CHAPTER SEVEN: Environmental Conditions

This chapter provides an overview of the Planning Area's existing environmental conditions such as air quality, biological resources, cultural resources, water resources, and noise. The section on biological resources includes a description of habitats, fish and wildlife, special status species, and wetlands. The section on cultural resources describes prehistoric and historic conditions and historical architectural resources.

AIR QUALITY

Citrus Heights lies within the Sacramento Valley Air Basin (SVAB). The SVAB is designated a state and federal attainment area (the area has attained the state and federal air quality standards) for carbon monoxide (CO). Sacramento County is a state and federal non-attainment area (the area has not attained the air quality standard) for ozone and inhalable particulate matter smaller than 10 microns in diameter (designated PM10). Table 7-1 shows federal and state ambient air quality standards. Table 7-2 summarizes data for the years 1999 to 2001 from monitoring stations near the project site.

Monitored CO levels have been trending downward in Sacramento County over the last several years (1999 - 2001) and have been relatively stable over the last three years. Sacramento was declared an attainment area for the federal CO standard in March 1998.

The state 24-hour PM10 standard has been exceeded eight percent of the time. Neither the federal/state annual PM10 standards have been exceeded during the 1998 – 2000 period reported in Table 7-2.

The state ozone standard has been exceeded 10 to 14 times each year (1999 - 2001) at the individual monitoring stations shown in Table 7-2. Ozone levels exceeding the federal ozone standard have also been recorded. Substantial year-to-year variations in monitored ozone levels are common; therefore, no consistent trend



Citrus Heights lies within a State and Federal nonattainment area for ozone and inhaliable particulate matter.

Environmental Conditions

in ozone levels is apparent for the air basin as well as for these individual monitoring stations.

The main source of CO, and ozone precursors (reactive organic gases [ROG], and nitrogen oxides [NOx]) is on-road motor vehicles. A variety of activities and processes contribute to PM10 emissions (CARB 1998).

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		Auburn Bouleva	ard Specific P TABLE 7-1	lan • Existi	ng Conditior	ns Report		
			IABLE /-I					
	AMB	IENT AIR QUALITY STA	NDARDS AP			FORNIA		
		Standard, as parts per million		as m	andard, icrograms ubic meter	Violation Criteria		
Pollutant	Symbol	Average Time	Californ ia	National	California	National	California	National
Ozone	03	1 hour	0.09	0.12	180	235	If exceeded	If exceeded on more than 3 days in 3 years
		8 hours	N/A	0.08	N/A	N/A	N/A	If exceeded on more than 3 days in 3 years
Carbon monoxide	СО	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
(Lake Tahoe only)		8 hours	6	N/A	7,000	N/A	If exceeded	N/A
Nitrogen dioxide	NO ₂	Annual average 1 hour	N/A 0.25	0.053 N/A	N/A 470	100 N/A	N/A If exceeded	If exceeded N/A
Sulfur dioxide	so ₂	Annual average 24 hours	N/A 0.05	0.03 0.14	N/A 131	80 365	N/A If exceeded	If exceeded If exceeded on more than 1 day per year
		1 hour	0.25	N/A	665	N/A	N/A	N/A
Hydrogen sulfide	H ₂ S	1 hour	0.03	N/A	42	N/A	If equaled or exceeded	N/A
Vinyl chloride	C ₂ H ₃ Cl	24 hours	0.010	N/A	26	N/A	If equaled or exceeded	N/A
Inhalable particulate Matter	PM10	Annual geometric mean Annual arithmetic mean 24 hours	N/A N/A N/A	N/A N/A N/A	30 N/A 50	N/A 50 150	If exceeded N/A N/A	N/A If exceeded If exceeded on more than 1 day per year
Fine Particulate Matter	PM _{2.5}	Annual arithmetic mean 24 hours	N/A N/A	N/A N/A	N/A N/A	15 65	N/A N/A	If exceeded If exceeded on more than 1 day per year
Sulfate particles	so ₄	24 hours	N/A	N/A	25	N/A	If equaled or exceeded	N/A
Lead particles	Pb	Calendar quarter	N/A	N/A	N/A	1.5	N/A	If exceeded no more than 1 day per year
		30 days	N/A	N/A	1.5	60	If equaled or exceeded	N/A

Source: California Air Resources Board, 2003.

	TABLE 7-2		
SUMMARY OF CARBON MONO2 Station Location	XIDE, OZONE, AND PM1	10 MONITORING 2000	<u>5 DATA</u> 2001
Carbon Monoxide (CO)	1373	2000	2001
Del Paso Manor			
Highest 8-hour concentration (ppm)	5.67	4.60	5.28
Days above standard (a)	0	0	5.2
North Highlands – Blackfoot Way	0	0	<u>`</u>
Highest 8-hour concentration (ppm)	3.54	3.07	3.1
Days above standard (a)	0	0	011
Roseville – N Sunrise Blvd		Ŭ	
Highest 8-hour concentration (ppm)	2.24	2.36	1.90
Days above standard (a)	0	0	
PM ₁₀	1998 (b)	1999 (b)	2000 (b)
Del Paso Manor			
Highest 24-hour concentration (ug/m3)	104	141	58.
Geometric mean (ug/m3)	17	22	1
Arithmetic mean (ug/m3)	22	27	N/2
Percentage of days above standard (b)	5%	8%	39
North Highlands – Blackfoot Way			
Highest 24-hour concentration (ug/m3)	73	73	82.
Geometric mean (ug/m3)	19	22	2
Arithmetic mean (ug/m3)	22	26	N/2
Percentage of days above standard (b)	3%	6%	29
Roseville – N Sunrise Blvd			
Highest 24-hour concentration (ug/m3)	67	89	58.
Geometric mean (ug/m3)	19	23	2
Arithmetic mean (ug/m3)	22	26	N/A
Percentage of days above standard (c)	5%	7%	29
Ozone	1999	2000	2001
Del Paso Manor			
1 st High (ppm)	0.131	0.124	0.14
2nd High (ppm)	0.123	0.123	0.11
Days above standard (d)	12	13	1
North Highlands – Blackfoot Way			
1 st High (ppm)	0.121	0.120	0.13
2nd High (ppm)	0.109	0.118	0.11
Days above standard (d)	11	10	1
Roseville – N Sunrise Blvd			
1 st High (ppm)	0.126	0.128	0.12
2nd High (ppm)	0.128	0.119	0.11
Days above standard (d)	14	13	1.

The 1998-2000 years were analyzed for Particulates due to incomplete data for 2001 Percentage of days above standard = days above state 24-hour standard of 50 ug/m3 divided by number of days sampled.

Days above standard = days above state 1-hour standard of 0.09 ppm.

N/A=data not available

Source: California Air Resources Board - http://www.arb.ca.gov

BIOLOGICAL RESOURCES

On November 13, 2002 PAR Environmental Services conducted a biological resources reconnaissance survey of the Planning Area. Prior to conducting the field surveys, PAR compiled a list of special status plants and wildlife known from the vicinity of the Planning Area or from similar habitats elsewhere in the region, and contacted the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG).

Habitats Present

The Auburn Boulevard corridor is dominated by urban uses, and natural habitats are absent in most of the area immediately adjacent to the roadway. The reconnaissance survey of the project corridor revealed, isolated scattered trees along the corridor, with most of the flora composed of landscape species. A large live oak (Quercus wislizenii) is located at the west edge of Auburn Boulevard in a commercial parking lot approximately 200 feet south of the Antelope Road intersection.

One area that retains some habitat value is the corridor located along Cripple Creek at Rusch Park. This area contains a remnant of the valley/foothill riparian habitat, oak woodland, and annual grassland. The creek itself is steep sided with heavily vegetated banks. Grasses, blackberry (Ribes sp.), alder saplings (Alnus rhombifolia) and ruderal vegetation are in the channel. On the east side of Auburn Boulevard the area adjacent to the Creek is occupied with annual grasses, ruderal species, and remnant oak woodland. The surrounding park area on the west side of Auburn Boulevard is turfed.

In Rusch Park, on the west side of Auburn Boulevard, there are numerous valley oaks (Q. lobata) and interior live oaks (Q. wislizenii) located along the creek. At the southeast corner of the park, the creek bends to within approximately 12 feet of the roadway. In this location, vegetation is dense with a mixture of live oaks, valley oaks, and other non-native trees along with an understory of blackberry and other riparian species. There are eight to ten smaller, 12 inch-diameter breast height (dbh) or less, valley oaks on the bank nearest the roadway. The creek is undercutting some of these trees.

Where the creek crosses under Auburn Boulevard, there is one valley oak that is growing immediately adjacent to the bridge; it is approximately 20 inches dbh. A landscape tree is located within 20 feet of the bridge, and another large valley oak (approximately 36 inches dbh) is located 40 feet from the back of the sidewalk.

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One of the few areas within the Planning Area with habitat value is Rusch Park and Cripple Creek.

On the east side of Auburn Boulevard the largest trees are live oaks. One is within ten to 12 feet from the edge of pavement and is 8 to 12-inch dbh. Another larger live oak is located about 20 feet from the road and is 24 to 30 inches dbh. A grove of small (six inches to 12 inches dbh) is located 30 to 40 feet from the edge of pavement, south of the creek. Vegetation in this area is ruderal in nature; other vegetation in this area includes invasive species – arundo grass, Robinia, Pyracantha, and pampas grass. A cottonwood, a shrubby valley oak and blackberry are also growing in this area.

Fish and Wildlife

The scattered native and non-native trees and other fragmented patches of vegetation along Auburn Boulevard are of relatively low value to wildlife, although the large trees provide cover, foraging, and possibly nesting habitat for species such as western scrub jay (Aphelocoma californica), yellow-billed magpie (Pica nuttallii), and Brewer's blackbirds (Euphagus cyanocephalus), however, these trees are no longer part of a natural oak woodland community, and their fragmented nature and high level of disturbance reduces its value as wildlife habitat. Cripple Creek and its adjacent riparian vegetation, however, provide significant resources for fish and wildlife, despite its relatively urban surroundings. This patchy riparian woodland provides foraging, nesting, and roosting habitat for a variety of species, and a movement corridor and for mule deer, gray fox (Urocyon cinereoargenteus), coyotes (Canis latrans), and other wide-ranging animals. Birds such as black phoebe (Sayornis nigricans), Pacific slope flycatcher (Empidonax difficicilis), downy woodpecker (Picoides pubescens), western tanager (Piranga ludoviciana), and vellow-rumped warbler (Dendroica coronata) are all potential inhabitants of this streamside vegetation. Large trees in the riparian corridor could support nesting Cooper's hawks (Accipiter cooperi), red-shouldered hawks (Buteo lineatus), Nuttall's woodpeckers (Picoides nuttallii), scrub jays Bullock's orioles (Icterus bullockii), and many other birds.

Bridges often support nesting sites for species such as cliff swallows (Hirundo pyrrhonota), as well as providing roost sites for a number of bat species. No evidence of swallows nesting or bats were observed under the Auburn Boulevard Bridge over Cripple Creek. There appear to be no crevices suitable for roosting and the underside is clean.



Cripple Creek and its adjacent riparian vegetation provide significant resources for fish and wildlife, despite its relatively urban surroundings

Special Status Species

Table 7-3 describes the status and habitats of special status plant and animals potentially occurring in the Planning Area. Most of these species are unlikely to occur in the Planning Area, but several special status wildlife species have potential to occur or are likely to be present. In particular, listed anadramous fish could occur in Cripple Creek. Cripple Creek flows to Arcade Creek, which has undammed access for fish from the Sacramento River via the Natomas East Main Drain to the American River. Therefore, Cripple Creek could possibly have Central Valley steelhead (Oncorhynchus mykiss), winter-run chinook salmon (Oncorhynchus tshawytscha), Central Valley spring run chinook salmon (Oncorhynchus tshawytscha) and Central Valley fall/late fall-run chinook salmon (Oncorhynchus tshawytscha). The first three species are listed by the National Marine Fisheries Service (NMFS) as threatened. During the field surveys, a dead salmon was found lying near the bridge.

The only other listed species potentially occurring in the Planning Area is the valley elderberry longhorn beetle (Desmocerus californicus dimorphus). This species requires elderberry shrubs (Sambucus sp.) as their host plant, and no elderberries were noted during the survey.

A number of "species of concern" or "species of local concern" are noted on Table 7-3 as potentially occurring in the Planning Area. These are species that are not listed as threatened or endangered, but which have shown declines in some or all of their range and may some day be threatened. Several of these species, such as oak titmouse and Nuttall's woodpecker, are likely to occur in the Planning Area.

Wetlands and Waters of the U.S.

Cripple Creek is the only waterway in the Planning Area. The creek is considered 'Waters' of the U.S., and as such is subject to the jurisdiction of the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. The CDFG would also have jurisdictional authority over the creek under State Fish and Game Code Sections 1600-1607. No vernal pools or seasonal wetlands were noted in the Planning Area during the survey.

Findings

The primary biological resource in the project boundaries is Cripple Creek and its riparian habitat. Cripple Creek potentially supports listed fish species, therefore, even indirect impacts (removal or trees shading the stream, potential for increased

Environmental Conditions

sedimentation due to nearby earthmoving and construction) would require at least informal consultation with the NMFS if any portion of the project involved federal funding, permits, or authorizations.

Other biological resources of concern in the Planning Area include native species of oaks and nesting migratory birds.

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SPECIAL STATUS SPECIES POTENTIALLY OCCURRING IN THE VICINITY OF THE AUBURN BOULEVARD CORRIDOR, SACRAMENTO COUNTY, CALIFORNIA (USFWS REFERENCE FILE NO. 1-1-03-SP-0042)

Plants			
Species	Status* Fed/Stat/ CNPS	Preferred Habitat	Potential for Occurrence
Valley sagittaria Sagittaria sanfordii	SC/-/1B	Standing or slow-moving freshwater ponds, marshes, and ditches	Recorded in 1994 along Sunrise Creek east of Fair Oaks Blvd, between Oak Blvd and Old Auburn Road, Citrus Heights
Critical habitat, vernal pool plants	PX	Proposed as an area critical to conservation of vernal pool plants (see Federal Register 67:59883)	No vernal pools or seasonal wetlands in Planning Area
Wildlife			
BIRDS			
American peregrine falcon Falco peregrinus anatum	D/E	Nests and roosts on protected ledges of high cliffs, usually near areas supporting large populations of other bird species	No suitable nesting or foraging habitat in Planning Area
Aleutian Canada goose Bransa canadensis leucopareia	T/-	Roosts in reservoirs and large marshes, flooded fields and stock ponds, forages in pastures, meadows and harvested grain fields	No suitable foraging or roosting habitat in Planning Area
Bald eagle Haliaeetus leucocephalus	T/E	Ocean shorelines, lake margins and river courses	No suitable nesting or foraging habitat in the project site
Bank swallow Riparia riparia	SC/T	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sandy soil to allow digging	No suitable bank nesting habitat in Planning Area; a 1990 record in American River Parkway, Fair Oaks
Black tern Chlidonia niger	SC/CSC	Breeds in freshwater marshes and ponds	No nearby records or suitable habitat in Planning Area
Ferruginous hawk Buteo regalis	SC/SSC	Open terrain in plains and foothills where ground squirrels and other prey are available	No suitable foraging habitat in Planning Area
BIRDS			
Grasshopper sparrow Ammodramus savannarum	SC/-	Well-drained grasslands; requires thick cover or grasses or annuals for foraging and breeding	No suitable nesting or foraging habitat at the project site
Greater sandhill crane Grus canadensis tabida	-/T	In summer, occurs near shallow lakes and marshes; in winter, in plains and valleys near fresh water	No suitable habitat in Planning Area

SPECIAL STATUS SPECIES POTENTIALLY OCCURRING IN THE VICINITY OF THE AUBURN BOULEVARD CORRIDOR, SACRAMENTO COUNTY, CALIFORNIA (USFWS REFERENCE FILE NO. 1-1-03-SP-0042 (CONTINUED)

Wildlife	(continued)
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Species	Status* Fed/Stat/ CNPS	Preferred Habitat	Potential for Occurrence
Lawrence's goldfinch Carduelis lawrencei	SC/-	Oak woodland, grassland, and chaparral often near water woodland	Potential for occurrence in Planning Area
Lewis' woodpecker Melanerps lewis	SC	Deciduous woodland or coniferous forest; sometimes found after burns in oak woodland	Potential for occurrence in Planning Area
Little willow flycatcher Empidonax traillii	SC/E	Breeds in large, wet mountain meadows with scattered willow thickets; uses riparian woodland in lowlands during migration	Possible migrant in riparian habitat at Cripple Creek; no breeding habitat
Loggerhead shrike Lanius ludovicianus	SC/CSC	Open terrain with well-spaced lookouts	Unlikely to occur in Planning Area
Long-billed curlew Numenius americanus	SC	In breeding season, occurs in interior grassland near lakes or marshes; in winter, coastal salt marshes and tide flats	No suitable habitat in Planning Area
Nuttall's woodpecker Picoides nuttallii	SLC	Oak woodlands, also found in residential areas in landscaping is mature and well-developed	Likely to occur in Planning Area
Oak titmouse Baeolophus inornatus	SLC	Open oak woodland, will nest in natural or artificial cavities	Likely to occur in oaks and riparian habitat at project site
Rufous hummingbird Selasphorus rufus	SC	Occurs only as migrant in California, found wherever melliferous flowers occur	Could occur in riparian habitat at site during migration
Short-eared owl Asio flammeus	SC/CSC	Fresh and saltwater marshes, lowland meadows, irrigated pastures; need tule patches or tall grass for nesting and daytime seclusion	No suitable habitat in Planning Area
Swainson's hawk Buteo swainsoni	-/T	Nests in oaks or cottonwoods near riparian areas, forages in grassland, irrigated pasture and agricultural fields	No suitable nesting or foraging habitat in Planning Area
Tricolored Blackbird Agelaius tricolor	SC/CSC	Nests in emergent marsh and other wetlands; forages in wetlands, agricultural fields, pastures	No suitable nesting or foraging habitat in Planning Area
Vaux's swift Chaetura vauxi	SC	Coast redwood and douglas fir forests; nests in hollow, burnt out tree trunks	No suitable habitat in Planning Area
Western burrowing owl Athene cunicularia hypugea	SC/CSC	Nests in burrows in sparse grassland, especially old ground squirrel burrows	Not observed during surveys, no suitable habitat in Planning Area

SPECIAL STATUS SPECIES POTENTIALLY OCCURRING IN THE VICINITY OF THE AUBURN BOULEVARD CORRIDOR, SACRAMENTO COUNTY, CALIFORNIA (USFWS REFERENCE FILE NO. 1-1-03-SP-0042 (CONTINUED)

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wuante	(Continued)

Species	Status* Fed/Stat/ CNPS	Preferred Habitat	Potential for Occurrence
White-tailed kite Elanus leucurus	SC/CSC	Low rolling foothills or valley margins with scattered oaks, or river bottomlands with nearby marshes	Could occur in oak or riparian habitat at project site; nearest record is from 1990, north side of American River in Fair Oaks
White-faced ibis Plegadis chihi	SC/CSC	Prefers freshwater marshes, but may also nest in trees and forage in flooded agricultural fields	No suitable marsh habitat in or near Planning Area
MAMMALS		T	T
Greater western mastiff-bat Eumops perotis californicus	SC/CSC	Roosts and breeds in deep narrow rock crevices; forages in semi- arid habitats	No evidence of bat roosts at bridge
Long-legged myotis bat Myotis volans	SC/-	Most common in woodlands and forests above 4,000 feet; maternity colonies form in buildings, rock crevices and trees	No evidence of bat roosts at bridge
Pacific western big-eared bat Plecotus townsendii townsendii	SC/SSC	Roosts in caves, tunnels, mines and dark attics of abandoned buildings	No evidence of bat roosts at bridge
San Joaquin pocket mouse Perognathus inornatus	SC/	Prefers grasslands and oak woodlands with friable soils	No suitable habitat in Planning Area
Small-footed myotis bat Myotis ciliolabrum	SC/-	Open stands in forests and woodlands, as well as shrublands	No evidence of bat roosts at bridge
Yuma myotis bat Myotis yumanensis	SC/-	Roosts colonially in a variety of natural and man-made sites, including caves, mines, bridges, buildings, and trees	No evidence of bat roosts at bridge
REPTILES AND AMPHIBIANS			
California horned lizard Phrynosoma coronatum Frontale	SC/CSC	Grasslands, brushlands, woodlands, and open coniferous forests with sandy or loose soil	No suitable habitat in Planning Area
California red-legged frog Rana aurora draytonii	T/CSC	Marshes, slow-moving water; prefers areas with good plant cover	No nearby habitat or nearby records
California tiger salamander Ambystoma californiense	C/CSC	Small ponds, lakes or vernal pools in grasslands and oak woodlands	No vernal pools or seasonal ponds in Planning Area

Wildlife (Continued)

TABLE 7-3

SPECIAL STATUS SPECIES POTENTIALLY OCCURRING IN THE VICINITY OF THE AUBURN BOULEVARD CORRIDOR, SACRAMENTO COUNTY, CALIFORNIA (USFWS REFERENCE FILE NO. 1-1-03-SP-0042 (CONTINUED)

Wildlife (Continued)

Species	Status* Fed/Stat/ CNPS	Preferred Habitat	Potential for Occurrence
Giant garter snake Thamnophis gigas	T/T	Sloughs, canals, and other waterways; requires grassy banks and emergent vegetation, and areas of high ground protected from winter flooding	No nearby records or suitable habitat in Planning Area
Northwestern pond turtle Clemmys marmorata marmorata	SC/CSC	Ponds, marshes, streams, irrigation canals with aquatic vegetation, cover, and basking sites	None observed during surveys; potential for occurrence in Cripple Creek
Western spadefoot toad Scaphiopus hammondii FISH	SC/CSC	Vernal pools or small ponds in grasslands and oak woodlands	No vernal pools or small ponds in Planning Area
Central Valley fall/late fall-run chinook salmon Oncorhynchus tshawytscha	C/CSC	Adults immigrate into the river system from mid-October through mid-April; begin spawning in January and continue to spawn through mid-April. Embryo incubation occurs from January through June, rearing and emigration of fry and smolts from April through mid-October	Potential for occurrence in Cripple Creek
Central Valley spring-run chinook salmon Oncorhynchus tshawytscha	T/T	Spawns on tributaries of Sacramento River, Deer and Mill Creeks; generally ascend to natal streams during spring snowmelt run-off and spend the summer in deep pools with suitable water quality	Potential for occurrence in Cripple Creek
Central valley steelhead Onchorhynchus mykiss	T/CSC	Spawn in small streams where cool, well-oxygenated water is available year round	Potential for occurrence in Cripple Creek
Delta smelt Hyposmesus transpacificus	T/T	Estuarine waters of the San Joaquin-Sacramento Delta	Outside of Delta smelt range, no suitable habitat in Planning Area
Green sturgeon Spirinchus thaleichthys	SC/CSC	Occur in lower reaches of large rivers, including the Sacramento, and seldom penetrate far upstream to tributaries	Outside of the range of green sturgeon, no suitable habitat in Planning Area
Longfin smelt Spirinchus thaleichthys	SC/CSC	Occur in salt and brackish water of estuaries	Outside of longfin smelt range, no suitable habitat in Planning Area

SPECIAL STATUS SPECIES POTENTIALLY OCCURRING IN THE VICINITY OF THE AUBURN BOULEVARD CORRIDOR, SACRAMENTO COUNTY, CALIFORNIA (USFWS REFERENCE FILE NO. 1-1-03-SP-0042) (CONTINUED)

Wildlife (Continued)

Species	Status* Fed/Stat/ CNPS	Preferred Habitat	Potential for Occurrence
Sacramento splittail Pogonichthys macrolepidotus	T/CSC-	Slow-moving stretches of Delta and Central Valley rivers	Outside of Sacramento splittail range, and no suitable habitat in Planning Area
Winter-run chinook salmon Oncorhynchus tshawytscha	E/E	Adults first appear in the Sacramento River near Red Bluff in December and continue to pass Red Bluff through May; typically spend a relatively long time holding in the river before spawning, spawns on upper Sacramento River, between river mile 284 and 298	Have not been recorded in streams in this area and are very unlikely to occur in the Planning Area
INVERTEBRATES			
Critical habitat, vernal pool invertebrates	PX	Proposed as an area critical to conservation of vernal pool plants (see Federal Register 67:59883)	No vernal pools or seasonal wetlands in Planning Area
California linderiella fairy shrimp <i>Linderiella occidentalis</i>	SC/-	Vernal pools and other freshwater wetlands	No seasonal wetlands, pools, or long- standing rain puddles in or near project site
Midvalley fairy shrimp Branchinecta mesovallensis	SC/-	Vernal pools and other freshwater wetlands	No seasonal wetlands, pools, or long- standing rain puddles in or near project site
Valley elderberry longhorn beetle Desmocerus californicus dimorphus	T/	Elderberry shrubs in riparian habitat or elderberry savannah	No elderberry shrubs observed within Planning Area
Vernal pool fairy shrimp Branchinecta lynchi	T/-	Vernal pools and other seasonal freshwater wetlands	No seasonal wetlands, pools, or long- standing rain puddles in or near project site

		TABLE 7-3
		ATUS SPECIES POTENTIALLY OCCURRING IN THE VICINITY OF THE AUBURN BOULEVARD CORRIDOR, CRAMENTO COUNTY, CALIFORNIA (USFWS REFERENCE FILE NO. 1-1-03-SP-0042) <i>(CONCLUDED)</i>
KEY:	FEDERAL	 E = Endangered listed in the Federal Register as being in danger of extinction T = Threatened listed likely to become endangered within the foreseeable future P= Proposed officially proposed (in the Federal Register) for listing as endangered or threatened C = Candidate to become a proposed species D= Delisted. Status to be monitored for five years. SC = Species of Concern. May be endangered or threatened. Not enough biological information has been gathered to support listing at this time SLC= Species of local or regional concern or conservation significance concern. PX = Proposed Critical Habitat. Proposed as an area essential to the conservation of the species. PE = Proposed endangered. * = Possibly extirpated from this quad.
	STATE	E = Endangered. Listed as endangered under the California Endangered Species Act T = Threatened. Listed as threatened under the California Endangered Species Act
	CNPS:	1B=California Native Plant Society list of plants rare, threatened, or endangered in California and elsewhere2=California Native Plant Society list of plants rare, threatened, or endangered in California but more common elsewhere

CULTURAL RESOURCES

Record Search and Reconnaissance Survey

Cultural Resource specialists from PAR Environmental Services conducted a record search and a cursory field survey of the project site. The record search, conducted at the North Central Information Center (NCIC) of the California Historical Resources Information System on October 9, 2002, included all areas within one-quarter mile of the Planning Area along Auburn Boulevard. Letters requesting background information regarding prehistoric, historic, ethnographic, sacred sites or other concerns about the proposed Planning Area were sent to the appropriate historical groups and Native American individuals and organizations on October 7 and October 31, 2002.

Ms. Monica Schmidt, Cultural Resource Specialist for PAR, conducted a pedestrian archaeological survey on October 3, 2002 of both sides of Auburn Boulevard from the intersection of Maple Avenue and Auburn Boulevard (one-quarter mile north of the Sylvan Corner/Old Auburn Road intersection) northward to the Sacramento-Placer county line (south of the Interstate 80 interchange).

On October 3, 2002, Ms. Tracy Bakic, Cultural Resource Specialist for PAR conducted a pedestrian architectural survey of all county tax assessor parcels immediately east and west of Auburn Boulevard and of structures within (e.g., bridges) the existing Auburn Boulevard alignment in the proposed Planning Area.

There were no known recorded prehistoric or historic archaeological sites within the researched area. Portions of the researched area have been previously surveyed. According to the data available at the information center, no archaeological sites were located and recorded during these surveys. Of 21 previously surveyed areas located within the present Auburn Boulevard Planning Area, there were four survey reports on file at NCIC; all four reports were negative.

Prehistoric and Historic Archaeological Conditions

Approximately 90 percent of the survey area is paved or professionally landscaped. All areas of exposed soil including landscaped areas within 49 feet from the edge of pavement (EOP) of Auburn Boulevard were investigated. All open lots and areas with more than average soil exposure were intensively surveyed using 49 feet transects to a distance of at least 131 feet from the



Old Road Bed near Cripple Creek.

Henricks, personal communication 2002).

No evidence of the foundation is remaining. There is an extant brick alignment that is most likely the remains of a walkway or other landscaping element in situ located between some small oak trees in the center of the open area. Other artifacts noted included one fragment of three-tenths-inch-thick aqua window glass, 10+ fragments of clear bottle glass of varying thicknesses, and a few small fragments of brick and cement. There are two standing structures (a garage and shed) behind the veterinary office. There is a pile of bricks, large cobbles, and several varieties of cement located behind the extant shed on the property. According to the office manager, some of the items making up the pile consists of a combination of property-related and non-property-related refuse. The fencing that surrounds the property is built in several different styles with different materials and probably represents several different construction periods. The fence along the northern border is constructed of two odd-sized timbers nailed horizontally between each set of fence posts and an old metal swinging gate of the type commonly used on farms and ranches. This section of fence has had large sheets of corrugated metal nailed on to the northern side, resulting in a solid barrier.

Site 5 This resource is located on the eastern side of Auburn Boulevard just north of the Pratt Street intersection. It consists of a few fragments of glass, ceramic and saw-cut bone eroding from the west-facing cut bank of the Mobile Estates trailer park (7540 Auburn Boulevard) and the sidewalk along the east side of Auburn Boulevard. An approximately 66 foot wide swath of the trailer park property on the east side of Auburn Boulevard is the only portion of the property surveyed to date. The lot on which that the trailer park is situated is one to four feet above the modern street level. The parking spaces in the gravel parking area on the corner of Auburn Boulevard and Pratt Street are delineated on all four sides with seven-and-one-half-inch-wide timbers embedded in the ground. Artifacts noted include two light green 'Coca-Cola' bottle body fragments, one clear glass bottle body fragment, one onetenth-inch-thick fragment of an olive glass bottle shoulder, one fragment of white improved earthenware with cobalt blue external glaze, and one piece of saw-cut large mammal bone.

Site 6. This potential resource is located at the northeast corner of the Auburn Boulevard/Sycamore Drive intersection. It consists of four cement pads and two large diameter pipes or cut support posts located in an asphalt-paved and fenced off lot. Because the lot was fenced, measurements of elements of the site were not possible; however, the western pipe appears to be approximately 20 inches in diameter. Further research is needed to determine the property's former use and its potential to be an historical resource.

Site 7 This potential resource is located at the northeast corner of Auburn Boulevard/Cedar Drive intersection and consists of an open gravel-surfaced lot with several large (four- to seven-foot) sections of finished flat cement embedded in the ground. One two-and-one-half-inch-diameter pipe and one threaded one-inch-diameter pipe protrude from the ground. There is a ditch that extends in an east-west direction along the northern edge of the open lot. It is possible that there was a structure on this site at one

time. Further research is needed to determine the property's former use and its potential to be an historical resource.

Architectural Resources

Approximately 102 architectural properties/resources were noted within the area. The majority of the architectural properties are commercial, with a few residential properties, a park, cemetery and a bridge.

The bridge within the Planning Area spans Auburn Boulevard over Cripple Creek (Caltrans Bridge No. 24C0085). This bridge was built in 1965. Caltrans, in its 1986 California Historic Bridge Inventory, previously evaluated this bridge for National Register eligibility, listing the bridge as "Category 5" (not eligible to the National Register) because it was not 50 years of age at the time of the inventory (Caltrans 1986). This bridge will not be 45 years old until 2010. Therefore, if further environmental studies for this proposed project occur before 2010, this bridge will not need further evaluation.

Of the approximately 101 properties adjacent to Auburn Boulevard, a maximum of 28 properties appear 45 years old or older. This number is based on the assumption that the appropriate cultural resource studies will be completed in 2002/2003. These 28 properties include commercial and residential buildings, as well as Rusch Park and Sylvan Cemetery; all of these properties require recordation on appropriate State of California Department of Parks and Recreation (DPR) 523 forms and assessed for their potential to meet criteria outlined in either the National Register of Historic Places or Public Resources Code (PRC) 5024.1.

Should a five-year period lapse between the completion of the initial cultural resource studies and the project start date, it will be necessary to update the studies to include any additional properties that meet the 45 year criteria. For example, if the initial studies are completed in 2003 and it is decided that the project cannot begin until 2009 or later, then approximately 17 additional architectural properties that would meet the 45-year criteria by that point would need to be evaluated.

Cultural resources that appear to be 45 years old or older need to be recorded for the purposes of inclusion in the State Office of Historic Preservation's filing system. "The 45 year criteria recognizes that there is commonly a five year lag between resource identification and the date that planning decisions are made" (California, State of 1995). Should the five year period lapse between the completion of the initial cultural resources

Environmental Conditions



Caltrans bridge above Cripple Creek.

documentation and the start date of the project, the cultural resource studies would need to be updated to include any additional properties/sites that would, by that time, meet the 45 year criteria.

The record search indicated that there are no known recorded prehistoric or historic properties/sites in the Planning Area. Preliminary examination of the Planning Area by PAR personnel in October 2002 found seven potential historic archaeological sites and a maximum of 28 architectural properties/resources that are over 45 years old and warrant appropriate recordation and evaluation.

NOISE

Ambient noise in the Planning Area is dominated by vehicle traffic on Auburn Boulevard. According to noise measurements and modeling conducted for the City of Citrus Heights General Plan Background Information (Citrus Heights 2000), ambient noise levels at a distance of 50 feet from the roadway at peak hour along Auburn Boulevard can be expected to be at least 70 dB Leq. The distance to the 65 dBA Ldn contour in the section of Auburn Boulevard between Sylvan Corners and Antelope Road was modeled to be 153 feet from the center of the roadway. From Antelope to Twin Oaks the distance was modeled to be 147 feet from the center of the roadway.

The City of Citrus Heights General Plan Noise Element defines normally accepted exterior noise levels for single family residential as 60 dB Ldn and for multi-family residential as 65 dB Ldn. Normally acceptable exterior noise levels for parks, commercial and office buildings is 70 dB Ldn. The majority of land uses along the corridor are commercial and office; however, residential receptors are located at several points along the corridor. The acceptable noise level for playgrounds and neighborhood parks is 70 dB Ldn. The existing noise 65 dB Ldn contour extends into Rusch Park, but does not reach the outdoor sport activity area (tennis courts) or community buildings.

Ambient exterior noise levels along the Auburn Boulevard corridor are elevated above the normally acceptable levels for residential land uses and may exceed levels normally acceptable for commercial and office uses in some areas.

Some portions of Rusch Park experience ambient noise levels above the normally accepted levels for recreational/park uses; however, these areas are not within formal activity areas.

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Vehicle traffic is the greatest source of ambient noise along Auburn Blvd.

WATER RESOURCES

Cripple Creek, which flows through the Planning Area, is one of several drainage basins in Citrus Heights. Cripple Creek flows to Arcade Creek, which in turn drains to the Natomas Main Drainage Canal and ultimately into the Sacramento River (City of Citrus Heights 2000). The headwaters of Cripple Creek and Arcade Creek originate in Sacramento County and drain the southwest portion of Orangevale. Cripple Creek maintains a perennial flow through the Planning Area, though a significant source of this flow is urban runoff.

Cripple Creek has a relatively small hydrologic capacity and can be quickly overwhelmed during severe storm runoff events. In these events stream channel banks can overflow and result in temporary inundation of adjoining low lying areas. Within the Planning Area, the Federal Emergency Management Agency (FEMA) flood maps show the area immediately adjacent to Cripple Creek as being within the 100-year floodplain (City of Citrus Heights 2000).

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