

The relatively high avian diversity on and near the project site is associated with the matrix of habitats within this area (e.g., willow scrub and cottonwood-willow riparian, cattail marsh, ponds, sagebrush and desert bitterbrush-dominated terraces, chaparral-covered slopes, and agricultural fields). These habitats provide nesting and foraging habitat for a wide variety of resident and neotropical migrant species. It should be noted that the lowest diversity within the area occurs within the active channel of the river (largely due to the low vegetative cover).

Many of the species observed during the survey are typical of the arid and semi-arid habitats of the dry interior slopes and valleys of the Coast Range (e.g., greater roadrunner [*Geococcyx californianus*], ash-throated flycatcher [*Myiarchus cinerascens*], California thrasher [*Toxostoma redivivum*], California towhee [*Pipilo crissalis*], and California quail [*Callipepla californica*]), while most of the remaining species are associated with riparian habitats (e.g., black-headed grosbeak [*Pheucticus melanocephalus*], Wilson's warbler [*Wilsonia pusilla*], Bullock's oriole [*Icterus bullockii*], and yellow-breasted chat [*Icteria virens*]) or are widely-distributed species (e.g., cliff swallow [*Hirundo pyrrhonota*], northern rough-winged swallow [*Stelgidopteryx serripennis*], red-winged blackbird [*Agelaius phoeniceus*], Brewer's blackbird [*Euphagus cyanocephalus*], and western scrub-jay [*Aphelocoma californica*].

Six species of mammals were documented on or adjacent to the project site. These species include Audubon cottontail [*Sylvilagus audubonii*], California ground squirrel [*Spermophilus beecheyi*], lodgepole chipmunk [*Eutamias speciosus*], coyote [*Canis latrans*], mountain lion [*Felis concolor*], and mule deer [*Odocoileus hemionus*]. The latter three species were each identified from sign of the species (e.g., scat, tracks). The project site is also likely to support other species of mammals (particularly several species of small rodents). However, the secretive and nocturnal habitats of these species generally preclude their observation in reconnaissance-level surveys.

Special-Status Plant Species

No special-status plant species were observed on the project site during the plant survey. In addition, based on the plant survey results, previous field experience, and examination of pertinent literature for the special-status plant species that have some potential to occur in the project vicinity, there appears to be only a low to moderate potential for any special-status plant species to occur on the project site. Each of the special-status plant species that have been documented or that may occur in the vicinity of the project site is evaluated in Table 1. The following descriptions, based on Hickman (1993), Tibor (2001), and Dale (1986), are provided for those plant species that were judged to have some potential to occur on the project site.

TABLE 1

SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING WITHIN THE VICINITY OF THE OZENA VALLEY RANCH SURFACE MINING SITE, VENTURA COUNTY

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			PLANTS	
Astragalus leucolobus	Big bear valley woollypod	none/none/CNPS 1b	This locoweed occurs in lower montane coniferous forest, pebble/pavement plains, pinyon-juniper woodland and upper montane coniferous forest. It is a perennial that blooms from May to July. It has been recorded in Los Angeles, Riverside, San Bernardino, and possibly San Diego counties.	**No Potential.** This species occurs within the region. However, it does not occur in the vegetation types present on the project site. Therefore, it has no potential to occur on the project site.
Calochortus palmeri var. *palmeri*	Palmer's mariposa lily	none/none/CNPS 1b	This perennial lily occurs in meadows and spring-time moist areas in yellow-pine forest and chaparral. It flowers from May to July, and is known from Los Angeles, Riverside, San Bernardino, Santa Barbara, San Luis Obispo, and Ventura counties.	**No Potential.** This taxon occurs within the region. However, it does not occur in the vegetation types present on the project site. Therefore, it has no potential to occur on the project site.
Calochortus weedii var. *vestus*	Late-flowered mariposa lily	none/none/CNPS 1b	This lily grows in chaparral, cismontane woodlands, and riparian woodland, and is often confined to serpentine areas. It is a perennial that blooms from June to August. It has been recorded in Monterey, Santa Barbara, San Luis Obispo, and Ventura counties.	**Low Potential.** This taxon occurs within the region. Although it was not found during the April 2003 survey, the survey was conducted prior to the flowering period of the taxon. Therefore, it is considered to have some potential, albeit low, to occur on the high terraces of the project site.

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Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
Caulanthus californicus	California jewel-flower	FE/SE/CNPS 1b	This jewel-flower is an annual that blooms from February to May. It is found in pinyon and juniper woodlands and foothill grasslands. It has been recorded in Fresno, Kings, Kern, Santa Barbara, San Luis Obispo, Tulare, and Ventura counties.	**Low Potential.** This species occurs on upland slopes in the region, and has some potential, albeit low, to occur in the vegetation types present on the high terraces of the project site. The species was not found during April 2003 survey.
Eriogonum kennedyi var. *alpigenum*	Southern alpine buckwheat	none/none/CNPS 1b	This perennial buckwheat blooms from July to September, and grows in high elevation alpine areas in Los Angeles, San Bernardino, and Ventura counties.	**No Potential.** This taxon occurs within the region. However, there is no suitable habitat for this taxon on the project site. Therefore, there is no potential for the taxon to occur on the project site.
Fritillaria ojaiensis	Ojai fritillary	none/none/CNPS 1b	This perennial lily blooms from March to May and grows in upland broad-leaved forests, chaparral, and lower montane coniferous forest in Santa Barbara, Ventura, and possibly San Luis Obispo counties.	**Low Potential.** This species occurs on upland slopes in the region, and has some potential, albeit low, to occur in the vegetation types present on the high terraces of the project site. It was not found during the April 2003 survey.
Layia heterotricha	Pale-yellow layia	none/none/CNPS 1b	This species is an annual herb that grows on alkaline and clay soils in cismontane woodlands, pinyon and juniper woodlands, and valley and foothill grasslands. It has been found in San Luis Obispo, Ventura, San Benito, Santa Barbara, Monterey, Kings, Kern, and Fresno counties. It	**Low Potential.** This species occurs on upland slopes in the region, and has some potential, albeit low, to occur in the vegetation types present on the high terraces of the project site. It was not found during the April 2003 survey.

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			has been recorded less than four miles from the project site.	
Monardella linoides ssp. *oblonga*	Flax-like monardella	none/none/CNPS 1b	This perennial herb blooms from June to August. It has been found in lower montane coniferous forest and pinyon-juniper woodlands in Kern, Tulare, and Ventura counties.	**Low Potential.** This species may occur on the upland slopes in the vicinity of the project site, and could potentially occur in the terrace vegetation types present on the project site. It was not found during the April 2003 survey.
Monolopia congdonii	San Joaquin woollythreads	FE/none/CNPS 1b	San Joaquin woollythreads occurs on sandy areas in chenopod scrub, and valley and foothill grasslands. It is an annual that blooms from February to May and has been found in Fresno, Kings, Kern, Santa Barbara, San Benito, San Luis Obispo, and Tulare counties.	**No Potential.** This species occurs a few miles downstream of the proposed project site in Santa Barbara Canyon. However, it does not occur in the vegetation types present on the project site. Therefore, it has no potential to occur on the project site.
Navarretia peninsularis	Baja navarretia	none/none/CNPS 1b	This small annual herb occurs in chaparral openings and in forest and wet areas of the lower montane coniferous forest. It blooms from June to August, and has been found in Kern, Santa Barbara, San Bernardino, San Diego counties and south into Baja California.	**Low Potential.** This species may occur on the upland slopes in the vicinity of the project site, and could potentially occur in the terrace vegetation types present on the project site. It was not found during the April 2003 survey.

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Oxytheca parishii var. *abramsii*	Abrams's oxytheca	none/none/CNPS 1b	This annual herb blooms during June to August, and has only been found in chaparral habitats on sandy or shale substrates. It is known to occur in Santa Barbara and Ventura counties.	**No Potential.** This species occurs in the region. However, it does not occur in the vegetation types present on the project site. Therefore, it has no potential to occur on the project site.
Sidalcea neomexicana	Salt spring checkerbloom	none/none/CNPS 2	The species is a perennial herb that blooms from March to June. It is known from chaparral, coastal scrub, and forest and desert areas throughout most of southern California, east to New Mexico and Utah, and south into Mexico.	**Moderate Potential.** The nearest recorded occurrence of this species is adjacent to the project site near Ozena Campground along Lockwood Valley Road. The collection made at the Ozena Campground described the habitat as alkaline with rush (*Juncus* sp.). Although this habitat type was not observed at the project site, there are other habitat types on the project site in which the species could occur. Therefore, although the species was not found during the April 2003 survey, it is considered to have a moderate potential to occur on the project site.
AMPHIBIANS				
Ensatina eschscholtzii croceator	Yellow-blotched salamander	none/CSC/none	Found in a variety of oak-dominated woodlands (typically in well-shaded canyons) to coniferous forests in Kern and Ventura counties from the Piute Mountains to the vicinity of Alamo Mountain. Downed woody debris may	**No Potential.** The taxon does not occur in the vegetation types present on the project site. In addition, the site is too dry for the taxon. Therefore, it has no potential to occur on the project site.

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			be a key habitat component for the taxon. The nearest record for the taxon is from a canyon on the north side of Cerro Noroeste at about 6,750 feet. This location is approximately 12 miles northeast of the project site.	
Bufo californicus	Arroyo toad	FE/CSC/none	Found historically on sand and gravel terraces and overflow pools located adjacent to larger Coast Range streams and rivers from the upper Salinas River system (San Luis Obispo County) to the San Diego River system (San Diego County). The species has also been found at six locations on the desert slope. The nearest record for the species is from Sespe Creek approximately 12 miles south of the project site.	**No Potential.** The species has not been recorded along the Cuyama River (Jennings and Hayes, 1994). In addition, the project site does not provide the necessary microhabitat for the species (i.e., shallow, sand or gravel-based overflow pools [for larval habitat] or stable sand terraces dampened by capillary action from the river [for juvenile and adult habitat]). In addition, flows in the vicinity of the project site do not generally persist past early June. Therefore, the project site has no potential to support the species.
Scaphiopus hammondii	Western spadefoot	FSC/CSC/none	Found in dry habitats (e.g., annual grassland, oak savannah and woodland, and coastal sage scrub) adjacent to vernal pools, stock ponds, and overflow channels of low-gradient drainages within the Central Valley and coastal California from Monterey	**No Potential.** No records for this species in Ventura County were found during the literature review for this report. In addition, the nearest reported occurrence is located approximately 23 miles north of the project site. Lastly, there is no suitable aquatic habitat for the species on the project site.

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			County to San Diego County. The species has been recorded from a pond approximately 23 miles north of the project site along State Highway 33.	Therefore, it has no potential to occur on the project site.
REPTILES				
Clemmys marmorata pallida	Southwestern pond turtle	FSC/CSC/none	The taxon is found primarily along the coast and in the Coast Ranges from Monterey County to San Diego County. A broad region of intergradation with the northwestern pond turtle (*C. m. marmorata*) occurs from the San Francisco Bay area to the southern San Joaquin Valley. The taxon occurs at scattered locations throughout its range in and adjacent to ponds, reservoirs, or other slow-moving perennial aquatic habitats (e.g., sloughs, streams, and rivers). Recorded occurrences of the taxon have been documented in Sespe Gorge and further downstream along Sespe Creek in the Los Padres National Forest (between 6 and 9 miles south of the project site).	**Known to Occur**. Four individuals of this taxon were observed in a small man-made pond on the northern boundary of the project site during the May 2003 survey. Consequently, it is known to occur on the project site.

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SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING WITHIN THE VICINITY OF THE OZENA VALLEY RANCH SURFACE MINING SITE, VENTURA COUNTY

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
Gambelia sila	Blunt-nosed leopard lizard	FE/SE/none	Found in the San Joaquin Valley from Merced County south to Ventura County. The species also occurs in the dry interior valleys adjacent to the southern San Joaquin Valley (i.e., Carrizo Plain and Cuyama Valley). Occurs in open, sparsely vegetated areas of low relief (typically in native or non-native grassland or alkali sink scrub).	**No Potential**. The project site supports suitable habitat for the species (i.e., sparsely vegetated arid scrub with low relief). However, the nearest recorded location for the species is 10 miles north of the project site along the Cuyama River. In addition, populations of leopard lizard south of the above occurrence are believed to represent either the species *G. wizlinenii* or *G. wizlinenii* and *G. sila* hybrids. Therefore, the species is considered to have no potential to occur on the project site.
Phrynosoma coronatum frontale	California horned lizard	FSC/CSC/none	Found at scattered locations throughout coastal California from the San Francisco Bay area to Ventura and northern Los Angeles counties. Also occurs along the Sierra Nevada foothills in the Sacramento Valley and throughout the San Joaquin Valley. Requires open vegetation communities for basking, loose soils for burial, and ants as a prey base.	**High Potential**. The taxon has not been found on the project site. However, an individual was recorded approximately 3,000 feet west of the project site during the May, 2003 survey. Therefore, given that the project site provides open vegetation with basking sites, sandy substrates that can used for night-time burial, and colonies of granivorous ants (i.e., prey base of the species), the taxon is considered to have a high potential to occur on the project site.
Charina bottae umbratica	Southern rubber boa	none/ST/none	Found in various montane forest habitats, but generally in the vicinity of streams or moist meadows (particularly	**No Potential**. The taxon does not occur in the vegetation types present on the project site. In addition, the site is too dry for the

TABLE 1

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Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			where there are loose, moist soils for burrowing). The taxon is limited to the Transverse Range from the San Emigdio Mountains east through the San Bernardino Mountains and in the San Jacinto Mountains of the Peninsular Range. The nearest recorded occurrences are from the San Emigdio Mountains approximately 13 miles northeast of the project site.	taxon. Therefore, it has no potential to occur on the project site.
Salvadora hexalepis virgultea	Coast patch-nosed snake	none/CSC/none	Found from near Creston (San Luis Obispo County) south through the Coast Range to San Diego County. The taxon typically occurs in chaparral and other structurally similar shrub vegetation communities. The taxon is known to occur in the vicinity of the upper Cuyama River based on museum records (Jennings and Hayes, 1994).	**Moderate Potential**. The project site provides suitable habitat for the taxon. Therefore, given the presence of historic records for the taxon in the region, it is considered to have a moderate potential to occur on the project site.
Thamnophis hammondii	Two-striped garter snake	none/CSC/none	Found from Monterey County south to San Diego County along the coast and in interior valleys. Also occurs along desert slope streams. Typically occurs in and along perennial and ephemeral streams with rocky beds or sandy riverbeds (always with adjacent dense	**No Potential**. The project site provides dense streamside vegetation (at scattered locations). However, flow in the river typically does not persist past early June. Therefore, the project site has no potential to provide suitable summer habitat for the species.

TABLE 1

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Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			stands of vegetation). The nearest recorded occurrences to the project site are approximately 11 to 14 miles south along Sespe Creek.	
			BIRDS	
Gymnogyps californianus	California condor	FE/SE/none	Found as a recently reintroduced species primarily in the mountains of Ventura, Santa Barbara, and Los Angeles counties. However, individuals are known to be wide-ranging and have even been seen soaring over the Tehachapi Mountains and southern Sierra Nevada. The species is strictly a scavenger and may travel up to 35 miles or more from roost sites in search of carrion. Most foraging occurs in open habitats that facilitate landings and takeoffs. Traditional roost sites are on cliffs or ledges, but snags and trees in old growth coniferous forest may also be used.	**Low Potential.** The species was recorded approximately 10 miles south of the project site in 1976 in the Matilija Condor Area within the Los Padres National Forest. The last wild condors were captured and taken into captivity in 1987, but releases of captive-produced birds have occurred since 1992. In 2002 three pairs of condors nested in rugged canyons adjacent to the Sespe Condor Sanctuary in western Ventura County. These locations are within approximately 25 miles of the project site. Therefore, there is some potential, albeit low, for the species to forage on and near the project site.
Aquila chrysaetos	Golden eagle (nesting and wintering)	none/CFP/none	Found as a breeding resident throughout most of California (other than the valley floor of the Central Valley). Also found as a wintering	**Low Potential.** The species has not been documented nesting in the immediate vicinity of the project site. Nor, is there suitable nesting habitat on the project site.

TABLE 1

SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING WITHIN THE VICINITY OF THE OZENA VALLEY RANCH SURFACE MINING SITE, VENTURA COUNTY

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			species throughout most of California (other than the high Sierra Nevada). Species requires open terrain for hunting (e.g., grassland, oak savannah, and early successional stages of shrub and woodland habitats). Typically nests on secluded cliffs, but may also use large, isolated trees.	However, the open habitats provided by the Cuyama River bed and adjacent lands are suitable as foraging habitat for the species. Given that the species nests in the higher, more remote mountains to the east, south, and west there is some potential, albeit low, for the species to occur on the project site while foraging.
Falco mexicanus	Prairie falcon (nesting)	none/CSC/none	Found as a breeding resident within the inner Coast Range, Sierra Nevada foothills, and much of the desert regions of California. Species requires open terrain for hunting (e.g., oak savannah, grassland, and early successional stages of shrub and woodland habitats). Typically nests on secluded cliff, bluff, or rock outcrop (particularly with southeastern exposure).	**No Potential.** No suitable nesting habitat occurs on or in the immediate vicinity of the project site. In addition, the nearest recorded nest site for this species is approximately 4.5 miles east of the project site on the Conrad Ranch. Therefore, the project site has no potential to provide nesting habitat for the species.
Melanerpes lewis	Lewis's woodpecker (nesting)	FSC/none/none	Found as a local wintering species within the lower-elevation, non-desert portions of California (typically in open woodland or savannah). Occurs as a nesting species in open deciduous and coniferous vegetation communities along the eastern slopes of the Coast	**No Potential.** The species was recorded on the project site during the April 2003 survey. The species is known to winter in the vicinity, but has not been documented nesting in the area. Consequently, the species is considered to have no potential to nest on the project site.

TABLE 1

SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING WITHIN THE VICINITY OF THE OZENA VALLEY RANCH SURFACE MINING SITE, VENTURA COUNTY

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			Ranges and in the eastern Sierra Nevada, Cascade Range, and Great Basin mountains.	
Lanius ludovicianus	Loggerhead shrike (nesting)	FSC/CSC/none	Found as resident and wintering species throughout the lower elevation portions of California in grasslands, shrub communities, oak savannah, and other open woodland types where there are trees with dense cover for nesting.	**Moderate Potential.** The project site provides suitable nest sites and foraging habitat for the species. In addition, it is within the known nesting range of the species. Therefore, the species has a moderate potential to occur on the project site.
Eremophila alpestris actia	California horned lark	none/CSC/none	The taxon nests in the San Joaquin Valley, adjacent Sierra Nevada foothills, and coastal California from Sonoma County south to San Diego County. Preferred nesting habitat for the taxon is generally provided by level or gently rolling low, sparse grassland; mountain meadows; open coastal plains; fallow grain fields, bald hills; and alkali flats.	**No Potential.** The project site does not provide a habitat type in which the taxon has been documented nesting. In addition, the taxon is unlikely to winter in the habitats represented on the project site. Therefore, it is considered to have no potential to occur on the project site.
Toxostoma redivivum	California thrasher	FSC/none/none	Found as a resident in foothill chaparral communities (up to over 6,000 feet in southern California) and less commonly in open foothill riparian habitats.	**High Potential.** The species was recorded at two locations immediately downstream of the project site (between 700 and 1,500 feet west of the project site). Consequently, the species is considered to have a high potential to nest (particularly in the dense

TABLE 1

SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING WITHIN THE VICINITY OF THE OZENA VALLEY RANCH SURFACE MINING SITE, VENTURA COUNTY

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
				willow scrub stands) or forage on the project site.
Icteria virens	Yellow-breasted chat (nesting)	none/CSC /none	Found as a summer resident generally in riparian habitats in low to mid-elevation coastal, valley, foothill, and desert habitats (up to 4,800 feet in foothill riparian and 6,500 feet east of the Sierra Nevada). Nesting typically occurs in dense vegetation adjacent to streams.	**High Potential.** The species was recorded at two locations immediately downstream of the project site and one location on the project site. The species was not documented as nesting, but given the numbers of individuals, presence of suitable habitat (dense willow scrub), and behavior of the birds (singing), it is considered to have a high potential to nest on the project site.
Spizella breweri	Brewer's sparrow (nesting)	MNBMC/none/none	Found as a breeding species east of the Sierra Nevada-Cascade crest, in the mountains and higher valleys of the Mojave Desert, and along the southern perimeter of the San Joaquin Valley (particularly in areas of continuous sagebrush). The species also occurs locally at scattered locations in and near the upper reaches of the Cuyama River.	**High Potential.** The species was recorded on the project site during the May 2003 survey. It was found in a stand of mature sagebrush (i.e., suitable nesting habitat) on an upper terrace along the south bank of the river. Although nesting was not confirmed during the survey, the species is considered to have a high potential to occur as a nesting species on or immediately adjacent to the project site given the presence of suitable habitat and other nesting records in the vicinity.

TABLE 1

SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING WITHIN THE VICINITY OF THE OZENA VALLEY RANCH SURFACE MINING SITE, VENTURA COUNTY

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
Agelaius tricolor	Tricolored blackbird (nesting)	FSC/CSC/none	Found as a resident species in annual grassland, oak savannah and freshwater marsh within the Central Valley and coastal California from Sonoma County to San Diego County. Nesting habitat typically involves emergent freshwater marsh, but may also include dense stands of willow, blackberry, thistle, nettles, or grasses. Grasslands or rangeland providing an abundant source of food (e.g., grasshoppers or butterfly larvae) often are within at least three miles of nest colonies.	**Known to Occur.** The species was documented nesting on the project site during the May 2003 survey. Approximately 50-80 nests occur in a cattail stand in a man-made pond adjacent to the aggregate processing operation. Foraging flocks were also observed traveling to grain fields located east of the project site and north of the river.
Carduelis lawrencei	Lawrence's goldfinch (nesting)	FSC/none/none	Found as a breeding species in oak woodlands, other arid woodlands, and chaparral in the lower elevations of northern California and in riparian woodland, pinyon-juniper woodland, and lower montane communities in southern California. A local water source and a source of abundant seeds are required habitat components.	**High Potential.** The species was recorded immediately adjacent to the project site (within 600 feet) during the May 2003 survey. In addition, the presence of dense willow riparian habitat on the project site (i.e., suitable nesting habitat for the species), time of observations (early May), and behavior of the species (singing) suggests that the species is nesting in the vicinity. Therefore, it has a high potential to nest on the project site.

TABLE 1

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Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			MAMMALS	
Perognathus inornatus inornatus	San Joaquin pocket mouse	FSC/none/none	This taxon typically occurs on fine-textured sandy soils on ridge tops and hillsides supporting grasslands or blue oak savannah. The species *P. inornatus* is distributed within the Central Valley from Yolo and Sutter counties to the southern-most portions of the San Joaquin Valley and within and near the dry interior valleys of the Coast Range (e.g., Salinas and Cuyama valleys, and Carrizo Plain). It should be noted that the subspecific taxonomy of *P. inornatus* is unresolved and populations within and near the Carrizo Plain and Cuyama Valley may be synonymous with *P. inornatus neglectus* (i.e., McKittrick pocket mouse).	**No Potential.** The taxon has been recorded from approximately 9.5 miles north of the project site in Quatal Canyon. However, the vegetation types/habitats on the project site are not considered suitable for the species. Therefore, it has no potential to occur on the project site.
Vulpes macrotis mutica	San Joaquin kit fox	FE/ST/none	Found in San Joaquin Valley from Contra Costa County south to Kern County. Also found in dry interior valleys of the Coast Range (e.g., Salinas and Cuyama valleys). Occurs in open, sparsely vegetated areas of low relief (typically in native or non-	**Low Potential.** The taxon has been recorded in the upper Cuyama River watershed in northern Ventura and Santa Barbara counties and southeastern San Luis Obispo County (USFWS, 1998). In addition, it occurs in the habitat types represented on the project site. However,

TABLE 1

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Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
			native grassland or alkali sink scrub).	there are no known records for the taxon within the vicinity of the project site. Therefore, it is consider to have some potential, albeit low, to occur on the project site.
Taxidea taxus	American badger	none/none/none	The species is found in a variety of open herbaceous and shrub vegetation types/habitats with dry, friable soils. It is widely distributed in California, with the exception of the humid coastal belt, occurring from sea-level to alpine meadows and coniferous forests.	**Moderate Potential.** No sign of the species was recorded on the project site during the May 2003 survey. However, the species is widespread in the region, likely uses the river as a travel corridor, and therefore is considered to have a moderate potential to occur on the project site.

FEDERAL		
	FE	Federally listed as Endangered
	FT	Federally listed as Threatened
	FC	Federal Candidate Species (former Category 1 candidates)
	FSC	U.S. Fish and Wildlife Service designated "Species of Concern" (former Category 2 Candidates for listing)
	MNBMC	U.S. Fish and Wildlife Service designated "Migratory Non-game Bird of Management Concern"
STATE		
	SE	State listed as Endangered
	ST	State listed as Threatened
	CFP	California Department of Fish and Game designated "Fully Protected"
	CSC	California Department of Fish and Game designated "Species of Special Concern"
OTHER		
	CNPS List 1a	Plants presumed extinct in California
	CNPS List 1b	Plants that are rare, threatened, or endangered in California and elsewhere
	CNPS List 2	Plants that are rare, threatened, or endangered in California, but are more common elsewher

Late-flowered mariposa lily (*Calochortus weedii* var. *vestus*) has no state or federal protection, but is included on the California Native Plant Society (CNPS) 1b list, which includes plants that the CNPS considers rare, threatened, or endangered in California and elsewhere. This perennial lily (all *Calochortus* grow from bulbs and are perennial) has inch-long petals that are cream, deep yellow, purplish, or red-brown in color when in flower from June to August. The on-site botanical survey was conducted prior to the normal flowering period of this species and therefore its occurrence cannot be discounted. It has been found growing in Monterey, Santa Barbara, San Luis Obispo, and Ventura counties in a variety of habitats including chaparral, cismontane woodland, and riparian woodland. It can be associated with serpentine geology/soils and is typically found at elevations ranging from 900 to 3,000 feet. The Cuyama River terraces with shrub-dominated plant communities, including big sagebrush and scale-broom types, are potential habitat for this taxon though the likelihood of its occurrence is low because it is not typically associated with these vegetation types.

California jewel-flower (*Caulanthus californicus*) is protected as state and federally endangered and included on the CNPS list 1b. It is an annual herb in the Brassicaceae (mustard family) that blooms from February to May, and has been found growing from 200 to 3,300 feet in elevation in Fresno, Kings, Kern, Santa Barbara, San Luis Obispo, Tulare, and Ventura counties. It produces several small purple flowers on a stalk that can be over one foot tall, and it is distinct because it has large clasping leaves on the stalk, some over four inches long. It is typically found on gently sloping grasslands or openings in juniper woodlands. It was listed as endangered largely because of populations that were destroyed by development and agriculture in the southern San Joaquin Valley. This distinctive plant was not found during the April 2003 survey, but there is a low potential for it to occur on the higher terraces along the Cuyama River.

Ojai fritillary (*Fritillaria ojaiensis*) is a perennial lily that grows from a bulb, and is on the CNPS list 1b. It has been reported from Santa Barbara and Ventura counties and possibly from San Luis Obispo County. It has whorled leaves typical for tall lilies and a flower stalk with several nodding flowers with 1-inch long petals that are dull greenish yellow with dark spots on the backside. It has been found on rocky slopes and in river basins from 1,000 to 1,600 feet in elevation in broadleaved upland mesic forest, chaparral, and lower montane coniferous forest. No fritillaries were found during the April 2003 survey, which was conducted during the prime flowering period (March to May) for this species. However, this species has a low potential of occurring on the higher shrub-dominated terraces along the Cuyama River.

Pale-yellow layia (*Layia heterotricha*) is included on the CNPS 1b list. It is an annual in the Asteraceae (sunflower family) that blooms from March to June. It has rather showy white to cream-colored ray flowers up to 1-inch long, so it is very conspicuous when in bloom. It grows on open clay soils at 900 to 5,300 feet elevation, and has been found in Fresno, Kings, Kern, Monterey, Santa Barbara, San Luis Obispo, and Ventura counties, and possibly San Benito County. It has been found in cismontane woodland, pinyon juniper woodland, and valley and foothill grasslands. It was not found on the proposed

project site during April surveys, but has a low potential of occurring on the terraces beside the Cuyama River.

Flax-like monardella (*Monardella linoides* ssp. *oblonga*) is a CNPS 1b list plant. It is a perennial in the Lamiaceae (mint family), which produces a stalk to 2 feet tall with a head of rose-purple flowers up to ½-inch long. It has been found in Kern, Tulare, and Ventura counties in lower montane coniferous forest, pinyon juniper woodland, and upper montane coniferous forest from 1,000 to 8,100 feet in elevation. It blooms from June to August. The taxon was not found during the April 2003 survey, though there is a low potential for the species to occur on the shrub-dominated terraces beside the Cuyama River.

Baja navarretia (*Navarretia peninsularis*) is a CNPS list 1b species that is an annual herb in the Polemoniaceae (phlox family). Its stems range from 1 to 10 inches tall, though its small lavender flowers are fairly indistinct. Baja navarretia typically grows in wet openings in chaparral and lower montane coniferous forests. It blooms from June to August and was not found during the April 2003 survey, even though navarretia species can typically be identified to genera even when not in flower. There is a low potential for the species to occur on the shrub-dominated terraces beside the Cuyama River, though the precise habitat (wet openings) appears to be lacking.

Salt spring checkerbloom (*Sidalcea neomexicana*) is a CNPS list 2 species (plants that are rare, threatened, or endangered in California, but are more common elsewhere). It is a perennial herb in the Malvaceae (mallow family), and has been found growing in Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, and Ventura counties in California, and east to Utah and New Mexico and south into Mexico. It occurs in a wide variety of habitats from sea level to over 5,000 feet in elevation including chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub (particularly on alkaline playas, springs and marshes). It blooms from March to June, and forms a stem one to three feet tall, with distinctive fleshy, incised leaves. The flowers, borne on a long stalk, are typically ½-inch long and rose colored. According to the CNDDB this species was reportedly collected near the U.S. Forest Service's Ozena Campground (adjacent to the project site). Therefore, there is a moderate potential for the species to occur on the project site due to the close proximity of this previous collection, though it was not found during the April 2003 survey and the preferred habitat for the species (alkaline seeps) appears to be lacking from the site.

Special-Status Wildlife Species

Several special-status wildlife species were observed on or immediately adjacent to the project site during the survey. These species include southwestern pond turtle, California horned lizard, Lewis's woodpecker (*Melanerpes lewis*), California thrasher, yellow-breasted chat, Brewer's sparrow (*Spizella breweri*), tricolored blackbird (*Agelaius tricolor*), and Lawrence's goldfinch (*Carduelis lawrencei*). Although not observed or otherwise documented on the project site, six other special-status wildlife species are considered to have some potential to occur on the project site. These species include

coast patch-nosed snake (*Salvadora hexalepis virgultea*), California condor (*Gymnogyps californianus*), golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), San Joaquin kit fox (*Vulpes macrotis mutica*), and American badger (*Taxidea taxus*). Each of the above species as well as other special-status wildlife species that have been documented in the vicinity of the project site is evaluated in Table 1. Those species that are known to occur or that have some potential to occur on the project site are further described below.

Southwestern pond turtle occurs in ponds, reservoirs, or other slow-moving perennial aquatic habitats (e.g., sloughs, streams, and rivers) from Monterey County south through coastal California to San Diego County. The taxon also occurs in a broad area of intergradation with the northwestern pond turtle (*C. m. marmorata*) from the San Francisco Bay Area south through the San Joaquin Valley. This taxon, which is designated a federal species of concern and California species of special concern, has been documented at scattered locations throughout Ventura County (primarily at mid to high elevations). It had not previously been documented on or immediately adjacent to the project site. The nearest reported occurrences are from Sespe Gorge and locations further downstream along Sespe Creek (Figure D-1). These occurrences are approximately six to nine miles south of the project site. However, the taxon was recorded on the project site during the May 2003 survey (Figure D-2). Four adult southwestern pond turtles were observed basking along the perimeter of a small man-made pond located immediately south of the aggregate processing plant (see photo in Appendix C). This pond, which was created three years ago (Michael Virgilio, pers. comm., May 1, 2003), supports an emergent fringe of cattail, open water, and a small number of basking sites. It is located immediately north of the bed of the Cuyama River where it is protected from all, but the highest flows in the river. Evidence of recruitment was not documented at this location since no juveniles or subadults were observed. However, since the taxon is known to move up to 600 feet from aquatic habitats to find suitable egg-laying sites, the individuals in the pond could potentially utilize non-compacted soils on the high terrace located immediately west of the pond as an egg-laying site. It should be further noted that a release of red-eared sliders (*Trachemys scripta elegans*) occurred near this location approximately 20 years ago (Michael Virgilio, pers. comm., May 1, 2003). However, no red-eared sliders were observed during the survey.

California horned lizard is a California species of special concern and federal species of concern that occurs in a variety of open habitats that provide sites for basking, sandy substrates in which night-time burial can occur, and a suitable prey base (the taxon feeds almost exclusively on ants). Suitable habitat for the taxon is provided by most of the natural habitats on and immediately adjacent to the project site (other than the river bed, steep slopes, and lands in agricultural production). However, the most suitable habitat is located on the high alluvial terraces above the active river channel. A single individual of the taxon was subsequently recorded from an alluvial terrace on the north side of the river approximately 3,000 feet west of the project site during the May 2003 survey (Figure D-2) (see photo in Appendix C). The taxon was not recorded from the project site, but

given the proximity of the previous record and presence of suitable habitat it is considered to have a high potential to occur on the project site.

Coast patch-nosed snake is designated as a California species of special concern. The taxon is among the most poorly known of the regularly surface-active snakes that occur in California (Jennings and Hayes, 1994). However, it has been found to be active from March to October and have a bimodal activity period that includes peaks in late morning and late afternoon (Klauber, 1939, Jennings and Hayes, 1994). Furthermore, this bimodal activity pattern may be associated with the activity pattern of what is believed to be a key prey species (i.e., whiptail lizards) (Cunningham, 1966; Jacobsen and Whitford, 1971). The taxon is distributed from near Creston (San Luis Obispo County) south through the Coast Range to San Diego County. The habitat requirements of the taxon are not well known, but appear to include a moderate cover of shrubs (e.g., chaparral communities) since it is not found in habitats without this type of cover. The taxon has not been recorded on the project site, but has been documented within the region based on museum records (Jennings and Hayes, 1994). Therefore, given the presence of suitable habitat on the project site (particularly on the high terraces), documentation of western whiptail within the immediate vicinity of the project site, and the taxon's known range, it is considered to have a moderate potential to occur on the site.

California condor is state and federally listed as endangered. The last wild condors were captured in 1987 and taken into captivity due to a precipitous decline in the species (fewer than 20 remaining individuals). Captively-produced condors, as well as some of the originally captured condors, have been reintroduced into the wild since 1992. The reintroductions in California have been focused on an area in northeastern Ventura County that includes the Sespe Condor Sanctuary. The species, which is considered a permanent resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley (i.e., Coast Range from Santa Clara County south to Los Angeles County, Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada), travels over a wide area when foraging. The species is known to regularly fly 35 miles or more from roost sites and occasionally travels even greater distances. Individuals that normally confine their activities to Ventura and Santa Barbara counties have occasionally been observed over the southern Sierra Nevada. The species roosts on cliffs and in large trees and snags in remote areas. Nest sites historically were sited in caves, crevices, behind rock slabs, or on large ledges on high sandstone cliffs. The nest is often surrounded by brush. The first California condors produced in the wild in more than 15 years have been hatched during the last two years. The young from the last two years did not survive due to the inexperience of the nesting pairs. However, indications are that successful recruitment will likely occur as these and other pairs gain additional experience. The species was not observed on the project site. Nor is the species expected to occur on the project site. However, given that the species is wide-ranging, occurs in the mountains to the southeast of the project site, and the site provides an open habitat type that facilitates landings, foraging, and take-offs, it cannot be discounted even if the probability that it will occur on site is extremely low.

Golden eagle occurs as an uncommon breeding resident throughout the state with the exception of the valley floor of the Central Valley. The species is a fully protected species within California (under §3511 of the California Fish and Game Code). As such the species cannot be taken at any time and permits authorizing take cannot be issued. Nest sites are generally located on secluded cliffs, in large trees in rugged, open canyons, or on escarpments. Nesting occurs from January through August with peak activity occurring during March through July. Nest territories have been documented ranging in size from 22 to 74 square miles where size is probably a function of prey density and the openness of the habitat surrounding the nest site (which affects prey availability during hunting). Although the species was not observed on or in the vicinity of the project site, it has some potential, albeit low, to occur on the project site given the presence of suitable nesting and foraging habitat in the surrounding mountains to the east, south, and west.

Lewis's woodpecker is designated as a California species of special concern (particularly in regards to nesting). It occurs as a nesting species in open deciduous and coniferous woodland and forest along the eastern slopes of the Coast Ranges and in the eastern Sierra Nevada, Cascade Range, and mountains of the Great Basin. Nesting occurs from early May through July with a peak in late May and early June. Nests are excavated in a snag or dead portion of a tree at 5 to 80 feet above ground (Raphael and White, 1984). The species tends to wander during the fall. It then typically winters in the lower-elevation, non-desert portions of California (usually in open woodland or savannah). The species was recorded on the project site during the April 2003 survey. However, the species does not nest in the area. It is only known to winter in the area (David Pereksta, USFWS, pers. comm., May 2, 2003). Therefore, given that the species' special status is associated only with nesting habitat, it is considered to have no potential to occur on the project site and is not addressed further.

Loggerhead shrike is a federal species of concern and California species of special concern. The species generally occurs in a variety of open grassland, oak savannah, shrubland, and other similar habitats where it feeds primarily on large insects (e.g., grasshoppers). However, the species may also occasionally take small reptiles, birds, and mammals. Loggerhead shrikes nest during March to June with young becoming independent during July or August. The nest is generally well-concealed on a stable branch in a densely-foliaged shrub or tree. Nest territories have been found to range in size from 11 to 40 acres (Miller, 1931). In areas of year-round residence (such as much of lowland California) members of a pair are known to defend adjoining territories during the non-breeding season and then defend a single nesting territory comprised of the adjoining winter territories during the breeding season (Lefranc, 1997). The species has not been recorded on the project. However, given the presence of suitable habitat and the species' wide distribution in California, it is considered to have a moderate potential to nest on the project site.

California thrasher is designated as a federal species of special concern. It occurs as a resident species within low to mid-elevation chaparral communities and less commonly in young, dense riparian communities in the foothills of the Sierra Nevada, and Transverse and Peninsular Ranges. It also occurs throughout much of coastal California

(including the Coast Ranges) in similar habitats. In southern California it may occur up to 6,600 feet in elevation in montane chaparral. Home ranges for the species may range up to 30 acres, while nest territories were documented to average approximately 3.5 acres in a study in the Santa Monica Mountains (Kingery, 1962). The nesting season for this species ranges from early December to early August with a peak from mid-April to mid-June. California thrasher was documented immediately adjacent to the project site. Two individuals were heard and observed downstream of the project site on both sides of the river within 700 to 1,500 feet of the site (Figure D-2). Although nesting was not confirmed, it is highly likely that these individuals were nesting in either the dense willow scrub or chaparral communities located at these sites given the time of year. Therefore, the species is considered to also have a high potential to nest on the project site (given that similar habitats occur on the site).

Yellow-breasted chat is designated as a California species of special concern (particularly in regards to nesting). It is considered to be an uncommon summer resident in coastal California and the foothills of the Sierra Nevada where it occurs in riparian thickets or other dense, brushy thickets near water. The species nests from early May to August with a peak in June. Nest territories have been documented to range in size from 0.1 to more than 3.1 acres (Brewer, 1955; Thompson and Nolan, 1973). The species was recorded on and immediately downstream of the project site during the May 2003 survey (Figure D-2). Singing individuals were recorded at three locations that were each associated with dense willow riparian scrub. Although nesting was not confirmed, the habitat at these sites is suitable for nesting. However, the timing of the observations (i.e., early May) suggests that these individuals could also only be migrants that are passing through the area. Given that any further determination in regards to nesting status cannot be made without follow-up surveys during a more appropriate time (e.g., June), this species is conservatively considered to have a high potential to nest on the project site.

Brewer's sparrow is designated a migratory non-game bird of management concern (MNBMC) within its breeding range by the United States Fish and Wildlife Service (USFWS). As such it is considered a special-status species. The species nests east of the Sierra Nevada-Cascade crest, in the mountains and higher valleys of the Mojave Desert, and along the southern perimeter of the San Joaquin Valley. In the vicinity of the project site the species specifically occurs in a disjunct population that is associated with suitable vegetation types in and near the Carrizo Plain, Cuyama Valley, and Lockwood Valley. The species shows a distinct preference for nesting in continuous stands of sagebrush (*Artemisia tridentata*), but may also utilize mixed stands with other shrub species (particularly in the western portion of its range where it utilizes relatively low shrub cover). Nesting occurs primarily from May to August with a peak in June. Migrants are typically observed outside of their breeding range during September and October. The species was recorded within the project site in a stand of mature sagebrush on a high terrace along the south bank of the river (Figure D-2). Although the species was not confirmed to be nesting, it is considered to have a high potential to nest on the project site given the presence of the local breeding population.

Tricolored blackbird is a federal species of concern and California species of special concern. The species historically nested in extremely large colonies. A small number of these colonies included more than 50,000 nests (Neff, 1937). More recent colonies have generally been documented to range in size from 50 to more than 10,000 nests (Beedy et al., 1991). Most historic nests (approximately 93%) were located in cattail or tule marsh (Neff, 1937). In contrast, only 53% of the colonies reported during the 1970s and 1980s were in cattails or tules. Most of the remaining colonies were located in willow thickets, blackberry or wild rose thickets, thistles, or nettles. In addition, a small number of colonies have been found in giant cane, safflower, alfalfa, oats, tamarisk, saltbush, elderberry/poison oak riparian, and lemon orchards (Beedy et al., 1991). These latter nesting habitats are considered to be less suitable for the species since they do not provide significant protection from nest predators (an important factor for colonial nesters). Important criteria for the selection of nest sites and successful recruitment of young include a nearby source of water and abundant concentrated supply of insects (e.g., grasshoppers or butterfly larvae [e.g., alfalfa butterfly larvae - *Colias eurytheme*]). These latter resources are typically within less than four miles of the colony (Orians, 1961). Small foraging flocks of tricolored blackbirds were initially observed flying between grain fields located to the east of the project site (north of the Cuyama River) and an unknown location west of these observations. These foraging flocks were later found to be originating from a colony located in a cattail stand in a small man-made pond immediately south of the aggregate processing plant. The colony is small and estimated to contain 50 to 80 nests. In addition, the pond containing the cattail stand was created three years ago (Michael Virgilio, pers. comm., May 1, 2003). Therefore, the colony was established recently (after development of the aggregate processing plant).

Lawrence's goldfinch is a federal species of concern. It typically nests in a variety of low elevation communities that include oak woodland, other open woodland types, chaparral, and riparian woodlands (particularly in the more arid portions of California). Nesting sites are often located adjacent to a source of water and abundant seeds. Both of these latter habitat requirements are met by the project site and adjacent lands given that water is available in the river through early June and an abundant source of seeds is available within the nearby grain fields. Nesting typically begins during late March or early April with nest territories comprising 0.08 to 0.37 acres (Linsdale, 1950; Coutlee, 1968). However, the species is highly erratic and tends to not nest in the same locations from year to year. Two pairs of this species were observed immediately adjacent to the project site during the May 2003 survey (within 600 feet of the project site boundaries) (Figure D-2). In addition, the project site provides potential nesting sites in the dense willow scrub thickets that are located on the higher terraces located adjacent to the river. Therefore, the species is considered to have a high potential to nest on the project site.

San Joaquin kit fox is another special-status taxon that may occur on the project site. It is state listed as threatened and federally listed as endangered. The subspecies historically occurred throughout the southern portion of the San Joaquin Valley, along the eastern edge of the San Joaquin Valley, and in the dry interior valleys of the Coast Range. In the vicinity of the project site the subspecies has been documented in the upper Cuyama River watershed in northern Ventura and Santa Barbara counties and southeastern San

Luis Obispo County (USFWS, 1998). The taxon occurs in a variety of open grassland, oak savannah, and shrub vegetation types/habitats. However, in the southern portion of its range it is generally found in sparse annual grassland and scrub communities (e.g., valley sink scrub, saltbush scrub). San Joaquin kit fox densities vary over the range of the species, but the taxon was found to have densities of between 0.39 to 0.62 individuals per square mile on the Carrizo Plain Natural Area (White and Ralls, 1993). Den characteristics of the subspecies vary across the range of the taxon. In the southern portion of its range the taxon often creates dens with two entrances. Natal dens typically generally have multiple entrances. Entrances are usually 8 to 10 inches in diameter and are normally higher than wide, but kit foxes can utilize dens with entrances as small as four inches in diameter. Kit foxes often change dens on a regular basis. One kit fox was tracked to 70 dens during a two-year study (USFWS, 1998). Home ranges for the taxon have been reported by several authors to range from 1 to 12 square miles (USFWS, 1998). No evidence of the taxon was observed during the May 2003 survey. However, California ground squirrel was documented on the project site. This latter species is often an indicator for the presence of San Joaquin kit fox (at least within the fox's known range). Therefore, given the presence of suitable habitat and California ground squirrel on the project site, records of the taxon in the region, and the taxon's mobility and size of home ranges, there is some potential for San Joaquin kit fox to occur on the project site. However, this potential is considered low given that the project site is at the extreme southwestern boundary of the taxon's known range.

American badger does not have a designated status, but is still included on the CDFG's special animals list (January 2003). Suitable habitat for badgers is characterized by herbaceous, shrub, and open stages of most habitats with dry, friable soils. Home range estimates vary geographically and seasonally, but tend to range between 338 and 1,549 acres (Messick and Hornocker, 1981; Lindzey, 1978). Badgers mate in summer and early fall and most young are born in March and April (Long, 1973). No evidence of the species was observed during the May 2003 survey. However, given the presence of suitable habitat on the project site, presence of California ground squirrel (an important prey species), the size of home ranges, mobility of the species, and the species' wide distribution within California, the species is considered to have a moderate potential to occur on the project site.

Conclusions

No special-status plant species or rare plant communities were recorded on the project site during the April 2003 plant survey. Seven special-status plant species that occur in the region are considered to have some potential to occur on the site, though none were documented on the project site. These species include late-flowered mariposa lily (*Calochortus weedii* var. *vestus*), California jewel-flower (*Caulanthus californicus*), Ojai fritillary (*Fritillaria ojaiensis*), pale-yellow layia (*Layia heterotricha*), flax-like monardella (*Monardella linoides* ssp. *oblonga*), Baja navarretia (*Navarretia peninsularis*), and salt spring checkerbloom (*Sidalcea neomexicana*). Only spring checkerbloom (*Sidalcea neomexicana*) is considered to have better than a low potential of occurring on the project site.

The only special-status wildlife species that were recorded on or near the project site during the April/May 2003 wildlife survey were southwestern pond turtle, California horned lizard, Lewis's woodpecker, California thrasher, yellow-breasted chat, Brewer's sparrow, tricolored blackbird, and Lawrence's goldfinch. Only one of the latter six avian species was documented nesting on the site (i.e., tricolored blackbird). However, each of the remaining seven avian species, with the exception of Lewis's woodpecker, is considered likely to be nesting within or immediately adjacent to the project site. Six other special-status wildlife species that occur in the region, but that were not documented on the project site, are considered to have some potential to occur on the site. These species include coast patch-nosed snake, California condor, golden eagle, loggerhead shrike, San Joaquin kit fox, and American badger. Of these latter six species, only coast patch-nosed snake, loggerhead shrike, and American badger are considered to have better than a low potential of occurring on the project site.

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