

Appendix D
Biological Resources Technical Report

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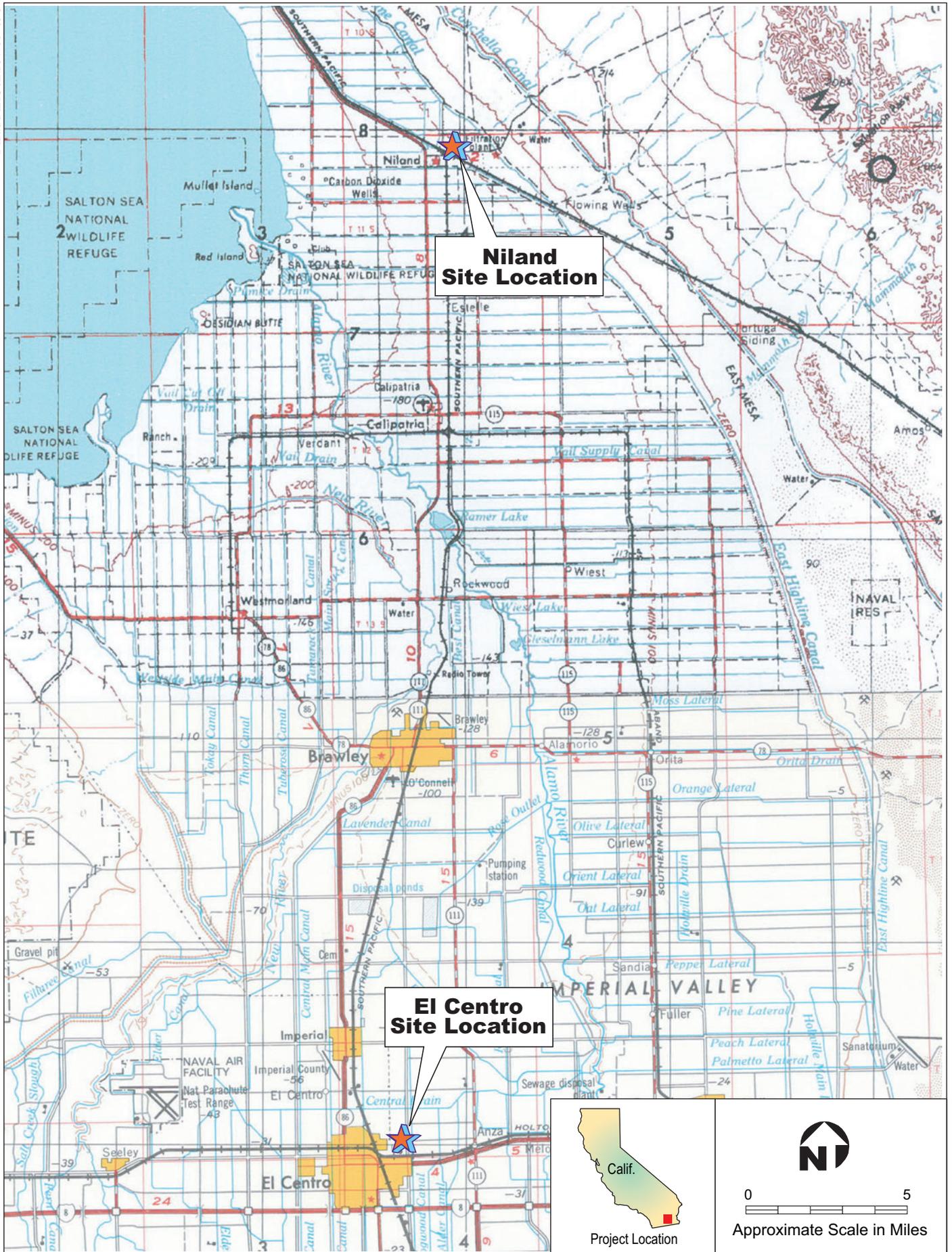
List of Acronyms

CDFG	California Department of Fish and Game
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CSSC	California Species of Special Concern
ECGS	El Centro Generation Station
IID	Imperial Irrigation District
URS	URS Corporation

List of Acronyms

URS Corporation (URS) was retained by the Imperial Irrigation District (IID), Power Generation Division to characterize the biological resources at the El Centro Generation Station (ECGS) repower site located on East Villa Road in El Centro, and the proposed peaker site located on Beal Road near the Town of Niland. Both sites are within Imperial County, California. The site locations are identified in Figure 1, Locations of El Centro and Niland Sites. URS understands that this study will be used by IID to document the current biological resources at the two sites. URS also understands that neither site will involve changes to existing or new linear corridors (natural gas, water, or electric interconnects), and that Project support facilities, such as laydown areas for construction, will be within the designated site boundaries.

The survey areas for both sites were identified in the URS scope of services dated March 10, 2005 prepared by Jeremy Rowland, URS project manager, and includes the existing ECGS site, the Niland site, plus land within 200 feet surrounding these sites. The additional 200 feet was included to evaluate (1) the environmental context of the site, and (2) an area of potential indirect affects due to construction activities. Plant and wildlife biological resources were characterized and documented in this report based on a literature review and a field survey conducted by Donald Mitchell, URS senior biologist. For Mr. Mitchell's detailed resume, please see Attachment B, Project Resume for Donald Mitchell. Mr. Mitchell was accompanied in the field at the ECGS site by IID representative Charles Canales, and at the Niland site by Mr. Canales and Mr. Kevan Hutchinson from IID.



Imperial Irrigation District
Power Generation Division
URS Corporation

Source:
U.S.G.S. 1:25,000 Maps
Salton Sea, CA, NV-1959 (Rev 1969)
El Centro, CA, AZ-1958 (Rev1977)

Figure 1. **LOCATIONS OF EL CENTRO AND NILAND SITES**

April
2005

2.1 LITERATURE SEARCH

As part of the biological resources characterization study for the sites, a literature search was conducted. Prior to conducting field surveys, office investigations were performed to gather existing information on sensitive botanical and wildlife species that are known or that could occur in the vicinities of the sites. The office investigation included reviews of: (1) available literature; (2) the reports from the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDDB); the California Native Plant Society (CNPS) Inventory On-line (CNPS 2005); and (4) the IID Water Conservation and Transfer Project, Habitat Conservation Plan (IID 2002). A list of potentially occurring special-status species was prepared based on the literature search.

The review of available literature included standard species field guides and floras including: Powell and Hougue (1979), Stebbins (1985), Peterson (1990), Jameson and Peeters (1988), Abrams and Farris (1960), Hickman (1993), Crampton (1974), and Munz (1974).

2.2 VEGETATION CLASSIFICATION AND MAPPING

On March 31, 2005, URS biologist Donald Mitchell conducted vegetation classification and mapping at the two sites. The efforts focused on classification of natural vegetation types, whereas non-native vegetation, agricultural, horticultural, and disturbance areas were not rigorously assessed. Lists of dominant plant species were developed. A survey for special-status plant species was also conducted. The data collection method at the ECGS site included a tour of the facility grounds conducted by Mr. Canales. The data collection method at the Niland site was conducted by walking several east/west transects. The mapping task included a characterization of the sites and a general characterization of the site vicinity to a distance of 200 feet. The vegetation classification system was based on Holland (1986).

2.3 WILDLIFE SURVEYS

Wildlife surveys were conducted concurrently with the vegetation classification and mapping surveys. The survey focused on the detection of special-status wildlife species. At the ECGS site, IID facilities personnel, including Manual Velarde, operations supervisor, were interviewed regarding their onsite wildlife occurrence knowledge. Wildlife presence and sign were identified and documented in the field at both sites. Signs included scat (fecal material), pellets (raptor species regurgitation), tracks, and burrows. Binoculars were used to aid in bird identification. Potential habitat characteristics for sensitive wildlife species were evaluated for suitability to support the special-status species identified by the literature review.

3.1 VEGETATION COMMUNITIES

3.1.1 ECGS Site

The ECGS site is mostly disturbed bare ground, existing facilities, paved areas, and water reservoirs. The vegetation, ground disturbance, and infrastructure features of the site are mapped in Figure 2, Draft Biological Resources Map, ECGS Site. There are no natural plant communities that occur on site. The only native plant species that occurred as scattered patches was alkali-mallow (*Malvella leprosa*). There are no special-status plant species that were observed or that are expected to occur on the site. A description of the horticultural plantings on the site and in the adjacent areas is omitted from this report because these areas are not considered habitats for native species. A thumbnail description of adjacent areas within 200 feet of the site includes:

- North: E. Villa Road, agricultural fields and operations, disturbed grounds.
- East: Dogwood Road, agricultural fields and operations, disturbed grounds.
- South: Railroad tracks, disturbed grounds, light industrial areas.
- West: Vacant lot, disturbed grounds.

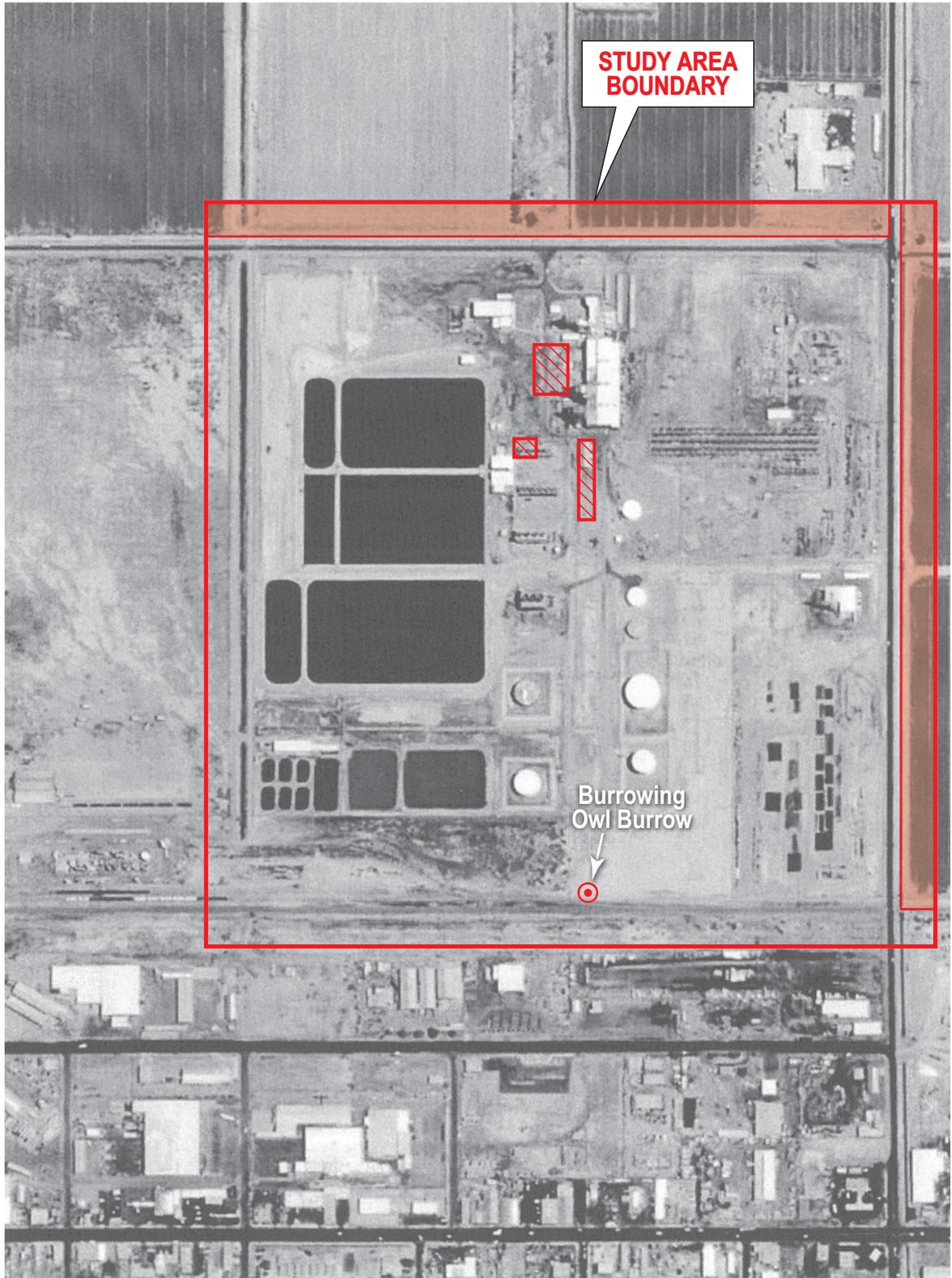
There are no native vegetation communities within 200 feet of the site. The environmental setting of the ECGS site to a radius of 1.0 mile can be characterized as urban and suburban communities and agricultural land uses.

3.1.2 Niland Site

The vegetation, ground disturbance, and infrastructure features of the Niland site are mapped in Figure 3, Draft Biological Resources Map, Niland Site. There is land disturbance associated with an existing IID substation and a storage area for transmission line tower scrap located in the westernmost quarter of the site. However, the majority of the Niland site is in a relatively natural condition and vegetated by a mixed Sonoran creosote bush scrub and desert saltbush scrub vegetation type (Holland 1986). The dominant shrub species are generally widely spaced and include creosote bush (*Larrea tridentata*), shadscale (*Atriplex confertifolia*), allscale (*A. polycarpa*), desert thorn (*Lycium* sp.), and burro-weed (*Ambrosia dumosa*).

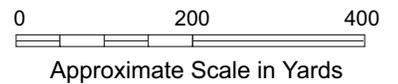
Within the open areas between the shrubs, annual plantain (*Plantago ovata*), red-stemmed filaree (*Erodium cicutarium*), and Mediterranean grass (*Schismus* sp.) are the dominant low-growing herb and grass stratum species that occur. A stand of salt cedar (*Tamarix* sp.) occurs along Cuff Road. Other plant species observed are included in Attachment A. A thumbnail description of adjacent areas within 200 feet of the site includes:

- North: Contiguous natural vegetation.
- East: Cuff Road, rural residential, disturbed grounds.
- South: Beal Road, natural vegetation, disturbed grounds.
- West: Contiguous natural vegetation, disturbed grounds.



Legend

-  New Facilities Locations
-  Agricultural Land
-  Disturbed Ground



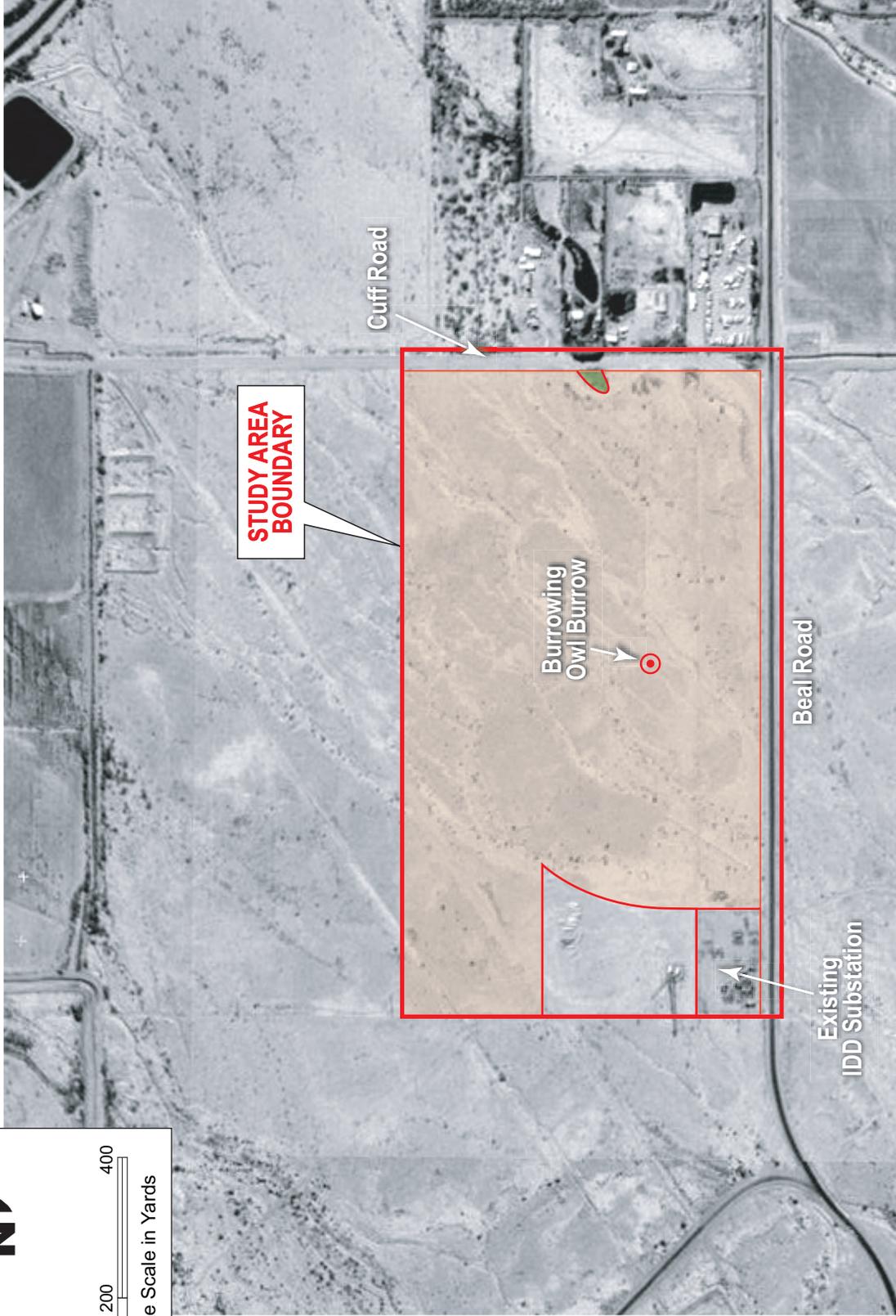
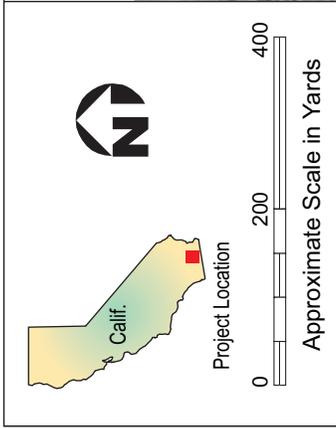
Imperial Irrigation District
Power Generation Division

URS Corporation

Source:
TerraServerUSA
El Centro, CA
Dated 5/28/2002

Figure 2. **DRAFT BIOLOGICAL
RESOURCES MAP**

April
2005



- Legend**
- Mixed Sonoran Creosote Bush Scrub and Saltbush Scrub
 - Disturbed Ground
 - Salt Cedar

Imperial Irrigation District
Power Generation Division
URS Corporation

Source:
TerraServerUSA
2 km East of Niland, CA
Dated 6/8/2002

Figure 3. **DRAFT BIOLOGICAL RESOURCES MAP**

April 2005

3.2 WILDLIFE SPECIES AND HABITAT RESOURCES

Wildlife species and habitat resources observed on the two sites are described below. Refer to Attachment A for a list of wildlife species observed during the field surveys.

3.2.1 ECGS Site

The ECGS site is partly in a developed condition and partly in a disturbed condition and there is a moderate level of ongoing human activities. These factors and the low level of available habitat resources limit the potential of the site to support native wildlife species. Characteristic wildlife that are adapted to such conditions that were observed, reported, or are expected at the site include house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), rock dove (*Columba livia*), Northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), greater roadrunner (*Geococcyx californianus*), and great-tailed grackle (*Quiscalus mexicanus*). There are no native species of reptiles or mammals that are expected to regularly occur on the site.

3.2.2 Niland Site

The Niland site is mostly in a natural condition with contiguous areas of native habitats in the four compass directions within a 1-mile radius. The site is considered to have approximately equivalent habitat resources values as those habitats of a similar type in the general area and, therefore, about the same potential to support wildlife species. As such, it is not expected that there are any wildlife species that would occupy the site preferentially to the adjacent areas.

Characteristic wildlife species that were observed or are expected at the site include side-blotched lizard (*Uta stansburiana*), desert iguana (*Dipsosaurus dorsalis*), western whiptail (*Cnemidophorus tigris*), desert horned lizard (*Phrynosoma platyrhinos*), long-nosed leopard lizard (*Gambelia wislizenii*), zebra-tailed lizard (*Callisaurus draconoides*), western diamondback rattlesnake (*Crotalus atrox*), western patch-nosed snake (*Salvadora hexalepis*), long-nosed snake (*Rhinocheilus lecontei*), gopher snake (*Pituophis melanoleucus*), night snake (*Hypsiglena torquata*), coachwhip (*Masticophis flagellum*), Say's phoebe (*Sayornis saya*), western meadowlark (*Sturnella neglecta*), white-crowned sparrow (*Zonotrichia leucophrys*), black-throated sparrow (*Amphispiza bilineata*), sage sparrow (*Amphispiza belli*), black-tailed gnatcatcher (*Polioptila melanura*), rock wren (*Salpinctes obsoletus*), common raven (*Corvus corax*), lesser nighthawk (*Chordeiles acutipennis*), burrowing owl (*Athene cunicularia*), greater roadrunner (*Geococcyx californianus*), common ground-dove (*Columbina passerine*), mourning dove (*Zenaida macroura*), Gambel's quail (*Callipepla gambelii*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), Audubon's cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), cactus mouse (*Peromyscus eremicus*), desert pocket mouse (*Perognathus penicillatus*), Merriam's kangaroo rat (*Dipodomys merriami*), Botta's pocket gopher (*Thomomys bottae*), round-tailed ground squirrel (*Spermophilus tereticaudus*), and coyote (*Canis latrans*). There are no species of bats that are expected to use the site.

3.3 SPECIAL-STATUS SPECIES OCCURRENCES

As used in this report, the term “special-status species” includes the following classifications:

- Federally listed as endangered.
- Federally listed as threatened.
- State-listed as endangered.
- State-listed as threatened.
- Federal Category 1 candidate for listing as endangered or threatened.
- Federal Species of Concern (a “term-of-art” for former Category 2 candidates).
- State candidate for possible listing.
- California Species of Special Concern.
- California Department of Fish and Game Fully Protected.
- Species that meet the criteria for listing, even if not currently included on any list, as described in Title 14 California Code of Regulations, Chapter 3 Guidelines, Article 20 Definitions, Section 15380 (d) of CEQA.
- Species protected by other sections of the California Fish and Game Code.
- Species that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring.
- A species population in California that may be on the periphery of its range, but is threatened with extirpation in California.
- A species closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, vernal pools, etc.).
- Species that are designated as special status, sensitive, or declining species by other state or federal agencies, or a non-governmental resources conservation organization.
- California Native Plant Society Lists:
 - List 1B: Plants rare, threatened, or endangered in California and elsewhere.
 - List 2: Plants rare, threatened, or endangered in California but more common elsewhere.

Based on the literature search, results of the field surveys, and conversations with IID personnel, potentially occurring special-status species were identified. Refer to Table 3.1, Potentially Occurring Special-Status Plant Species in the Site Vicinities, and Table 3.2, Potentially Occurring Special-Status Wildlife Species in the Site Vicinities, for potentially occurring special-status plant and wildlife species, respectively. The records search of the CNDDDB did not indicate that known occurrences of special-status species have been documented for either of the two sites. Some categories of special-status species identified in the literature search including fish, waterfowl, and wetland associated birds were removed from consideration in this report for the Niland site because suitable habitat is not present.

**TABLE 3.1
POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES IN THE SITE VICINITIES¹**

Species	Status ²	Closest Documented Locations of Occurrence	Year of Documented Occurrence	Potential for Occurrence on Site
ECGS Site				
Chaparral sand-verbena <i>Abronia villosa var. aurita</i>	1B	Calexico vicinity	Late 1800s	Discountable. Open sandy places in creosote bush scrub not present on site.
Abrams's spurge <i>Chamaesyce abramsiana</i>	2	Calexico, Brawley and Heber vicinities	Early 1900s	Discountable. Suitable sandy areas in desert scrub habitat not present on site.
Rock nettle <i>Eucnide rupestris</i>	2	Mount Signal and Painted Gorge vicinities	1994	Discountable. Habitat is cliff crevices in desert mountain ranges.
Hairy stickleaf <i>Mentzelia hirsutissima</i>	2	Mount Signal vicinity	1961	Discountable. Coarse rubble, talus slope, alluvial fans and washes not present on site.
Sand food <i>Pholisma sonora</i>	1B	Meloland vicinity	1915	Discountable. Sand dune habitat not present on site.
Niland Site				
Abrams's spurge <i>Chamaesyce abramsiana</i>	2	Niland and Wister vicinities	1912	Very low. Preferred habitat of sandy sites within desert scrub vegetation basically absent on site.
Munz's cholla <i>Opuntia munzii</i>	1B	Chocolate Mountains Aerial Gunnery Range and vicinity	1998	Discountable. Suitable habitat of sandy and gravelly soils of washes and along canyon walls of mountain ranges not present on site.

¹ California Natural Diversity Database Records Search for USGS El Centro, Brawley, Holtville West, Heber, Seeley, Niland, Wister, Iris Wash, and Iris 7.5-minute Series Quadrangles.

² Status:

CNPS (California Native Plant Society) Lists:

1B – Plants rare, threatened or endangered in California or elsewhere.

2 – Plants rare, threatened or endangered in California but more common elsewhere.

**TABLE 3.2
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES IN THE SITE VICINITIES¹**

Species	Status ²	Closest Documented Locations of Occurrence	Year of Known Occurrence	Potential for Occurrence on Site
ECGS Site				
Razorback sucker <i>Xyrauchen texanus</i>	FE/SE	All American Canal, East Highland Canal	None cited	Low, but not discountable within onsite open-water reservoirs. Periodically reported as incidental occurrences of entrained individuals from the Colorado River within the IID irrigation water distribution system.
Colorado River toad <i>Bufo alvarius</i>	CSSC	Holtville and Meloland	1912	Discountable. Onsite reservoirs unlikely breeding habitat due to presence of fishes that are predatory on eggs and young.
Flat-tailed horned lizard <i>Phrynosoma mcalli</i>	CSSC	Signal Mountain, Holtville, Seeley, and Brawley vicinities	Historic museum specimens; most recent from 1971	Discountable. No suitable habitat, including fine sandy washes and flats, is present on site or in the vicinity, and the site is likely not within current species range distribution.
Burrowing owl <i>Athene cunicularia</i>	CSSC	Numerous occurrences in El Centro vicinity generally within agricultural settings and along IID irrigation water system canals, ditches, berms, access roads, etc.	2005	One pair observed at burrow along southern fence line during field survey. Otherwise, carrying capacity of the site is regarded as low relative to the agricultural areas located in the Imperial Valley.
Ferruginous hawk <i>Buteo regalis</i>	CSSC	Meadows Union School, 4 miles east of El Centro	2003	Discountable. Desert scrub habitat with adequate small mammal prey base not present on site.
Crissal thrasher <i>Toxostoma crissale</i>	CSSC	Brawley vicinity	1910	Discountable. Preferred dense mesquite-ironwood-arrowweed-desert willow wash vegetation not present on site.
Yellow warbler <i>Dendroica petechia brewsteri</i>	CSSC	Calexico vicinity	1921	Discountable. Riparian woodland habitat not present on site.
California brown pelican <i>Pelecanus occidentalis</i>	FE/SE	Open-water reservoirs on site	2005	Reported by IID facilities staff to incidentally occur on site during migrations to opportunistically forage for fish. Not resident on site.
Yuma clapper rail <i>Rallus longirostris yumanensis</i>	FE/ST	New River, near El Centro Naval A.S., Seeley	1989	Discountable. Cattail and tule marsh not present within reservoirs on site.

TABLE 3.2
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES IN THE SITE VICINITIES¹

Species	Status ²	Closest Documented Locations of Occurrence	Year of Known Occurrence	Potential for Occurrence on Site
Colorado Valley woodrat <i>Neotoma albigula venusta</i>	None	Seeley vicinity	1909	Discountable. Cactus and mesquite habitat not present on site.
American badger <i>Taxidea taxus</i>	None	Silsbee	1911	Discountable. Sufficient prey base (burrowing rodents), friable soils for den sites, and open undisturbed areas not present on site.
Niland Site				
Colorado River toad <i>Bufo alvarius</i>	CSSC	Niland and Wister vicinities	1916	Discountable. No temporary pools or irrigation ditches present on site.
Desert tortoise <i>Gopherus agassizii</i>	FT/ST	Chocolate Mountains Aerial Gunnery Range and vicinity	2005	Unlikely to occur in the Imperial Valley area to the west of the East Highline Canal which includes the site.
Flat-tailed horned lizard <i>Phrynosoma mcalli</i>	CSSC	Durmid and Frink vicinities	1995 and 1966	Unlikely to occur. Preferred suitable habitat including fine sandy washes and flats is absent on site and the site is likely not within the current species range distribution regarded as eastward of the East Highline Canal.
Mountain plover <i>Charadrius montanus</i>	CSSC	Salton Sea National Wildlife Refuge and adjacent fields	1974	Unlikely. Preferred grassland, plowed field, grain field, and sod farm habitats not present on site.
Yellow warbler <i>Dendroica petechia brewsteri</i>	CSSC	Niland and Wister vicinities	1952	Low as a transient during migration. Discountable as a resident breeding bird on site.
Southwestern willow flycatcher <i>Empidonax traillii traillii</i>	SE	Niland and Wister vicinities	1952	Low as a transient during migration. Discountable as a resident breeding bird on site.
Yellow-breasted chat <i>Icteria virens</i>	CSSC	Wister Unit Wildlife Refuge	1961	Low as a transient during migration. Discountable as a resident breeding bird on site.
Black-tailed gnatcatcher <i>Polioptila melanura</i>	None	West Pond, Imperial Waterfowl Management Area	1968	Moderate foraging potential in desert scrub habitat on site. Low breeding potential because preferred mesquite-palo verde-ironwood woodland habitat not present on site.
Crissal thrasher <i>Toxostoma crissale</i>	CSSC	West Pond, Imperial Waterfowl Management Area	1969	Low as a transient during regional movement. Discountable as a breeding bird because preferred dense mesquite-ironwood-arrowweed-desert willow wash vegetation not present on site.

**TABLE 3.2
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES IN THE SITE VICINITIES¹**

Species	Status²	Closest Documented Locations of Occurrence	Year of Known Occurrence	Potential for Occurrence on Site
Burrowing owl <i>Athene cunicularia</i>	CSSC	Observed on site and known to be common in the Imperial Valley region	2005	Burrow located during the field survey. Later confirmation by Kevan Hutchinson, IID, of a breeding pair with one egg. Otherwise, carrying capacity of the site is regarded as low relative to the agricultural areas located in the Imperial Valley.
American badger <i>Taxidea taxus</i>	None	Imperial Waterfowl Management Area	1937	Low, but not discountable. Sufficient prey base (burrowing rodents) considered not likely present on site.
Nelson's bighorn sheep <i>Ovis canadensis nelsoni</i>	None	Chocolate Mountains Aerial Gunnery Range and vicinity	2005	Unlikely to occur in the Imperial Valley area to the west of the Coachella Canal which includes the site.

¹ California Natural Diversity Database Records Search for USGS El Centro, Brawley, Holtville West, Heber, Seeley, Niland, Wister, Iris Wash, and Iris 7.5-minute Series Quadrangles.

² Status:
 FE = Federal endangered
 FT = Federal threatened
 SE = State endangered
 ST = State threatened

CSSC = California Species of Special Concern

3.3.1 Special-Status Plant Species

No federal or state special-status plant species were observed on either the ECGS site or the Niland site during the surveys. The absence of sensitive plant species observations is believed to be due to human-caused reductions in historic range distributions and a general absence of suitable onsite habitat conditions and not due to poor germination attributable to unfavorable climatic conditions since rainfall was plentiful in 2005. Plant species that are documented in the CNDDDB to have occurred in the region of the two sites are presented in Table 3.1, Potentially Occurring Special-Status Plant Species in the Site Vicinities, and information is provided regarding sensitivity status, closest documented locations of occurrences, year of known occurrence, and assessments of potential for occurrence on site. All of the plant species in Table 3.1 are assessed to have an occurrence probability ranking of discountable or very low for the two sites. As such, no additional surveys for special-status plant species are considered to be necessary.

3.3.2 Special-Status Wildlife Species

With the exception of burrowing owls that were observed at both sites, and the California brown pelican which is reported by IID staff as incidentally occurring at the water reservoirs on the ECGS site, no federal or state special-status wildlife species were observed on either of the sites during the surveys. Wildlife species that are documented in the CNDDDB to have occurred in the region of the two sites, and species observed during the surveys or reported by IID staff to occur on the sites, are presented in Table 3.2, Potentially Occurring Special-Status Wildlife Species in the Site Vicinities. Information is provided in the table regarding sensitivity status, closest documented locations of occurrences, year of known occurrence, and assessments of potential for occurrence on site. Of the 23 species records included in Table 3.2, most are assessed to have discountable and low potentials for occurrence at the two sites.

Further discussion is provided below regarding those species that are considered to have known occurrences or a reasonable expectation for onsite occurrences, the potential for affects to these species, and preliminary mitigation suggestions if needed.

Burrowing Owl

A burrowing owl pair was observed along the southern fence line of the ECGS facility (Figure 2, Draft Biological Resource Map, ECCS Site). The burrow is located about 800 feet away from the sites proposed for new construction, so potential affects are expected to be minimal. A burrowing owl burrow and pellets were observed at the Niland site at approximate GPS coordinates utm 11S 0640169 / 3679147 or N 33 14.636 / W 115 29.728 (Figure 3, Draft Biological Resources Map, Niland Site). However, visual confirmation of owl presence could not be confirmed. Accordingly, Kevan Hutchinson from the IID Environmental Group returned to the location on April 4, 2005, and used a fiber optic scope to inspect the interior. The results indicated that the burrow was occupied by a breeding pair and at least one egg was observed.

IID may consider it prudent to adhere to either of the following two suggested courses of action to minimize potential affects to burrowing owls on the two sites:

1. Monitor owl activity on site, establish a 500-foot setback from active burrows, and implement construction activities to occur outside the breeding season (February 1 through August 30).
2. Follow the protocol for burrowing owl burrow closure specified in *Appendix D, Procedures for Removing Burrowing Owls*, in the *IID Water Conservation and Transfer Project Final Environmental Impact Report/Environmental Impact Statement Habitat Conservation Plan*, June 2002.

California Brown Pelican

Pelicans are reported by IID facilities staff to incidentally occur at the water reservoirs on the ECGS site during migrations to opportunistically forage for fish. They are not resident on site and no direct affects to pelican survival are expected. There is potential for an incremental perturbation of opportunistic foraging activity during the construction phase. However, this potential affect is considered not to be significant because far greater foraging opportunities occur at the Salton Sea. No mitigation is considered to be needed.

Razorback Sucker

This fish species is periodically reported as incidental occurrences of entrained individuals from the Colorado River within the IID irrigation water distribution system. The species is regarded as not likely to breed in the IID system, including terminal reservoirs such as those that occur on the ECGS site. These reservoirs will not be subject to construction disturbance and no direct affects, or indirect affects, are expected to any entrained individuals that might be present. No mitigation is considered to be needed.

3.3.3 Other Fish and Game Code Special-Status Categories

Raptor Species

Some species of raptors may use the ECGS site and the Niland site for foraging, roosting, or breeding activities. The burrowing owl, American kestrel, and the red-tailed hawk are cited as examples. Section 3503.5 of the California Fish and Game Code states: “It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” As such, it is possible that Section 3503.5 of the code could be invoked by development activities at the two sites. Appropriate mitigation for compliance with Section 3503.5 would likely include: (1) scheduling construction activity to occur outside of the breeding seasons for any raptor species that become resident on a site, and/or (2) dedication of a minimum construction setback from an active nesting location following consultation with the California Department of Fish and Game.

Nesting Songbirds

Section 3503 of the California Fish and Game Code states: “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Similar to the previous discussion, appropriate mitigation for compliance with Section 3503 would likely include: (1) scheduling construction activity to occur outside of the breeding seasons for any songbird species that become resident on a site, and/or (2) dedication of a minimum construction setback from an active nesting location following consultation with the California Department of Fish and Game.

Migratory Nongame Birds

Section 3513 of the California Fish and Game Code states: “It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.” Through compliance with the code sections cited previously, it is considered unlikely that Section 3513 of the code would be invoked by development of the two sites.

- Abrams, Leroy, and Roxana Ferris. 1960. *Illustrated Flora of the Pacific States*. Volumes I-IV. Stanford University Press. Stanford, CA.
- California Native Plant Society Inventory On-line (CNPS). 2005. <http://www.cnps.org/>
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Attachment A
Plant and Wildlife Species Lists

PLANT SPECIES LIST

ECGS Site

<u>Scientific Name</u>	<u>Common Name</u>
<i>Malvella leprosa</i>	alkali-mallow

Niland Site

<i>Ambrosia dumosa</i>	burro-weed
<i>Atriplex confertifolia</i>	shadscale
<i>A. polycarpa</i>	allscale
<i>Bromus rubens</i>	red brome
<i>Encelia frutescens</i>	bush encelia
<i>Erodium cicutarium</i>	red-stemmed filaree
<i>Larrea tridentata</i>	creosote bush
<i>Lycium</i> sp.	desert thorn
<i>Plantago ovata</i>	annual plantain
<i>Schismus</i> sp.	Mediterranean grass
<i>Sonchus oleraceus</i>	annual sowthistle
<i>Tamarix</i> sp.	salt cedar

WILDLIFE SPECIES LIST

ECGS Site

Birds:

<i>Athene cunicularia</i>	burrowing owl
<i>Columba livia</i>	domestic pigeon
<i>Carpodacus mexicanus</i>	house finch
<i>Columba livia</i>	domestic pigeon
<i>Corvus brachyrhynchos</i>	American crow
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Geococcyx californianus</i>	greater roadrunner
<i>Mimus polyglottos</i>	northern mockingbird
<i>Passer domesticus</i>	house sparrow
<i>Quiscalus mexicanus</i>	great-tailed grackle

Attachment A
Plant and Wildlife Species Lists

Scientific Name

Common Name

Sturnus vulgaris

European starling

Zenaida macroura

mourning dove

Niland Site

Reptiles:

Callisaurus draconoides

zebra-tailed lizard

Cnemidophorus tigris

western whiptail

Dipsosaurus dorsalis

desert iguana

Gambelia wislizenii

long-nosed leopard lizard

Phrynosoma platyrhinos

desert horned lizard

Uta stansburiana

side-blotched lizard

Crotalus atrox

western diamondback rattlesnake

Hypsiglena torquata

night snake

Masticophis flagellum

coachwhip

Pituophis melanoleucus

gopher snake

Rhinocheilus lecontei

long-nosed snake

Salvadora hexalepis

western patch-nosed snake

Birds:

Amphispiza belli

sage sparrow

Amphispiza bilineata

black-throated sparrow

Athene cunicularia

burrowing owl

Buteo jamaicensis

red-tailed hawk

Callipepla gambelii

Gambel's quail

Carpodacus mexicanus

house finch

Chordeiles acutipennis

lesser nighthawk

Columbina passerine

common ground-dove

Corvus brachyrhynchos

American crow

Corvus corax

common raven

Falco sparverius

American kestrel

Geococcyx californianus

greater roadrunner

Mimus polyglottos

northern mockingbird

Passer domesticus

house sparrow

Scientific Name

Common Name

Polioptila melanura

black-tailed gnatcatcher

Salpinctes obsoletus

rock wren

Sayornis saya

Say's phoebe

Sturnella neglecta

western meadowlark

Sturnus vulgaris

European starling

Zenaida macroura

mourning dove

Zonotrichia leucophrys

white-crowned sparrow

Mammals:

Canis latrans

coyote

Lepus californicus

black-tailed jackrabbit

Dipodomys merriami

Merriam's kangaroo rat

Perognathus penicillatus

desert pocket mouse

Peromyscus eremicus

cactus mouse

Spermophilus tereticaudus

round-tailed ground squirrel

Sylvilagus audubonii

Audubon's cottontail

Thomomys bottae

Botta's pocket gopher

Attachment B
Project Resume for Donald Mitchell

AREAS OF EXPERTISE

- CEQA/NEPA Environmental Impact Assessment
- Corps Section 404 Waters and Wetlands Jurisdictional Determination
- CDFG Section 1601-03 Jurisdiction Determination
- Revegetation Plan Design and Implementation
- Field Botany, Ecology and Vegetation Mapping
- Wildlife Ecology and Habitat Quality Assessment
- Focused Sensitive Plant and Wildlife Species Surveys
- RFP scope-of-work and cost proposal development

EDUCATION

University of California, Riverside, CA, B.S., Botany, 1986

University of California, Riverside, CA, M.S., Botany, 1989

PROFESSIONAL HISTORY

2004 – Present URS Corp., Santa Barbara, CA; Senior Project Biologist

REPRESENTATIVE EXPERIENCE

Mr. Mitchell has conducted biological and environmental assessments at project sites in Alameda, Calaveras, Fresno, Kern, Los Angeles, Madera, Monterey, Nevada, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties in California, as well as in the states of Arizona, Nevada, Wyoming, and Utah. He has conducted the following types of assessments: rare plant species surveys; plant species inventory and vegetation mapping; revegetation plan preparation and implementation; wildlife species general surveys; focused sensitive wildlife species surveys and habitat quality assessments; sensitive wildlife species monitoring and relocations; small mammal trapping studies; Corps Section 404 waters/wetlands delineation and jurisdictional determination; CDFG 1601-3 stream and riparian habitat assessments and jurisdictional determinations; Corps and CDFG permit application preparation and coordination; and preparation of biological assessment reports and sections of EIS and EIR documents for federal, state, and/or county agency CEQA and NEPA environmental review. Mr. Mitchell's duties have also included providing project management support as well as developing scopes and budgets for responding to RFPs.

DETAILED CORE SKILLS OR DETAILS BY ECONOMIC SECTOR AND BY PROJECT

Flood Control and Watershed Management

- **Santa Clara River Enhancement and Management Plan (SCREMP).** Development of a comprehensive plan for managing and preserving the physical, ecological, and economic resources within the 500-year floodplain of a 100-mile-long reach of the Santa Clara River in southern California.
- **Logan Wash Improvement Project.** Focused desert tortoise surveys and monitoring; Clark County, Nevada; Clark County Flood Control District.
- **Arroyo Simi Flood Control Project.** Biological surveys, vegetation mapping, technical illustration, EIR preparation; Simi Valley, Ventura County; Ventura County Flood Control Department.

2002 – 2004 AMEC Earth & Environmental, Inc., Riverside, CA; Senior Project Manager

2000 – 2002 Coachella Valley Water District, Coachella, CA; Biologist

1998 – 2000 Self-Employed (as M&C Biological Consultants, Goleta CA); Biological Consultant

1991 – 1998 Dames & Moore, Santa Barbara, CA; Staff Biologist

1989 – 1991 Tierra Madre Consultants, Riverside, CA; Staff Botanist

PROFESSIONAL QUALIFICATIONS

California Community Colleges Instructors Credential in Botanical Sciences #22 2MIT 001 - 367333; June 25, 1990 - valid for life

Society for Ecological Restoration. "Desert Restoration, Arid Ecosystems in the Southwest." Boulder City, NV, November 1996

Wetland Training Institute, Inc. "Wetland and Riparian Restoration, Creation and Monitoring." Sacramento, CA, October 1991.

- **Borrego Wash Channel Improvements Project.** Coastal California gnatcatcher, coastal cactus wren, and Quino checkerspot butterfly surveys and habitat assessments; Orange County; Irvine Ranch Water District.
- **Mojave River Improvement Project.** Waters/wetlands delineation, riparian habitat assessment; Victorville, San Bernardino County; San Bernardino County Flood Control District.
- **Galivan Retarding Basin and Associated Oso Creek Improvements Project.** Sensitive wildlife species survey and habitat suitability assessment, waters/wetlands delineation, riparian habitat assessment; Mission Viejo, Orange County; Orange County Environmental Management Agency.
- **Tahquitz Creek Flood Control Channel Improvement Project.** Pre-construction salvage of native plant species vegetative stocks and seed for post-construction phase revegetation; Riverside County; Riverside County Flood Control and Water Conservation District.
- **Wilson Creek Bridge Project Mitigation Monitoring Project.** Riparian revegetation success criteria monitoring; Riverside County; Riverside County Flood Control and Water Conservation District.
- **San Jacinto River Improvement Project.** Preparation of riparian habitat mitigation plan, preparation of Stephens' kangaroo rat mitigation plan, and preparation of population status report and mitigation plan for the San Jacinto Valley saltbush and thread-leaved brodiaea; Riverside County; Riverside County Flood Control and Water Conservation District
- **Coachella Valley Stormwater Channel Slope Protection Project Section 404 Delineation.** Conducted "waters/wetlands" delineation and prepared report submitted to the Corps; Riverside County; CVWD.

Domestic Water Development and Supply

- **Coachella Canal Lining Project.** Preparation of FEIS/R, Environmental Commitment Plan, and Revegetation Strategy; participation in ESA Section 7 Informal Consultation, NEPA Record of Decision, and CEQA Findings of Fact and Statement of Overriding Considerations and Mitigation Monitoring and Reporting Program processes and document preparation; project

Wetland Training Institute, Inc. "Federal Wetland Regulation." San Francisco, CA, February 1990.

Wetland Training Institute, Inc. "Preparation for Taking the Corps' Delineators Certification Program Test." Ontario, CA, January 1994.

The Central and Southern California Chapters of the Wildlife Society. "Biology and Inventory Techniques of Amphibians in Central and Southern California - a Workshop." Santa Barbara, CA, May 1993.

American Fisheries Society. "Introduction to Aquatic Invertebrate Biocriteria and Standardized Procedures for Rapid Biological Assessment." San Diego, CA, February 1998.

U.C. Davis University Extension. "California Watersheds: Protecting Water Quality and Aquatic Habitat." Sacramento, CA, March 1999.

Environmental Coordinator; desert tortoise and flat-tailed horned lizard surveys; Section 404 and Section 1601 coordination; Imperial and Riverside counties; CVWD.

- **Metropolitan Water District Westside Conveyance Project.** General biological survey; rare plant surveys including population mapping conducted for spiny rush, Peirson's morning glory, Catalina mariposa lily, and Lyon's pentachaeta; vegetation mapping; waters/wetlands delineation, riparian habitat assessment; technical report and EIR preparation; Ventura and Los Angeles counties; Metropolitan Water District.
- **Metropolitan Water District San Diego Pipeline #6 Project.** Waters/wetlands delineation, riparian habitat assessment; Riverside and San Diego counties; Metropolitan Water District.
- **Colorado River Commission (CRC) River Mountains Tunnel Water Supply Project for Las Vegas Valley, Nevada.** Desert tortoise monitoring; Clark County, Nevada; CRC.
- **Kern County Water Agency Long-term Water Supply Project.** Habitat/vegetation mapping; sensitive species habitat assessment; Tipton kangaroo rat trapping study; Kern County; Kern County Water Agency.
- **Imperial Irrigation District – San Diego County Water Authority 300 acre-feet Water Transfer Project HCP.** Represented CVWD interests with respect to the proposed water transfer; Imperial County; CVWD.
- **Lower Colorado River Multiple Species Habitat Conservation Plan.** Member of Biological Workgroup; represented CVWD interests pertaining to effects to biological species resulting from allocation and diversion of Colorado River waters to SoCal water agencies; Riverside and Imperial counties; CVWD.
- **Coachella Valley Water District Water Management Plan.** Development of baseline information pertaining to potential impacts to desert pupfish, Yuma clapper rail, and California black rail resulting from plan implementation; Riverside County; CVWD.
- **Vista del Mar Union School District Water Line Project Revegetation, Erosion Control, and Reclamation Plan (RECRP) Project.** Waters/wetlands delineation, riparian habitat assessment, RECRP

preparation and implementation monitoring, native grassland habitat restoration and transplanting implementation, Gaviota tarplant mitigation plan surveys and monitoring; Gaviota, Santa Barbara County; Vista del Mar Union School District/Chevron Company.

Electrical Power

- **Mead/McCullough - Victorville/Adelanto Transmission Project.** Waters /wetlands delineation, focused desert tortoise pre-construction surveys and construction monitoring, tortoise den excavations and relocations, rare plant surveys and population monitoring, revegetation monitoring, compliance report preparation; Nevada and California; Los Angeles Department of Water and Power (LADWP).
- **Edison Utilities Facilities Acquisition Project.** Rare plant survey; San Bernardino National Forest, San Bernardino County; SoCal Edison Co.

Department of Defense

- **Nellis AFB Target Site Project.** Desert tortoise monitoring, abandoned target site revegetation and restoration plan preparation and implementation; Nellis AFB, Clark County, Nevada; USAF.
- **Nellis AFB Wetland, Spring and Floodplain Inventory Project.** Development of workplan to inventory wetlands, springs and floodplains on the Nellis AFB range; Nellis AFB, Clark County, Nevada; USAF.
- **NAS Miramar Land Use Management Plan.** Biological resources research and baseline data development; NAS Miramar, San Diego County; USMC.
- **Vandenberg AFB, Septic System Sites Revegetation Project.** Revegetation plan preparation; Vandenberg AFB, Santa Barbara County; USAF.
- **California Commercial Spaceport Project Wetlands Assessment, Vandenberg AFB.** Waters/wetlands delineation; Vandenberg AFB, Santa Barbara County; Lockheed Environmental/USAF.

Transportation and Infrastructure

- **Union Pacific Railroad – Southern Pacific Railroad Merger Project.** General research and report preparation addressing sensitive species and jurisdictional waters

issues pending the merger; western regional United States; Union Pacific Railroad.

- **Isabel Avenue Biological Assessment Project.**
Vegetation mapping, general biological survey, waters/wetlands delineation, riparian habitat assessment, NES preparation; Livermore, Alameda County; Caltrans.
- **Highway 1 Improvement Project, Castroville to the Santa Cruz County Line, Wetland Assessment.**
Waters/wetlands delineation, draft EIR preparation/revision for final EIR; Monterey County; Caltrans.
- **State Highway 14 Improvement Project.**
Waters/wetlands delineation, Mohave ground squirrel Cumulative Human Impact Evaluation Format (CHIEF) survey, NES preparation; Kern County; Caltrans.
- **State Highway 33 Improvement Project.**
Waters/wetlands delineation; NES preparation; Fresno County; Caltrans.
- **State Highway 41 Improvement Project.** Sensitive amphibian survey for western spadefoot toad and California tiger salamander; vernal pool delineation and botanical assessment; Madera County; Caltrans.
- **State Highway 49 Improvement Project.**
Waters/wetlands delineation, riparian habitat assessment, oak tree inventory, general botanical assessment, rare plant surveys; Nevada County; Caltrans.
- **State Highway 58 Improvement Project.** Biological resources survey of eight culvert sites; Kern County; Caltrans.
- **State Highway 79 Improvement Project.** General biological survey, Stephens' kangaroo rat survey, rare plant survey, sensitive species habitat assessment, waters/wetlands delineation, riparian habitat assessment, IS/NES preparation, compliance/mitigation monitoring, revegetation plan preparation; western Riverside County; Riverside County Transportation Commission/Caltrans.
- **State Highway 178 Improvement Project.** Oak tree inventory, rare plant habitat assessment, general wildlife assessment, small mammal trapping study,

- **State Highway 180 Improvement Project.** Waters/wetland delineation, NES preparation; Fresno County; Caltrans.
- **Arroyo Seco and Piney Creek Bridges Replacement Project.** Sensitive species surveys and habitat assessments, waters/wetlands delineation, riparian habitat assessment; Monterey County; Federal Highways Administration.
- **Boyd Road and Norrish Road Bridges Replacement Project.** Sensitive species surveys and habitat assessments, burrowing owl relocation; Imperial County; Imperial County Department of Public Works.
- **Scott Road/Washington Street Realignment Project.** Biological assessment; Riverside County; Office of Road Commissioner & County Surveyor, County of Riverside Road & Survey Department.
- **Project.** Waters/wetlands delineation, riparian habitat assessment, rare plant survey, response to comments researcher; Los Angeles County; Elsmere Corporation/USFS/Los Angeles County Department of Regional Planning.