

Common Name	Scientific Name	Status			Geographic Distribution	Habitat Requirements	Blooming Period	Potential Occurrence in Study Area
		Federal <sup>a</sup>	State <sup>a</sup>	CNPS <sup>a</sup>				
hibiscus					and Yolo Counties			the drainage canals
Northern California black walnut	<i>Juglans hindsii</i>	–	–	1B.1	Last two native stands in Napa and Contra Costa Counties; historically more widespread through southern north inner Coast Ranges, southern Sacramento Valley, northern San Joaquin Valley, and San Francisco Bay region	Riparian forest, riparian woodland; below 1,444 feet	Apr–May	Moderate; suitable riparian forest habitat occurs in the project area
Legenere	<i>Legenere limosa</i>	–	–	1B.1	Primarily located in the lower Sacramento Valley, also from north Coast Ranges, northern San Joaquin Valley, and the Santa Cruz Mountains	Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks; below 500 feet asl	May–June	None; no suitable habitat present in the project area
Heckard’s pepper-grass	<i>Lepidium latipes</i> var. <i>heckardii</i>	–	–	1B.2	Southern Sacramento Valley: Glenn, Solano, and Yolo Counties	On margins of alkali scalds in annual grassland, below 656 feet	Mar–May	None; no suitable habitat present in the project area
Baker’s navarretia	<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	–	–	1B.1	Inner north Coast Ranges, western Sacramento Valley: Colusa, Glenn, Lake, Mendocino, Marin, Napa, Solano, Sonoma, Tehama, and Yolo Counties	Vernal pools and swales in woodland, lower montane coniferous forest, mesic meadows, and grassland; generally below 5,709 feet	Apr–Jul	None; no suitable habitat present in the project area
Colusa grass	<i>Neostapfia colusana</i>	T	E	1B.1	Central Valley—Merced, Solano, Stanislaus, and Yolo Counties	Adobe soils of vernal pools, generally below 650 feet asl	May–Sep	None; no suitable habitat present in the project area
Slender Orcutt grass	<i>Orcuttia tenuis</i>	T	E	1B.1	Lassen, Plumas, Tehama, Siskiyou, Lake, and Sacramento Counties	Vernal pools (on high-terrace Laguna formation in Sacramento County)	May–Oct	None; no suitable habitat present in the project area
Sacramento Orcutt grass	<i>Orcuttia viscida</i>	E	E	1B.1	Endemic to Sacramento County	Vernal pools below 330 feet asl	May–July	None; no suitable habitat present in the project area
Sanford’s arrowhead	<i>Sagittaria sanfordii</i>	–	–	1B.2	Scattered locations in Central Valley and Coast Ranges	Freshwater marshes, sloughs, canals, and other slow-moving water habitats; below 1,000 feet asl	May–Aug	Moderate; suitable habitat occurs along the drainage canals
Crampton’s tuctoria	<i>Tuctoria mucronata</i>	E	E	1B.1	Southwestern Sacramento Valley—Solano and Yolo Counties	Mesic grassland, vernal pools; below 500 feet asl	Apr–Jul	None; no suitable habitat present in the project area

Common Name	Scientific Name	Status			Geographic Distribution	Habitat Requirements	Blooming Period	Potential Occurrence in Study Area
		Federal <sup>a</sup>	State <sup>a</sup>	CNPS <sup>a</sup>				

**NOTES:**

asl = above sea level

**<sup>a</sup>Status Explanations**

**Federal**

E = Listed as endangered under FESA

T = Listed as threatened under FESA

**State**

E = Listed as endangered under CESA

**California Native Plant Society**

1B = List 1B species: rare, threatened, or endangered in California and elsewhere

2 = List 2 species: rare, threatened, or endangered in California but more common elsewhere

3 = List 3 species: more information is needed about this plant

4 = List 4 species: plants of limited distribution (Watch List)

.1 = Listed as seriously endangered in California

.2 = Listed as fairly endangered in California

.3 = Listed as not very endangered in California

- = No listing

**Likelihood to Occur within the Study Area**

High: CNDDDB, or other documents, records the known occurrence of the plant in the region or project vicinity. Suitable habitat conditions and suitable microhabitat conditions are present.

Moderate: CNDDDB, or other documents, records the known occurrence of the plant in the region or project vicinity. Suitable habitat conditions are present but suitable microhabitat conditions are not.

Low: CNDDDB, or other documents, does not record occurrence of the plant in the region or project vicinity. Habitat conditions are of poor quality.

None: CNDDDB, or other documents, does not record occurrence of the plant in the region or project vicinity. Suitable habitat is not present in any condition.

**Table 2.3.5-1.** Special-Status Wildlife Species Documented or Identified during the Pre-Field Investigation as Having the Potential to Occur in the I-80 Study Area

Common Name	Scientific Name	Status <sup>a</sup>		California Distribution	Habitats	Potential Occurrence in Study Area
		Federal	State			
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	–	Stream side habitats below 3,000 feet asl throughout the Central Valley	Riparian and oak savanna habitats with elderberry shrubs; elderberry shrub is the host plant	None; no suitable habitat in the study area. The nearest occurrence is located 1.2 miles south of the study area (CNDDDB 2008).
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T		Found in Central Valley, central and south Coastal Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County	Vernal pools; also sandstone rock outcrop pools	None; no suitable habitat in the study area. The nearest occurrence is located 3.7 miles east-northeast of the study area (CNDDDB 2008).
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E		Found in Shasta County south to Merced County	Vernal pools and ephemeral stock ponds	None; no suitable habitat in the study area. The nearest occurrence is located 5.7 miles northeast of the study area (CNDDDB 2008).
Western spadefoot	<i>Scaphiopus hammondi</i>	-	SSC	Found in Sierra Nevada foothills, Central Valley, Coast Ranges, coastal counties in southern California	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	None; no suitable habitat in the study area. No occurrences within 10 miles of the study area (CNDDDB 2008).
California tiger salamander	<i>Ambystoma californiense</i>	T	SSC	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Butte County south to northeastern San Luis Obispo County;	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy	None; no suitable habitat in the study area. No occurrences within 10 miles of the study area (CNDDDB 2008).
Giant garter snake	<i>Thamnophis gigas</i>	T	T	Central Valley from Fresno north to the Gridley/Sutter Buttes area; has been extirpated from areas south of Fresno	Sloughs, canals, and other small water-ways where there is a prey base of small fish and amphibians; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter	High; the nearest occurrence is located 1.4 miles upstream of the study area in the East Drainage Canal (CNDDDB 2008). The canals provide suitable aquatic habitat, and adjacent ruderal grasslands provide suitable upland habitat.
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	-	SSC	Occurs along the central coast of California east to the Sierra Nevada and along the southern California coast inland to the Mojave and Sonora Deserts; range overlaps with that of the northwestern pond turtle throughout the Delta and in the Central Valley	Woodlands, grasslands, and open forests; aquatic habitats, such as ponds, marshes, or streams, with rocky or muddy bottoms and vegetation for cover and food	Moderate; the nearest occurrence is located 5.7 miles northeast of the study area (CNDDDB 2008). The canals provide suitable aquatic habitat.
Bald eagle	<i>Haliaeetus leucocephalus</i>	-	E/FP	Nests in Siskiyou, Modoc, Trinity, Shasta, Lassen, Plumas, Butte, Tehama, Lake, and Mendocino Counties and in the Lake Tahoe Basin. Reintroduced into central coast. Winter range includes the rest of California, except the southeastern deserts, very high altitudes in the Sierra Nevada, and east of the Sierra Nevada south of Mono County	In western North America, nests and roosts in coniferous forests within 1 mile of a lake, reservoir, stream, or the ocean	Low; rare winter occurrences along the Sacramento River (CNDDDB 2008).

Common Name	Scientific Name	Status <sup>a</sup>		California Distribution	Habitats	Potential Occurrence in Study Area
		Federal	State			
Aleutian Canada goose	<i>Branta canadensis leucopareia</i>	D	-	Only winters in the Central Valley of California	Grazes in marshes and stubblefields, roosts in water	Low; could forage in agricultural fields and roost in the canals.
Swainson's hawk	<i>Buteo swainsoni</i>	-	T	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks, cottonwoods and other native and non-native trees in riparian habitats, tree rows, and lone trees; forages in grasslands, irrigated pastures, and grain, hay, and row crops	High; inactive nest is located adjacent to the study area on the west side of the Natomas Main Drainage Canal. A number of active nests are within 10 miles of the study area (CNDDDB 2008). Six adults were observed flying over project study area during March 29, 2004, survey.
White-tailed kite	<i>Elanus leucurus</i>	-	FP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands	High; nearest active nesting occurrence is located 3.7 miles northeast of the study area (CNDDDB 2008). Cottonwood-willow riparian provides suitable roosting habitat, and agricultural fields provide suitable foraging habitat.
Western burrowing owl	<i>Athene cunicularia hypugea</i>	-	SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast	Level, open, dry, heavily grazed or low-stature grassland or desert vegetation with available burrows	Low; the nearest occurrence was in 1991, 1.2 miles north of the study area (CNDDDB 2008). Not observed in 2004, possibly because of new development. Potential nesting and foraging habitat along canal banks.
Loggerhead shrike	<i>Lanius ludovicianus</i>	-	SSC	Resident and winter visitor in lowlands and foothills throughout California; rare on coastal slope north of Mendocino County, occurring only in winter	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches	High; observed foraging along West Main Drainage during April 13, 2004 survey. Could nest in willow riparian and black walnut habitat in study area.
Double-crested cormorant	<i>Phalacrocorax auritus</i>	-	SSC	Winters along the entire California coast and inland over the Coast Ranges into the Central Valley from Tehama County to Fresno County; a permanent resident along the coast from Monterey County to San Diego County, along the Colorado River and the Imperial River	Rocky coastlines, beaches, inland ponds, and lakes; needs open water for foraging and nests in riparian forests or on protected islands, usually in snags	High; observed in canal during March 29, 2004, survey.
Mountain plover	<i>Charadrius montanus</i>	-	SSC	Does not breed in California; in winter, found in the Central Valley south of Yuba County, along the coast in parts of San Luis Obispo, Santa Barbara, Ventura, and San Diego Counties; parts of Imperial, Riverside, Kern, and Los Angeles Counties	Occupies open plains or rolling hills with short grasses or very sparse vegetation; nearby bodies of water are not needed; may use newly plowed or sprouting grainfields	Low; nearest occurrence 11.5 miles northwest of study area, near Woodland (CNDDDB 2008). May be present in agricultural areas during winter.

Common Name	Scientific Name	Status <sup>a</sup>		California Distribution	Habitats	Potential Occurrence in Study Area
		Federal	State			
Bank swallow	<i>Riparia riparia</i>	–	T	The state’s largest remaining breeding populations are along the Sacramento River from Tehama County to Sacramento County and along the Feather and lower American Rivers, in the Owens Valley; nesting areas also include the plains east of the Cascade Range south through Lassen County, northern Siskiyou County, and small populations near the coast from San Francisco County to Monterey County	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam to allow digging; forages for insects over open water and cropland	None; nearest occurrence is located 1.7 miles southeast near the Business-80 bridge over the American River (CNDDDB 2008). Canals in the study area do not provide suitable nesting habitat for bank swallows.
Tricolored blackbird	<i>Agelaius tricolor</i>	-	SSC	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony	Low; numerous occurrences within a 10-mile radius of the study area (CNDDDB 2008). No nesting habitat but the ruderal grasslands and agricultural crops provide foraging habitat in the study area.
White-faced ibis	<i>Plegadis chihi</i>	-	SSC	Both resident and winter populations on the Salton Sea and in isolated areas in Imperial, San Diego, Ventura, and Fresno Counties; breeds at Honey Lake (Lassen County), at Mendota Wildlife Management Area (Fresno County), and near Woodland (Yolo County)	Prefers freshwater marshes with tules, cattails, and rushes, but may nest in trees and forage in flooded agricultural fields, especially flooded rice fields	Low; no occurrences recorded within a 10-mile radius of the study area (CNDDDB 2008). Could forage in agricultural habitat in the study area.
Hoary bat	<i>Lasiurus cinereus</i>	-	SSC	Common and widespread throughout most of California	Hoary bats spend the summer days hidden in the foliage of trees. Much like the red bat, they choose a leafy site open beneath them, and usually 10–15 feet above the ground. Hoary bats are solitary roosting bats and keep themselves well hidden	Low; suitable roosting habitat in cottonwood riparian habitat the study area. One occurrence approximately 3 miles south of the study area (CNDDDB 2008).

Common Name	Scientific Name	Status <sup>a</sup>		California Distribution	Habitats	Potential Occurrence in Study Area
		Federal	State			

NOTES:

asl = above sea level

<sup>a</sup> Status Explanations:

-- = No status.

**Federal**

E = listed as endangered under FESA

T = listed as threatened under FESA

**State**

E = Listed as endangered under CESA

T = Listed as threatened under CESA

FP = Fully protected under the DFGC

SSC = Species of special concern in California

# **Chapter 3**      **List of Preparers**

---

## **3.1 City of Sacramento**

Zuhair Amawi, City Project Manager

Scott Johnson, Assistant Planner

## **3.2 URS Corporation**

Gary Horton, Project Manager

Sami Kalantari, Project Engineer

## **3.3 ICF Jones & Stokes Associates**

Maggie Townsley, Project Director

Wendy Johnson, Project Manager

Stephanie Myers, Wildlife Biologist

Sue Bushnell, Botanist

Mark Bowen: Cultural Resources

Shannon Hatcher: Air Quality and Noise

Wendy Johnson and Bonnie Chiu: Land Use, Population/Housing, Utilities, Hazards, Aesthetics

Wendy Johnson and John Jarecki: Water Resources, Transportation/Circulation, Energy, Hazards, Utilities

Wendy Johnson and Kristin Hammond: Recreation and Public Services

John Durman, Graphics

Joan Lynn, Editor

Ken Cherry, Editor

This Page Intentionally Left Blank

**Appendix A** CEQA Environmental Significance  
Checklist

---



## ENVIRONMENTAL SIGNIFICANCE CHECKLIST

Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Initial Study/Mitigated Negative Declaration. Documentation of "No Impact" determinations is provided at the beginning of Chapter 2. Discussion of all impacts and mitigation measures under the appropriate topic headings in Chapter 2.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS -- Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**III. AIR QUALITY --** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Less Than Significant	With Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------	-------------------------------------	------------------------------------	--------------

- |   |                          |                                     |                          |                                     |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| e) Create objectionable odors affecting a substantial number of people?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

IV. BIOLOGICAL RESOURCES -- Would the project:

- |  |                          |                                     |                          |                                     |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Less Than Significant	With Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------	-------------------------------------	------------------------------------	--------------

V. CULTURAL RESOURCES -- Would the project:

- |   |                          |                                     |                          |                                     |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?    | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?       | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

VI. GEOLOGY AND SOILS -- Would the project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:   |                          |                          |                                     |                                     |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iii) Seismic-related ground failure, including liquefaction?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iv) Landslides?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Result in substantial soil erosion or the loss of topsoil?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

	Less Than Significant	With Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------	-------------------------------------	------------------------------------	--------------

VII. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

- |  |                          |                                     |                                     |                                     |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

	Less Than Significant	With Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------	-------------------------------------	------------------------------------	--------------

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------	--------------------------

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------	--------------------------

f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------	--------------------------

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

IX. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

X. MINERAL RESOURCES -- Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

	Less Than Significant	With Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------	-------------------------------------	------------------------------------	--------------

XI. NOISE –

Would the project result in:

- |   |                          |                                     |                                     |                                     |
|---|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

XII. POPULATION AND HOUSING -- Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Less Than Significant	With Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------	-------------------------------------	------------------------------------	--------------

### XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### XIV. RECREATION –

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

### XV. TRANSPORTATION/TRAFFIC -- Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

- g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

	Less Than Significant	Less Than Significant Impact	No Impact
Potentially Significant Impact	With Mitigation Incorporation	Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. UTILITIES AND SERVICE SYSTEMS –

Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- g) Comply with federal, state, and local statutes and regulations related to solid waste?

XVII. MANDATORY FINDINGS OF SIGNIFICANCE –

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?
- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **Appendix B** Mitigation Summary

---



Impact	Significance without Mitigation	Mitigation Measure	Significance with Mitigation
<b>Land Use</b>			
LU-1: Potential alteration of the present or planned use of an area	Significant	LU-1: Locate Construction Staging Areas away from Residential Areas LU-2: Limit Construction Traffic LU-3: Provide Advance Notice of Construction Activities	Less than Significant
LU-2: Potential effects on agricultural resources or operation	Less than Significant	No Mitigation Is Required	--
<b>Aesthetics</b>			
AES-1: Substantially change scenic resources	Less than Significant	No Mitigation Is Required	--
AES-2: Degrade visual character in project area	Less than Significant	No Mitigation Is Required	--
AES-3: Create a new source of light and glare which would adversely affect views	Less than Significant	No Mitigation Is Required	--
<b>Cultural Resources</b>			
CUL-1: Cause a substantial adverse change in significance of a historic resource	Less than Significant	No Mitigation Is Required	--
<b>Hydrology, Water Quality, Stormwater, and Runoff</b>			
HYD-1: Potential alteration of existing drainage patterns or absorption rates	Less than Significant	No Mitigation Is Required	--
HYD-2: Potential to increase flooding hazards	Less than Significant	No Mitigation Is Required	--
HYD-3: Potential impacts on water quality	Less than Significant	No Mitigation Is Required	--
HYD-4: Potential to deplete or interfere with groundwater supplies and recharge	Less than Significant	No Mitigation Is Required	--
<b>Geology, Soil, and Seismicity</b>			
GEO-1: Potential to expose people to the risk of strong seismic events, liquefaction, or landslides	Less than Significant	No Mitigation Is Required	--
GEO-2: Potential to locate structures on expansive soil or soils that are inadequate	Less than Significant	No Mitigation Is Required	--
GEO-3: Potential effect on unique geologic resource	Less than Significant	No Mitigation Is Required	--
<b>Paleontology</b>			
PAL-1: Potential effects on sensitive paleontological resources	Significant	PAL-1: During construction activities, if sensitive paleontological resources are encountered, work will be stopped immediately and recording and salvage activities will be instituted	Less than Significant

Impact	Significance without Mitigation	Mitigation Measure	Significance with Mitigation
<b>Hazardous Waste/Materials</b>			
HAZ-1: Potential for accidental explosion or release of hazardous substances	Significant	HAZ-1: Comply with Standard Specifications for Public Works Construction and the SWPPP	Less than Significant
HAZ-2: Potential presence of Aerially Deposited Lead in soils	Significant	HAZ-1: Comply with Standard Specifications for Public Works Construction and the SWPPP HAZ-2: Conduct site investigation for Aerially Deposited Lead	Less than Significant
<b>Air Quality</b>			
AIR-1: Potential for construction-related emissions	Significant	AIR-1: Reduce NO <sub>x</sub> emissions from off-road diesel-powered equipment AIR-2: Submit an off-road construction equipment inventory to the SMAQMD AIR-3: Control visible emissions from off-road diesel-powered equipment AIR-4: Phase construction activities AIR-5: Control fugitive dust emissions	Less than Significant
<b>Noise</b>			
NO-1: Noise impacts on noise-sensitive receptors	Significant	NO-1: Limit hours for construction activities NO-2: Equip engines with silencers	Less than Significant
<b>Biological Resources</b>			
BIO-1: Substantial adverse effect on riparian habitat	Significant	BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone	Less than Significant
BIO-2: Substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act	Significant	BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone BIO-2: Implement City BMP measures to reduce impacts on Waters of the U.S. BIO-3: Obtain and comply with State, Federal, and Local Permits	Less than Significant
BIO-3: Substantial adverse effect on sensitive natural community identified in local or regional plans, policies, and regulations of the California Department of Fish and Game or U.S. Fish and Wildlife Service	Less than significant		--

Impact	Significance without Mitigation	Mitigation Measure	Significance with Mitigation
BIO-4: Substantially adversely affect northwestern pond turtle	Significant	HCP V.A.1: Preconstruction surveys HCP V.A.3: General measures to minimize take HCP V.A.5j: Measures to reduce take of northwestern pond turtle BIO-4: Implement City BMP measures to reduce impacts to sensitive species	Less than Significant
		BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone	
		BIO-3: Obtain and comply with State, Federal, and Local permits	
BIO-5: Substantially adversely affect white-tailed kite	Significant	HCP V.A.1: Preconstruction surveys HCP V.A.3: General measures to minimize take BIO-4: Implement City BMP measures to reduce impacts to sensitive species	Less than Significant
		BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone	
		BIO-5: Construct outside of the nesting season or conduct preconstruction surveys for nests and implement appropriate restrictions	

Impact	Significance without Mitigation	Mitigation Measure	Significance with Mitigation
BIO-6: Substantially adversely affect loggerhead shrike	Significant	HCP V.A.1: Preconstruction surveys HCP V.A.3: General measures to minimize take HCP V.A.5g: Measures to reduce take of loggerhead shrike BIO-4: Implement City BMP measures to reduce impacts to sensitive species BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone HCP V.A.1: Preconstruction surveys HCP V.A.3: General measures to minimize take	Less than Significant
BIO-6: Substantially adversely affect migratory birds and raptors	Significant	BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone BIO-5: Construct outside of the nesting season or conduct preconstruction surveys for nests and implement appropriate restrictions	Less than Significant

Impact	Significance without Mitigation	Mitigation Measure	Significance with Mitigation
BIO-6: Substantially adversely affect giant garter snake habitat	Significant	HCP V.A.1: Preconstruction surveys HCP V.A.3: General measures to minimize take HCP V.A.5a: Measures to reduce take of giant garter snake	Less than Significant
		BIO-4: Implement City BMP measures to reduce impacts to special-status species	
		BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone	
		BIO-3: Obtain and comply with State, Federal, and Local permits	
		Measure BIO-6: Compensate for the temporary and permanent loss of GGS habitat	
BIO-7: Substantially adversely affect Swainson's hawk	Significant	HCP V.B.5b: Measures to reduce take of Swainson's hawk BIO-4: Implement City BMP measures to reduce impacts to sensitive species	Less than Significant
		BIO-1: Install construction barrier fencing to protect sensitive biological resources located adjacent to the construction zone	
		BIO-3: Obtain and comply with State, Federal, and Local permits	
BIO-8: Potential spread of noxious weed species through project implementation	Significant	BIO-7: Avoid the introduction or spread of noxious weeds in the project area	Less than Significant



## **Appendix C** Acronyms

---



## **Acronym**

## **Meaning**

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
APE	Area of Potential Effects
ASR	Archaeological Survey Report
BFEs	Base Flood Elevations
Bikeway Master Plan	2010 City/County Bikeway Master Plan
BMP	Bicycle Master Plan
CAAQS	California Ambient Air Quality Standards
CalEPPC	California Exotic Pest Plant Council
Caltrans	California Department of Transportation
Caltrans	California Department of Transportation
Canal Bridge	at-grade level bridge across the West Drainage Canal
CARB	California Air Resources Board
CBSC	California Building Standards Code
CE	Categorical Exclusion
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	Code of Federal Regulations
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
City	City of Sacramento
CNDDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO <sub>2</sub>	carbon monoxide
County	Sacramento County
CWA	Clean Water Act

dB	decibel
dBA	A-weighted decibel
DFG	Department of Fish and Game
DFGC	California Fish and Game Code
DFGC	California Fish and Game Code
DOT	Department of Transportation
DPR	Department of Parks and Recreation
EB	eastbound
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Maps
FOE	Finding of Effects
FR	Federal Register
FR	Federal Register
FR	Federal Register
General Construction Permit	General Permit for Discharges of Storm Water Associated with Construction Activity
GGG	Giant garter snake
HCP	Habitat Conservation Plan
HP	horsepower
HRER	historic resources evaluation report
I-5	Interstate 5
IS	Initial Study
$L_{dn}$	day-night level
$L_{eq}$	equivalent sound level
$L_{max}$	maximum sound levels
$L_{min}$	minimum sound levels
$L_n$	sound level percentiles

LNWI	lower northwest interceptor
LNWI	Lower Northwest Interceptor Sewer Main
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MND	Mitigated Negative Declaration
NAAQS	National Ambient Air Quality Standards
NBHCP	Natomas Basins Habitat Conservation Plan
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NFIP	National Flood Insurance Program
NNL Program	National Natural Landmarks Program
NO <sub>2</sub>	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NO <sub>x</sub>	nitrous oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NRNL	National Registry of Natural Landmarks
OHWM	ordinary high-water mark
PA	Programmatic Agreement
PM	Post Mile
PM <sub>2.5</sub>	particulate matter smaller than 2.5 microns or less in diameter
POC	pedestrian overcrossing
ppd	pounds per day
ppm	parts per million
PUD	Planned Unit Development
RD-1000	Reclamation District 1000
ROG	reactive organic gases
RT	Regional Transit
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement

SDC	Seismic Design Criteria
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SRCSD	Sacramento Regional County Sanitation District
SVAB	Sacramento Valley Air Basin
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
USACE	U.S. Army Corps of Engineers
USC	United States Code
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

## **Appendix D** References Cited

---



# Appendix D References Cited

---

## D.1 Printed References

- American Ornithologists' Union. 1983. Checklist of North American birds. 6th edition. Lawrence, KS: Allen Press.
- Analytical Environmental Services. 2003. Bikeway Master Plan Draft Environmental Impact Report. December 2003. Prepared for the City of Sacramento
- Bell, C. J., E. L. Lundelius Jr., A. D. Barnosky, R. W. Graham, E. H. Lindsay, D. R. Ruez Jr., H. A. Semken Jr., S. D. Webb, and R. J. Zakrzewski. 2004. The Blancan, Irvingtonian, and Rancholabrean Mammal Ages. In M. O. Woodburne (ed.), *Late Cretaceous and Cenozoic Mammals of North America*. Columbia University Press, New York.
- Bennett, G. L., G. S. Weissmann, G. S. Baker, and D. W. Hyndman. 2006. Regional-Scale Assessment of a Sequence-Bounding Paleosol on Fluvial Fans Using Ground-Penetrating Radar, Eastern San Joaquin Valley, California. Geological Society of America Bulletin, Vol. 118, No. 5/6:724-732.
- Bowen, M. 2004. *Historic Resources Evaluation Report for the Natomas Interstate 80 Bicycle and Pedestrian Overcrossing Project*. City of Sacramento, Sacramento County, California. On file at the California Department of Transportation, District 3, Marysville, CA.
- Bradley, D., and M. Corbett. 1995. *Final Rural Landscape Report for Reclamation District 1000*. U.S. Army Engineer District, Corps of Engineers. On file at the City of Sacramento Planning and Building Department. Sacramento, CA
- California Air Resources Board. 2006. *The California Almanac of Emissions and Air Quality: 2006 Edition*. Planning and Technical Support Division. Sacramento, CA.
- \_\_\_\_\_. 2008a. *Ambient Air Quality Standards*. Last Revised: February 21, 2008. Available: <<http://www.arb.ca.gov/research/aags/aags2.pdf>>. Accessed: February 26, 2008.
- \_\_\_\_\_. 2008b. *Air Resources Board Databases: Aerometric Data Analysis and Management System (ADAM)*. Last Revised: January 15, 2008. Available: <<http://www.arb.ca.gov/html/databases.htm>>. Accessed: March 17, 2008.
- California Department of Fish and Game. 1994. Staff report regarding mitigation for impacts to Swainson's hawk (*Buteo swainsoni*) in the Central Valley of California. November 1. Sacramento, CA.
- California Department of Food and Agriculture. 2001. Pest ratings of noxious weed species and noxious weed seed (list and update). Available: <<http://pi.cdfa.ca.gov/weedinfo/Index.html>>. Last updated: February 22, 2001.
- California Department of Transportation. 2003. *Construction Site Best Management Practices Manual*. Sacramento, CA.
- \_\_\_\_\_. 2007. *Statewide Storm Water Quality Handbooks*. Sacramento, CA.

- California Natural Diversity Database. 2008. Records search of the Grays Bend, Taylor Monument, Rio Linda, Davis, Clarkburg, Florin, Saxon, and Sacramento East 7.5-minute quadrangles. Sacramento, CA. California Department of Fish and Game.
- Caltrans. See California Department of Transportation.
- CARB. See California Air Resources Board.
- CDFG. See California Department of Food and Agriculture.
- CDFG. See California Department of Fish and Game.
- Cherven, V. B. 1984. *Early Pleistocene glacial outwash deposits in the eastern San Joaquin Valley, California: a model for humid-region alluvial fans*. Sedimentology 31 (6):823–836.
- Chica, L. 2008. Larry Craig, Caltrans Environmental Coordinator. Email message February 14, 2008. <Larry\_Chica@dot.ca.gov>.
- City of Sacramento. 1987. City of Sacramento General Plan Update Draft Environmental Impact Report. Department of Planning and Development. March.
- \_\_\_\_\_. 1988a. City of Sacramento General Plan. Department of Planning and Development. Adopted by the City of Sacramento City Council on January 19, 1988. (Resolution No. CC88-058.)
- \_\_\_\_\_. 1988b. North Natomas Community Plan. Department of Planning and Development Department. Adopted by the City of Sacramento City Council on November 29, 1988.
- \_\_\_\_\_. 1994. North Natomas Community Plan. Department of Planning and Development. Adopted by the Sacramento City Council on May 4, 1994. (Resolution No. 94-259.) Amended by Sacramento City Council on April 16, 1996.
- \_\_\_\_\_. 1999. South Natomas Community Plan. Amended June 1999. City of Sacramento Planning Department. Sacramento, CA.
- \_\_\_\_\_. 2001. *The 2010 Sacramento City/County Bikeway Master Plan Update*. Sacramento City/County staff. Sacramento, CA.
- \_\_\_\_\_. 2002. North Natomas Community Plan Map. Last updated August 2002.
- \_\_\_\_\_. 2003a. Housing Element of the General Plan, Housing Element Update July 1, 2002 – July 30, 2007. City of Sacramento Planning and Building Department. Adopted by the City Council July 10, 2003. (Resolution No. 2003-384.)
- \_\_\_\_\_. 2003b. South Natomas Community Plan Map. Last Updated January 2006.
- \_\_\_\_\_. City of Sacramento website. Updated July 1, 2004. Accessed July 7, 2004. Available at <http://www.cityofsacramento.org>.
- \_\_\_\_\_. 2005. Technical Background Report for the 2030 General Plan. Available: <http://www.sacgp.org/documents.html#tblr>. Accessed: March 17, 2008.

- . 2007. *City of Sacramento Draft 2030 General Plan Update*. Sacramento, CA.
- . 2008a. *City of Sacramento Draft 2030 General Plan Update. North Natomas Draft Community Plan Chapter*. Sacramento, CA.
- . 2008b. *City of Sacramento Draft 2030 General Plan Update. South Natomas Draft Community Plan Chapter*. Sacramento, CA.
- City of Sacramento Website. Updated 2008. Accessed March 12, 2008. Available online at: <http://www.cityofsacramento.org/>.
- City of Sacramento/County of Sacramento. 1993. *2010 Sacramento City/County Bikeway Master Plan* (Department of Transportation. Adopted by the County of Sacramento on November 23, 1993. Adopted by the City of Sacramento April 11, 1995. Sacramento, CA.
- City of Sacramento, Sutter County, and Natomas Basin Conservancy. 2003. Final Natomas Basin Habitat Conservation Plan. Sacramento and Sutter Counties, CA.
- CNDDDB. See California Natural Diversity Database.
- Dames & Moore. 1995. Final Rural Landscape Report for Reclamation District 1000. U.S. Army Engineer District, Corps of Engineers. On file at the City of Sacramento Planning and Building Department. Sacramento, CA
- EPA. See U.S. Environmental Protection Agency.
- Federal Highway Administration. 1983. *Visual Impact Assessment for Highway Projects*. (FHWA-HI-88-054.) Available at: <http://www.dot.ca.gov/ser/guidance.htm#visual>
- Federal Highway Administration, Advisory Council on Historic Preservation, California State Historic Preservation Officer, and California Department of Transportation. 2004. *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as It Pertains to the Administration of the Federal-Aid Highway Program in California*.
- Federal Transit Administration. 2006. Transit Noise Impact and Vibration Assessment. Available: <[http://www.fta.dot.gov/documents/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf)>
- FHWA. See Federal Highway Administration.
- Gillespie, A. R., M. M. Clark, and R. M. Burke. 1999. Eliot Blackwelder and the alpine glaciations of the Sierra Nevada. In E. M. Moores, D. L. Stout, and D. Sloan (eds.), *Classic Cordilleran Concepts: A View from California*. (Geological Society of America Special Paper 338, page 449.)
- Grinnell, J. and A. H. Miller. 1944. The distribution of the birds of California. Pacific Coast Avifauna. 27:1-608

- Hart, E. W., and W. A. Bryant. 1997. *Fault-Rupture Hazard Zones in California: Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zone Maps*. (Special Publication 42.) California Division of Mines and Geology
- International Conference of Building Officials. 1997. *Uniform Building Code*. Whittier, CA
- Jennings, M. R., and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Final report. California Department of Fish and Game, Inland Fisheries Division. Rancho Cordova, CA.
- Jennings, M. R., M. P. Hayes, and D. C. Holland. 1992. A petition to U.S. Fish and Wildlife Service to place the California red-legged frog and the western pond turtle on the list of endangered and threatened wildlife and plants.
- Jones & Stokes. 2004. *Negative Archaeological Survey Report for the Interstate 80 Bicycle and Pedestrian Overcrossing Project City of Sacramento, Sacramento County, California*. July. (J&S 03-211.) Sacramento, CA. Prepared for the City of Sacramento, Sacramento, CA.
- . 2008. *Natomas Interstate 80 Bicycle and Pedestrian Overcrossing Project Finding of Effects*. Sacramento, CA.
- Lettis, W. R., and Unruh, J. R. 1991. Quaternary geology of the Great Valley, California, in Morrison, R. B., editor, *Quaternary nonglacial geology—Continous U. S., Geological Society of America, Geology of North America*, vol. K-2.
- Sacramento Metropolitan Air Quality Management District. 2004. *Guide for Air Quality Assessment in Sacramento County*. July 10. Sacramento, CA.
- Scott, E., and K. Springer. 2003. CEQA and fossil preservation in California. *The Environmental Monitor*, fall 2003.
- Shlenson, R. J. 1971. The Quaternary Deltaic and Channel System in the Central Great Valley, California. *Annals of the Association of American Geographers*, 61(3):427–440.
- SMAQMD. See Sacramento Metropolitan Air Quality Management District.
- State of California. 2003. *State of California General Plan Guidelines 2003*. Governor's Office of Planning and Research. Available: [http://www.opr.ca.gov/planning/publications/General\\_Plan\\_Guidelines\\_2003.pdf](http://www.opr.ca.gov/planning/publications/General_Plan_Guidelines_2003.pdf).
- Stebbins, Robert C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3<sup>rd</sup> Edition. Boston: Houghton Mifflin Company.
- U.S. Environmental Protection Agency. 2008. *AirData*. Last Revised: March 4, 2008. Available: <<http://www.epa.gov/air/data/reports.html>>. Accessed: March 17, 2008.
- U.S. Fish and Wildlife Service. 1999. Draft Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). Portland, OR.
- USFWS. See U.S. Fish and Wildlife Service.

Weissmann, G. S., J. F. Mount, and G. E. Fogg. 2002. Glacially driven cycles in accumulation space and sequence stratigraphy of a stream-dominated alluvial fan, San Joaquin Valley, California. *Journal of Sedimentary Research*.

## **D.2 Personal Communications**

de Beauvieres, Mary. 2008. Principal Planner. City of Sacramento Department of Parks and Recreation. Email communication concerning current park and recreational lands within the City of Sacramento. June 2008.

Chiea, Larry. 2008. Environmental Coordinator. California Department of Transportation. Email communication concerning Section 7 consultation for the Natomas I-80 Bicycle and Pedestrian Overcrossing Project. February 2008.

Johnson, S. 2004. Scott Johnson, Assistant Planner, City of Sacramento Planning and Building Department, Environmental Planning Services. Numerous emails and phone communication. March–July 2004.

Widell, C. 1994. Office of Historic Preservation Concurrence Letter Regarding Eligibility of RD 1000 Rural Historic Landscape District to National Register of Historic Places. September 16. On file at the North Central Information Center. Sacramento, CA.



## **Appendix E** Letter of Concurrence

---





**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

P. O. BOX 942896  
SACRAMENTO, CA 94296-0001  
(916) 653-6624 Fax: (916) 653-9824  
calshpo@ohp.parks.ca.gov  
www.ohp.parks.ca.gov

March 24, 2008

Reply To: FHWA080226A

Gregory P. King  
Chief, Cultural and Community Studies Office  
Division of Environmental Analysis  
Department of Transportation  
PO Box 942874  
Sacramento, CA 94274-0001

Re: Finding of No Adverse Effect for the Proposed Interstate 80 Bicycle and Pedestrian Overcrossing Project, Sacramento County, CA

Dear Mr. King:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The California Department of Transportation is requesting my concurrence that a finding of no adverse effect without standard conditions is appropriate for this undertaking. Based on my review of the submitted documentation, I concur with this finding.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at [nlindquist@parks.ca.gov](mailto:nlindquist@parks.ca.gov).

Sincerely,

A handwritten signature in cursive script that reads "Edward H. Shattler for".

Milford Wayne Donaldson, FAIA  
State Historic Preservation Officer



**CITY OF SACRAMENTO**  
CALIFORNIA

DEVELOPMENT SERVICES  
DEPARTMENT

300 RICHARDS BLVD  
3<sup>rd</sup> FLOOR  
SACRAMENTO, CA  
95811

916-808-5842  
FAX 916-808-1077

September 16, 2008

**NOTICE OF ERRATA**  
**Interstate 80 Bicycle/Pedestrian Overcrossing (I-80 POC) Project (P05-108)**  
**Initial Study**

After the circulation of the initial study/draft mitigated negative declaration for the I-80 POC project, additions were made to the initial study based upon comments received during the public review period. Revisions were made pursuant to CEQA Guidelines Section 15073.5(c)(1)(4), which consisted of more effective mitigation measures, and revisions that merely clarify the information contained in the mitigated negative declaration and initial study. Recirculation of the mitigated negative declaration is not required.

Deletions are set forth in ~~strike~~through; additions to the text are set forth in **bold**.

Page 1-2: Section 1.3, Project Description – "...constructed by the **Sacramento Regional County** Sanitation District, runs..."

Page 2.1-8: Section 2.1.2.2, Affected Environment, Sewer System – "The Sacramento Regional Wastewater Treatment Plant has an existing capacity of approximately 150 treats on average 165 million gallons of wastewater per day (mgd), of dry-weather flow and is capable of treating up to 400 399 mgd of during peak wet weather flow."

Page 2.1-16: Section 2.1.5.1, Regulatory Setting – **Cultural resource impacts may be considered significant if the proposed project would result in a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5.**

Page 2.1-17: Third Paragraph – "(Widell pers. comm. 1994)"

Page 2.3-20: **Mitigation Measure BIO-6: Compensate for the temporary and permanent loss of GGS habitat**

Approximately 1.08 acres of upland GGS habitat and 0.23 acres of aquatic habitat will be temporarily affected by construction activities. Approximately 0.66 acres of upland habitat will be permanently lost as a result of construction activities (Table 2.3-5-2). Approximately 0.08 acres of permanent habitat loss on the north side of I-80 and west of the West Drainage Canal have already been compensated for by the LNWL project. In addition, habitat compensation fees have already been paid for all areas south of I-80 per the NBHCP. Habitat compensation fees may be required for temporary and permanent habitat losses only on the west side of the West

~~Drainage Canal minus the habitat compensation already made for the LNWL (pending a decision from USFWS). The project will compensate for permanent loss of GGS habitat at ratio of 3:1. Temporary habitat loss will be mitigated by restoration for one (1) season of disturbance; restoration plus 1:1 replacement for two (2) seasons of disturbance; or 3:1 replacement (or restoration plus 2:1 replacement) for more than two seasons, and shall be approved by and occur at a location acceptable to the U.S. Fish and Wildlife Service and California Department of Fish and Game.~~

**Restoration of GGS habitat within the project area pursuant to "Guidelines for Restoration and/or Replacement of Giant Garter Snake Habitat" or other methods agreeable to the agencies identified in the Biological Opinion and agreeable to RD1000 will be undertaken.**

**Page 2.3-22: HCP Mitigation Measure V.B.5b: Measures to reduce take of Swainson's hawk**

To ensure that possible impacts on nesting Swainson's hawks are less than significant, and that unauthorized take of Swainson's hawk does not occur, the City shall implement the following measures to reduce nest disturbance taken from the NBHCP:

1. Prior to the commencement of development activities at any development site within the NBHCP area, a preconstruction survey for nesting Swainson's hawks shall be conducted in suitable habitat within 0.5 mile of the project area. The surveys will be used to determine if any Swainson's hawk nest trees will be removed onsite, or if active nests occur on or within 0.5 mile of the site. These surveys shall be conducted according to the Swainson's Hawk Technical Advisory Committee's (May 31, 2000) methodology or updated methodologies, as approved by the Service and CDFG, using experienced Swainson's hawk surveyors.
2. If breeding Swainson's hawk (i.e., exhibiting nest building or nesting behavior) are identified, no new disturbances (e.g., heavy equipment operation associated with construction) will occur within 0.5 mile of an active nest between March 15 and September 15, or until a qualified biologist, with concurrence by DFG, has determined that young have fledged or that the nest is no longer occupied. If the active nest is located within 0.25 mile) of existing urban development, the new disturbance zone can be limited to 0.25 mile versus 0.5 mile. ~~Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within 0.50 mile of an active nest are not restricted.~~
3. ~~If construction or other project-related activities which may cause nest abandonment or forced fledging are proposed within the 0.25-mile zone, intensive monitoring (funded by the project sponsor) by a DFG-approved raptor biologist will be required. Exact implementation of this measure will be based on specific information at the project site. Prior to ground disturbance, compensation for the temporary loss of 1.58 acres, and permanent loss of 0.66 acres of foraging habitat will be undertaken at a ratio of 1:1, and shall be approved by and occur at a location acceptable to the U.S. Fish and Wildlife Service and California Department of Fish and Game.~~

The above measures will apply to all of the project area. However, for the portion of this project outside of the HCP area, the City shall also consult directly with DFG for their concurrence with this approach and to determine whether additional permits (e.g., incidental take permit under Section 2081 of CESA) are required.

Sacramento splittail are listed as a State species of special concern. Adult splittail migrate from Suisun Bay and the Delta to upstream spawning habitat during December through March. An angler captured a Sacramento splittail in the project area (Cane, pers. comm. 2008). While there is a barrier between the Sacramento River and the Natomas Main Drainage Canal, it is likely anglers could catch a splittail in the Sacramento River and release them into the Drainage Canal. Splittail could survive in the Drainage Canal, however it is unknown if spawning habitat is available. With the implementation of the mitigation below, impacts to Sacramento splittail resulting from the I-80 POC project will be less than significant.

**Mitigation Measure BIO-8: Remove Fish From the Isolated Cofferdam Area**

The City will ensure that a fish biologist is on site prior to dewatering to implement a fish rescue operation in the isolated area between the cofferdams that may harbor stranded fish. Exclusion and rescue protocols outlined by DFG will be implemented. Fish shall be removed from the isolated area with a dip net. At least one person on the fish rescue team will have a 4-year college degree in fisheries or biology, or related degree. The person must also have at least 2 years of professional experience in fisheries field surveys. All fish will be released downstream of the project area. If any listed fish such as steelhead are recovered, NMFS and DFG will be notified immediately and construction activities will cease until the agencies and the City have decided on appropriate actions.

Appendix D, Page 2: D.1 Printed References –  
Chiea, L. 2008. Larry Craig Chiea. Caltrans Environmental Coordinator. Email message  
Februaury 14, 2008 Larry\_Chiea@dot.ca.gov.

Appendix D, Page 5: D.2 Personal Communications –  
Cane, M. 2008 Michael Cane, Caltrans Environmental Planner Natural Resources.  
Sacramento Office. Telephone conversation September 11, 2008.  
Michael\_cane@dot.ca.gov.