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**Biological
Resources
Assessment**

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GLAMIS SPECIFIC PLAN
NO. SP19-0001
BIOLOGICAL RESOURCES
ASSESSMENT REPORT
GLAMIS, CALIFORNIA

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EXECUTIVE SUMMARY

General biological surveys were conducted on June 28, 2019 within the proposed site. The approximately 141 acres of the project site is located within Imperial County, CA.

No federal or state botanical endangered or threatened species were found within the project site areas or buffer survey zone during this survey. A floristic botanical survey is recommended after a germinating rainfall.

Burrowing owls, a California Species of Special Concern, were not found on project site and would not be expected. Migratory Bird Treaty Act bird nests were found on site. Flat-tailed horned lizard were not observed but could be present.

Invasive species were found in several areas.

1.0 INTRODUCTION

1.1 LOCATION

The Glamis Specific Plan is located in the remote community of Glamis, an unincorporated area in the central portion of Imperial County. The project site is located approximately 27 miles east of the City of Brawley; approximately 32 miles northeast of the City of El Centro; approximately 20 miles north of Interstate 8; and approximately 35 miles southeast of the Salton Sea. Project Vicinity Exhibit, shows the relationship between the GSP area and surrounding vicinity with the Imperial Sand Dunes Recreation Area (ISDRA) located immediately to the southwest, the North Algodones Dunes Wilderness (NADW) immediately to the northwest, and the Chocolate Mountains and Chocolate Mountain Aerial Gunnery Range (CMAGR) located to the northeast. The Plan consists of the following APNs: 039-310-022, 039-310-023, 039-310-026, 039-310-027, 039-310-029, 039-310-030

1.2 PROJECT DESCRIPTION

This biological survey was done to inventory existing environmental status on the project site. This information will guide plans related to the preparation of a Specific Plan for an area known as “Glamis” in Imperial County.

The Glamis Specific Plan No. SP19-0001 provides for a flexible recreational master plan with a broad range of land uses ranging from recreational, commercial/retail, storage, entertainment, hospitality, residential, renewable energy, utility facilities, among other primary and complimentary land uses. Associated standards and protocols have been incorporated into the Glamis Specific Plan (GSP) to complement the broad range of land uses in order to safely enrich the activities that will enhance the Glamis experience.

With a total planning area of approximately 141 acres, the Glamis Specific Plan is designed to integrate seamlessly into the natural sand dunes environment and will have uniquely designated phased land use areas.

The project site’s central location within Imperial County together with State Route 78 (SR-78) bisecting the project site, the close proximity to Interstate 8 and the State of Arizona due east, makes it a desirable location for recreational visitors to travel efficiently east or west. The GSP attempts to build off the historical Glamis-going experience by providing expanded recreational, commercial, entertainment, and hospitality experiences, yet meet County Planning goals, while addressing environmental, engineering, commercial, public safety, and aesthetic needs that have been identified during the planning process. Finally, the GSP will eliminate the need for special event-related annual Conditional Use Permits (CUPs) and/or discretionary temporary event permits through implementation of a Special Event Management Plan that will include standards and protocols in accordance with regulatory requirements of the County and key stakeholder agencies for regulation of special events.

Historically, the GSP area and the ISDRA has been utilized for off-highway vehicle (OHV) recreational activities since the 1960s. Enthusiasm for dune buggies and other sand vehicles brought 30,000 people to Glamis area during the 1979 Thanksgiving weekend. By the 2010s, tens of thousands of off-road enthusiasts were visiting the Imperial Sand Dunes during the holidays in autumn, winter, and early spring months, many of them camping in Recreational Vehicles (RVs) near Glamis. Glamis became known as the Sand Toy Capital of the World. As a result, events and activities such as “Camp RZR” started to occur within the GSP area that attracted as many as 20,000 visitors each year during Halloween weekend or the weekend before Halloween. With the advent of special events within the Glamis area discretionary temporary event permits and CUPs required by the County of Imperial were deemed necessary to allow for the continued provision of such events. Currently, special and temporary events are permitted under Conditional Use Permit #08-0025. Events such as “Camp RZR” are required to undergo review and approval of event operations and protocols with the County and key stakeholder agencies.

The following is a brief description of the land uses within the GSP:

- a. Recreational - The GSP provides an opportunity for a variety of recreational activities to complement the established “Glamis” sand dunes experience of the surrounding ISDRA. These include an Adventure Center (offers activities such as OHV training, OHV rentals, etc.), amusement facilities, Desert Tours (off road experience), racetrack, shooting range, park/playground/picnic area, and other recreational-based activities.
- b. Commercial/Retail - The GSP will allow for a wide range of commercial and retail development, which include fuel stations, rental facilities, and sporting goods stores to accommodate the needs of visitors to the Glamis area. It may also provide for RV Park(s) to accommodate a small number of users that desire to have conveniences not found in open dry camping.
- c. Storage - OHV and RV storage is an existing land use within the project site. The GSP will provide for storage for OHVs and RVs to allow visitors to store their vehicles at Glamis year around.
- d. Entertainment - The Glamis area has long been known as the premier destination for OHV enthusiasts to enjoy their recreational activities within the world-renowned Imperial Sand Dunes. The GSP will allow for a range of entertainment land uses whose purpose is to enhance the visitors experience to the Glamis Area. Entertainment land uses could include an adventure center, amusement facilities, movie theater, obstacle courses, shooting range, fireworks display area, and racetrack.
- e. Hospitality - With an average annual attendance of 200,000 visitors to the Glamis area, the GSP will provide for the development of various hospitality services to provide visitors with the accommodations they need to fully enjoy all that the Glamis area has to offer. Hospitality land uses may include medical services facility, mobile food trucks, tourist information center, public showers, public restrooms, and hotel/motel facilities.
- f. Residential - The GSP will allow for limited residential development to accommodate those who require temporary housing in Glamis. Housing will be developed in the form

of guest, employee housing, seasonal private residences and temporary use of RV's on Owner's property.

- g. Renewable Energy - Due to the remote location of the GSP, renewable energy facilities will be developed in order to provide electricity to the Glamis area. The GSP will allow for the development of a solar and wind energy generation facilities (including battery storage) located throughout the GSP
- h. Infrastructure Improvements - In order to properly accommodate the large volume of visitors to the Glamis Project area, existing water and wastewater facilities will need to be improved along with the development of additional infrastructure. The GSP will allow for the development of utility buildings, utility substation(s), and water/wastewater treatment facilities.
- i. Research & Development Facility - The GSP provides for a research & development (R&D) facility that will take advantage of the close proximity of the ISDRA. This R&D facility will allow Polaris to test their equipment in a natural and private setting.

1.3 POSSIBLE APPLICABLE ENVIRONMENTAL REGULATIONS

1.3.1 STATE OF CALIFORNIA

California Environmental Quality Act (CEQA) Title 14 CA Code of Regulations 15380 requires that endangered, rare or threatened species or subspecies of animals or plants be identified within the influence of the project. If any such species are found, appropriate measures should be identified to avoid, minimize or mitigate to the extent possible the effects of the project.

Native Plant Protection Act CDFG Code Section 1900-1913 prohibits the taking, possessing, or sale within the state of any plant listed by CDFG as rare, threatened, or endangered. Landowners may be allowed to take these species if CDFG is notified at least 10 days prior to plant removal or if these plants are found within public right of ways.

CA Fish and Game Codes 3503, 3503.5, 3513 protect migratory birds, bird nests and eggs including raptors (birds of prey) and raptor nests from take unless authorized by CDFW.

CA Fish and Game Code Section 1600, as amended regulates activities that substantially diverts or obstructs the natural flow of any river, stream or lake or uses materials from a streambed. This can include riparian habitat associated with watercourses.

State of CA Fully Protected Species identifies and provides additional protection to species that are rare or face possible extinction. These species may not be taken or possessed at any time except for scientific research or relocation for protection of livestock.

California Endangered Species Act (CESA) protects all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved.

Porter-Cologne Water Quality Control Act, as amended is administered by the State Water Resource Control Board (SWRCB) to protect water quality and is an avenue to implement CA responsibilities under the federal Clean Water Act. This act regulates discharge of waste into a water resource.

1.3.2 FEDERAL

National Environmental Policy Act (NEPA: 42 United States Code (U.S.C.) 4321 et seq) established national environmental policy and goals for the protection, maintenance and enhancement of the environment. A process is available for implementation goals within federal agencies. NEPA requires federal agencies to consider the environment in processing proposed actions.

Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531-1544) protects federal listed threatened and endangered species from unlawful take (harass, harm, pursue, hunt, shoot, kill, wound, collect, capture, trap or attempt to do so) or significantly modify habitat. If a proposed project would jeopardize a threatened or endangered species, then a Section 7 consultation with a federal agency could be required.

Migratory Bird Treaty Act (50 Code Federal Regulations (CFR) 10.13) is a federal statute with several foreign countries to protect species that migrate between countries. Over 850 species are listed and may not be disrupted during nesting activities. It is illegal to collect any part (nest, feather, eggs, etc.) of a listed species, disturb species while nesting or offer for trade or barter any listed species or parts thereof.

Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) protects bald and golden eagles from take (harass, harm, pursue, hunt, shoot, kill, wound, collect, capture, trap or attempt to do so) or interference with breeding, feeding or sheltering activities.

Clean Water Act, 1972 (CWA 33 U.S.C. 1251 et seq.) regulates discharges into waters of the U.S. EPA is given the responsibility to implement programs to prevent pollution.

2.0 BIOLOGICAL SURVEY METHODOLOGIES

The purpose of the survey was to determine the inventory of biological resources at the time of the survey; the possibility of the existence of endangered, threatened, sensitive or species of concern within project area: map habitats, and ascertain the probability of the presence of sensitive species on site.

2.1 FIELD SURVEYS

2.1.1 GENERAL BIOLOGICAL SURVEY

The survey of the Specific Plan was intended to assess presence or the potential for species to occur based on habitat suitability within the Plan.

California Natural Diversity Database (CNDDDB), California Native Plant Society database (CNPS), United States Fish and Wildlife Service (USFWS)/Carlsbad office Sensitive Species list, field guides, personal contacts and other methods were utilized to ascertain potential for sensitive species on the site.

Pedestrian biological surveys of the approximately 141-acre project area and buffer zones, where possible, to document vegetation and animals were conducted by biologists Marie Barrett, Glenna Barrett, Shawna Bishop and Dani Figueroa as indicated in Table 1: Field Survey Schedule. The surveys were conducted to develop an inventory of species (plant and animal) present at the time of the surveys, map vegetative communities, if present and ascertain the potential for occurrence of sensitive, endangered or threatened species within the project area and vicinity.

TABLE 1: FIELD SURVEY SCHEDULE

Date/Conditions	Surveyors	Survey Time
6/28/19 80-90°F clear, 0-3 mph	Marie Barrett/Glenna Barrett/Shawna Bishop, Dani Figueroa	0600-0830
Total all surveyors		10 hrs.

Garmin GPS, binoculars, thermometer, anemometer and digital cameras were used.

2.1.2 JURISDICTIONAL DELINEATION

Several washes and ephemeral washes were observed on site. A formal jurisdictional delineation may be necessary to determine areas of waters of the United States.

2.2 LITERATURE REVIEW

Potential occurrence for endangered, threatened, sensitive, species of concern and noxious weeds was determined by perusal of appropriate data bases which included:

- CA Natural Diversity Database (CNDDDB)
- CA Native Plant Society (CNPS) Rare Plant Program
- USFWS Bird Species of Conservation Concern
- UFWS Critical Habitat for Threatened & Endangered Species Website
- CA Food and Agriculture Department Noxious Weed Information Project

3.0 EXISTING CONDITIONS

3.1 TOPOGRAPHY AND SOILS

Glamis is located in Imperial County and is found in the eastern part of the county. Landforms are alluvial fans derived from igneous rock and are typically sand to fine sand. Drainage is excellent and depth to water table is typically greater than 80 inches.

The elevation on this site varies from approximately 324 feet to 345 feet (above mean sea level).

3.2 VEGETATION

3.2.1 VEGETATION COMMUNITY

Vegetation has been divided into communities that are groups of plants that usually coexist within the same area. This area is considered the Colorado Desert and native vegetation would be creosote bush-brittle bush scrub (*Larrea tridentate-Encelia farinosa* Shrubland Alliance). (*A Manual of California Vegetation*, 2009, Sawyer/Wolf).

TABLE 2: VEGETATIVE COMMUNITIES

Parcels	Acreage	Description	Vegetative Communities
039-310-022	141	Developed lots highly disturbed. These areas include a trailer storage lot; RV site, store, vendor lot, race track and a cell phone tower. Areas show concentration of heavy ATV/UTV and dune buggy usage	Sparse native and ruderal vegetation Smoke tree, <i>Dalea spinosa</i> , were observed but not in numbers to demonstrate riparian habitat
039-310-027			
039-310-023			
039-310-029			
039-310-026			
039-310-029			

3.2.2 AGRICULTURE

Site did not show signs of agricultural cultivation.

3.2.3 VEGETATION

The sparse vegetation found on site was a combination of native and ruderal (listed with scientific names in Appendix C). No annuals were found on site; sparse vegetation which included typical creosote bush-brittle bush scrub species (listed in Appendix C).

3.3 WILDLIFE

3.3.1 INVERTEBRATES

This project site consists of developed lots. Ants and grasshoppers were observed; identified in Appendix C.

3.3.2 AMPHIBIANS

Reliable moisture is a requirement for a portion of amphibian life cycle. The project site consists of developed lots. No amphibians were observed on site. Due to the lack of available water, none would be expected.

3.3.3 REPTILES

The project site consists of developed lots. Reptiles utilize habitat dependent upon their dietary requirements. Some species diet includes vegetation while others consume insects. All require vegetation for shelter. Sparse vegetation is available on site. Lizard tracks were observed.

3.3.4 BIRDS

Bird species diversity varies with seasons, variety and quality of vegetative communities.

Birds and bird nests were observed in the vicinity. List of species observed is found in Appendix C.

3.3.5 MAMMALS

Signs of mammals were observed on sites but were assumed to be coyotes, rabbits and kangaroo rats. Bats are not expected; roosting sites are not available. The mammals that were found are identified in Appendix C.

3.3.6 FISH

The project site consists of developed lots with sparse vegetation. There are no permanent water sources observed on site; no fish would be expected.

3.4 SENSITIVE BIOLOGICAL RESOURCES

3.4.1 SPECIAL STATUS SPECIES

TABLE 3. SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR ON PROJECT SITE

Special-Status Species	Legal Status	Found	Potential for Occurrence
Flat-tailed horned lizard (FTHL) <i>Phrynosoma mcallii</i>	Federal: None State: Protected, Species of Special Concern	No	Medium on site - Highly disturbed acreage. Loose soils occur on site. Ants were observed onsite. No FTHL, scat or tracks were identified in the general biological survey. This area is not within a FTHL Management Area. 2 occurrence records were found on CNDDDB; one 3.8 miles (1969); the other 5.78 miles (2002) from project site. Records attached.
Colorado fringe toed lizard <i>Uma notata</i>	Federal: Threatened State: Endangered	No	Very low on site - Primarily found in wind-blown sand areas. Highly degraded acreage with no windblown sand areas. Habitat is present to the west.
Burrowing owl <i>Athene cucularia</i>	Federal: None State: CSC	No	Very low on site - Highly disturbed acreage with sparse available burrow opportunities; limited prey observed.
Gila Woodpecker <i>Melanerpes uropygialis</i>	CDFW: Endangered	No	Very low on site - Highly disturbed acreage with sparse available nesting opportunities; no palm trees.
Le Conte's thrasher <i>Toxostoma lecontei</i>	CDFW: Species of Concern	No	Very low on site - Highly disturbed acreage with sparse available nesting opportunities; medium offsite.
Loggerhead shrike <i>Lanius ludovicianus</i>	CDFW: Species of Concern	No	Very low on site - Highly disturbed acreage with sparse available nesting opportunities. Lizards which are prey were seen so loggerhead shrikes could use area; medium offsite.

3.4.2 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITIES

Based upon the level of disturbance or habitat conversion within adjacent areas, vegetative communities are considered rare or sensitive. Rare vegetation types that are converted and degraded can disrupt the integrity of the ecological functions of natural environments. This can lead to the loss of sensitive plant species and a resulting decrease in biodiversity. Wetland or riparian habitat communities are considered sensitive by CDFW.

3.4.3 Jurisdictional Waters

Wetlands and other “waters of the United States” that are subject to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act are under the jurisdiction of the U.S. Army Corp of Engineers (ACOE).

3.4.4 Habitat Connectivity and Wildlife Corridors

The ability for wildlife to freely move about an area and not become isolated is considered connectivity and is important to allow dispersal of a species to maintain exchange genetic characteristics; forage (food and water) and escape from predation.

3.4.5 California Desert Conservation Area (CDCA)

This project is not within or immediately adjacent to an Area of Critical Environmental Concern (ACEC) of the CDCA.

4.0 PROPOSED PROJECT IMPACT

The proposed impacts are summarized in this section.

4.1 IMPACT TO SPECIAL STATUS SPECIES

If this project has a substantial adverse effect, either directly or through habitat modification or elimination, on any plant or animal species that is considered endangered, threatened, candidate for listing or special status species either through federal or state regulations, this project would be considered to have a significant impact.

4.1.1 BIOLOGICAL RESOURCES

No special status and priority plants or animals were observed. The approximately 141 acres are highly disturbed and no adverse impact is expected either directly or through habitat modification 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 Wildlife or U.S. Fish and Wildlife Service when avoidance, minimization and mitigation recommendations are followed.

Biological resources found are listed in Table 4 and Figure 4 Biological Resources Map.

TABLE 4 BIOLOGICAL RESOURCES

Location	Description	Recommendations
1. 32°59'55.7"/115°4'14.4"	Small burrows with tracks	Observe prior to construction activities to see if active
2. 32°59'53.4"/115°4'10.4"	2 avian nests	Observe prior to construction activities to see if active

Location	Description	Recommendations
3. 32°59'53.5"/115°4'10.2"	1 avian nest	Observe prior to construction activities to see if active
4. 32°59'53.2"/115°4'10.5"	Small burrows with tracks	Observe prior to construction activities to see if active
5. 32°59'33.7"/115°4'6.4"	Small burrows with tracks	Observe prior to construction activities to see if active

4.1.2 SENSITIVE WILDLIFE

4.1.2.1 FLAT-TAILED HORNED LIZARD

Construction Impact.

Prior to construction, a protocol FTHL survey should be performed by qualified biologists.

The proposed project may cause small mammals and reptiles with low mobility to be inadvertently killed during grading of the site.

FTHL could potentially occur within the softer sands (within and around the washes, and along the roadsides) in the creosote bush scrub on-site. There is an abundance of prey (ants) that could support FTHL presence. There is potential that there would be direct and/or indirect impacts to this species if construction occurs during the active period of mid-February to mid-November. Ground disturbance from heavy equipment, which may potentially impact the FTHL, would be considered significant and would require mitigation. Impacts to this species would be considered significant, if present.

Section 5 discusses avoidance, minimization and mitigation requirements for burrowing owls found on site or in vicinity during construction.

4.1.2.2 MBTA NESTING

Construction Impact

There are small trees on site that encourage bird nesting. Nests were observed in the palo verde (*Cercidium microphyllum*) and mesquite (*Prosopis* spp) on site. Ground nesting species, such as lesser nighthawk, could use the area.

If construction is planned to begin during nesting season (generally February 1 through August 31), the project area and a 500-foot buffer area should be surveyed to determine presence/absence of nesting. If nests are found, an appropriate buffer zone for the species should be maintained during construction until juveniles have fledged.

There will be no impacts to nesting raptors due to the absence of suitable large trees for nesting.

Operations and Maintenance Indirect Impact

ELECTROCUTION

A small solar/wind facility could be built. These facilities would consist of roof top panels and small wind towers with minimal electrical components which would not be considered an avian hazard. Typical community electrical components currently exist and could be expanded within the project but would not be expected to impact avian populations.

4.2 IMPACT TO RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITIES

The distribution of riparian plant species is largely driven by hydrological and soil variables and riparian plant communities frequently occur in relatively distinct zone along streamside elevational and soil textural gradients.

There is sparse riparian vegetation found on site, therefore this project should not have a substantial adverse effect on any riparian habitat.

4.3 IMPACT TO JURISDICTIONAL WATERS

There are no wetlands found on site; therefore this project will have no impact 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.

A stormwater channel runs through a small portion of the northeast which is channeled under the railroad track. On the southeast portion, a wash is piped under SR 78.

Several established washes and ephemeral washes were observed on site. It is recommended that the ACOE and CDFW be consulted to determine permitting requirements.

4.4 IMPACT TO WILDLIFE MOVEMENT AND NURSERY SITES

This project is in a predominately developed and fenced community. Site is bisected on by SR 78, Ted Kipf Road and Union Pacific railroad and as a result of these existing barriers, the project will not interfere substantially with the currently restricted 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.

4.5 IMPACT TO AIRPORTS

This project has no components that will attract avian populations that would impact airports. It is approximately 28 miles from Brawley Airport, CA, which is the closest airport. No impact upon airports is expected.

4.6 CEQA IMPACTS

Possible CEQA significant impacts that could include the following within the parameters of this project:

TABLE 5: EXPECTED IMPACTS

Area	Endangered/threatened/ Species of Concern Habitat	Riparian Habitat	Wetlands	Wildlife Corridors	Local Ordinances	Waters of the U.S.
141 acres	None with avoidance/ minimization/ mitigation measures listed	No	No	No	No	Possibility; consult agencies

5.0 RECOMMENDED AVOIDANCE, MINIMIZATION AND MITIGATION MEASURES

5.1 SENSITIVE WILDLIFE

5.1.1 FLAT-TAILED HORNED LIZARD

Avoidance Measures

A preconstruction survey should be performed prior to initiating ground disturbance. Report should be submitted to the appropriate agency.

Since FTHL have been located within the vicinity, it is recommended that construction foremen and workers and onsite employees be given worker training by a qualified biologist regarding FTHL that would include the following:

- Description of FTHL
- Biology
- Regulations (CDFW/USFWS)
- Wallet card with picture/guidelines for protecting FTHL, birds and wildlife

- Notification procedures if FTHL (dead, alive, injured) is found on or near site

A sign in should be obtained and the training materials and sign in sheet should be submitted to appropriate agency.

Minimization Measures

To avoid direct or indirect impacts to FTHL, protocol surveys for this species should be conducted to determine if this species is present within the survey area. If FTHL is present, mitigation will be required. Per the Management Strategy, survey protocol for FTHL for a project site between 51-100 hectares (141 acres = 57 hectares) requires eight one-hour presence/absence surveys by qualified FTHL surveyors. All roads within and near the survey area shall be driven twice to allow for detection of lizards. However, a project proponent can forego these surveys by assuming the species is present and applying appropriate mitigation and compensation (Flat-tailed Horned Lizard Interagency Coordinating Committee [FHLICC] 2003).

Construction should occur as much as possible during the FTHL's dormant period, November 15 to February 15, and employ all mitigation measures recommended by the management strategy. Construction is to be completed in as short a time as possible to minimize the length of time that habitat will be disturbed by activity.

This project site is historically highly disturbed and will not remove favorable FTHL habitat.

Mitigation measures for these impacts are detailed in the FTHL Rangewide Management Strategy (FHLICC 2003) and these measures are summarized below. The mitigation measures shall be overseen by an agency approved project biologist who is familiar with the entire text and requirements of the mitigation measures outlined in the Management Strategy. If FTHL is not found to be present after protocol surveys, then no mitigation for this species is required. If FTHL presence is found, the following mitigations should be followed.

Mitigation Measures

1. A Field Contact Representative (FCR) shall be designated prior to the start of construction. The FCR will be responsible to ensure compliance with protective measures for the FTHL and other sensitive biological resources and will act as the primary resource agency contact. The FCR shall have the authority to halt activities that are in violation of these terms and conditions.
2. All work areas will be clearly flagged or otherwise marked, and all work will be restricted to these areas. All construction workers shall restrict their activities and vehicles to areas that have been flagged or to clearly recognizable areas such as access roads that have been identified as "safe" areas by the FCR.
3. A biological monitor shall be present in each area of active construction throughout the workday from initial clearing through habitat restoration (or completion of project), except where the project is completely fenced and cleared of FTHLs by a biologist (see Measure 8 below and suggested alternate option). The biologist must have sufficient education and field training with the FTHL. This biologist will ensure that the project

complies with these mitigation measures and will have the authority to halt activities if they are not in compliance. The biologist will inspect the construction areas periodically for the presence of FTHLs and will inspect any open trenches or pits prior to backfilling. The biologist will also work with the construction supervisor to take steps to avoid disturbance to the lizards and their habitat. If a lizard is discovered within an affected area, the lizard will be captured and relocated. The monitor will also excavate all potential FTHL burrows within the construction areas and relocate any FTHLs encountered.

4. Only biologists authorized by CDFW may handle FTHLs. Any workers who discover FTHLs shall avoid disturbing the animals and shall immediately notify their construction supervisor and the biological monitor.
5. The area of vegetation and soil disturbance shall be restricted to the smallest extent possible. When possible, equipment and vehicles should use existing surfaces or previously disturbed areas. When excavation or grading is necessary, the topsoil should be stockpiled and restored following completion of the work.
6. Existing roads shall be used to the greatest extent possible for travel and staging areas.
7. Sites of permanent or long-term (greater than one year) projects in Management Areas where continuing activities are planned and where FTHL mortality could occur, may be enclosed with FTHL barrier fencing to prevent lizards from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing should be in accordance with the standards outlined in Appendix 7 of the Management Strategy. After clearing the area of FTHLs (also see Appendix 7), no on-site monitor is required (see Measure 4).
8. Where feasible and desirable, in the judgment of the lead agency, newly created access routes shall be restricted by constructing barricades, erecting fences with locked gates at road intersections, and/or by posting signs. In these cases, the project proponent shall maintain, including monitoring, all control structures, and facilities for the life of the project and until habitat restoration is completed.
9. The FCR shall keep a record of the extent of all areas permanently and temporarily disturbed by construction. This record shall be the basis for determining a monetary compensation to be paid by the proponent as required by Appendix 4 (Compensation Formula) of the Management Strategy. The BLM may require, prior to the beginning of construction, a reasonable deposit based on the extent of anticipated disturbance, with the final compensation to be determined according to the FCR's final record and the Compensation Formula in the Management Strategy.

Mitigation will also include contribution to a compensation fund that will be used to acquire lands and enhance habitat within FTHL management areas (FHLICC 2003). Compensation for habitat lost from impacts resulting from the project, which is outside of an FTHL management area, will be charged at a 1:1 ratio, as stated in the Rangewide Management Strategy (FHLICC 2003).

5.1.2 MIGRATORY BIRDS AND NON-MIGRATORY BIRD SPECIES

If construction is scheduled to begin during nesting season (February-August), a survey for nesting birds should be performed within 3-7 days of groundbreaking activities on project site. Dependent upon species found, appropriate buffer zones will be established by a

qualified biologist. If construction is delayed or halted for over 2 weeks during nesting season, a nesting bird survey should be conducted within 3-7 days prior to resumption of construction.

It is recommended that construction foremen and workers and onsite employees be given worker training by a qualified biologist regarding nesting birds that would include the following:

- Description of birds covered under MBTA and likely to be found on project
- Biology
- Regulations (CDFW/USFWS)
- Notification procedures if bird (dead, alive, injured) is found on or near site

A sign in should be obtained and the training materials and sign in sheet should be submitted to appropriate agency.

A biologist should be consulted immediately if a dead or injured bird is found on site.

5.1.3 INVASIVE PLANTS

Any mustards, saltcedar or russian thistle found on site should be removed in a manner that will not distribute plant seeds or plant material as overseen by project biologist prior to construction. Use of covered trailers to remove invasive species to an approved landfill is recommended.

Equipment brought onsite should be clean to prevent importing invasive species to site.

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APPENDIX A
SENSITIVE BOTANICAL AND
ZOOLOGICAL SPECIES
(CNDDDB/CNPS) SPECIES

APPENDIX A
SENSITIVE BOTANICAL AND ZOOLOGICAL SPECIES (CNDDDB/CNPS)
Glamis Quadrangle (9 Quads)

June 2019

BOTANICAL SPECIES	STATUS ¹	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/SITE POTENTIAL
Algodones Dunes sunflower <i>Helianthus niveus ssp. tephrodes</i>	CNPS List 1B.2 State: Endangered	Stem: soft-white-, +- appressed-hairy. Leaf: most alternate; petiole 1.5--3.5 cm; blade generally 3--7 cm, triangular-ovate, base wedge-shaped, tip obtuse to acute, faces densely white-hairy, abaxially gland-dotted. Annual or perennial herb, +- subshrub, <= 15 dm, from taproot	Dunes habitat	L No deep loose sand available; none observed
Darlington's blazing star <i>Mentzelia puberula</i>	CNPS List 2B.2	Stem: erect, hairy. Leaf: 2--6.5 cm, 10--40 mm wide, lower widely obovate to elliptic or widely elliptic, toothed, upper sessile, ovate to broadly elliptic, base not clasping.	Sandy crevices in cliffs or rocky slopes; Elevation: 90--1280 m.	L No cliffs habitat available; none observed
Munz's cholla <i>Cylindropuntia munzii</i>	CNPS: 1B.3	Plant < 2.4 m. Stem: trunk 1; branches several, spreading to curving upwards; terminal segments generally < 10 cm, 3--5 cm diam, generally easily detached; tubercles 10--16 mm, 3--8 mm high. Spines: 9--16, < 4 cm, light yellow to pale red-brown, sheath yellow-brown.	Gravelly or sandy soils of washes, canyon walls; Elevation: 150--600 m. Bioregional Distribution: DSon (Chocolate, Chuckwalla mtns, Imperial, Riverside cos.);	L No habitat None observed
Peirson's milk-vetch <i>Astragalus magdalenae var. peirsonii</i>	State: Threatened Federal: Endangered CNPS: 1B.2	is a member of the legume family (Fabaceae) and is an erect to spreading, herbaceous, short-lived perennial. It is covered with fine silky hairs and produces purple flowers, often with white tips, which generally appear from December through April.	Algodones Dunes in Imperial County, California and the Gran Desierto of northwestern Sonora, Mexico.	L No deep loose sand available habitat; none observed
Pink Fairy Duster <i>Calliandra eriophylla</i>	CNDDDB Ranks G5, S2S3; CNPS: 2.3	Fairy Duster is a low, densely branched shrub 8 to 48 inches high. The leaves are formed by 2-to-4 pairs of 1/4-inch, oblong leaflets. It is a member of the Pea Family (Fabaceae) which includes acacias and mimosas.	Open hillsides, sandy desert washes and slopes below 5,000 feet.	L No habitat; none observed
roughstalk witch grass <i>Panicum hirticaule ssp. hirticaule</i>	CNPS: 2B.1	Annual. Stem: 1--8 dm. Leaf: sheath 2--6 cm, axis glabrous to short-hairy; ligule membrane 0.5--2 mm, ciliate; blade 7--20 cm, 3--15 mm	Sandy soils, open sites, creosote-bush scrub; Elevation: < 1400 m. Bioregional Distribution: D; Distribution Outside California: to Texas, South	L None observed; habitat heavily disturbed

		wide, upper surface generally sparsely short-hairy.	America. Flowering Time: Aug--Dec	
BOTANICAL SPECIES	STATUS¹	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/SITE POTENTIAL
Sand Food <i>Pholisma sonorae</i>	State: S1.2 (threatened); CNPS list:1B.2	Parasite on species such as <i>Erigonus</i> , <i>/tiquila</i> , <i>ambrosia</i> , <i>pluchea</i> . White to brown color. Corolla pink to purple.	Sonoran Desert Dunes; loose deep sand	L No deep loose sand available habitat; none observed
sand evening-primrose <i>Chylismia arenaria</i>	CNPS: 2B.2	Annual or bushy perennial herb, erect; hairs spreading, in inflorescence a few glandular. Stem: < 180 cm. Leaf: petiole < 60 mm; blade < 60 mm, cordate-deltate, teeth coarse or larger and smaller.	Sandy washes, rocky slopes, desert scrub; Elevation: < 430 m. Bioregional Distribution: DSon; Distribution Outside California: southwestern Arizona, northern Mexico (Sonora).	L Habitat not favorable; heavily disturbed
slender cottonheads <i>Nemacaulis denudata</i> <i>var. gracilis</i>	CNPS: 2B.2	Plant 0.4--2.5(4) dm, 0.4--2 dm diam. Leaf: blades 1--7 cm, 0.1--0.6 cm wide. Inflorescence: branches light brown; involucre bracts 2--4 mm, 0.5--1 mm wide. Flower: 0.5--1.2 mm, generally obscured by hairs.	Deserts; Elevation: 10--500 m. Bioregional Distribution: SW, DSon; Distribution Outside California: Arizona, northwestern Mexico.	L Habitat not favorable; heavily disturbed
Wiggins' croton <i>Croton wigginsi</i>	State: Rare	Shrub/subscrub; Petiole is 1-4 cm with a blade of 2-8.5 cm. and is elliptic (narrowly)to linear-oblong. Tip is rounded to obtuse. Flowers have 10-15 stamens – filaments are hairy; no petals	Desert Dunes	L No desert dune habitat; none observed
Giant Spanish-needle <i>Palafoxia arida</i> <i>var gigantea</i>	CNPS: 1B.3	Stems generally 9-20 mm in diameter and glabulous; leaves 6-12 mm	Sonoran Desert Shrub	L Highly disturbed area; none seen
ZOOLOGICAL SPECIES	STATUS¹	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/ SITE POTENTIAL
Burrowing Owl <i>Athene cunicularia</i>	CDFW: SC Species of Concern	Small raptors that nest in burrows that have been borrowed from other species in open grassland areas. Have adapted well in Imperial County using canals/drains/ditches to establish burrows and foraging for insects in agricultural fields	Open, dry annual or perennial grasslands; deserts & scrublands	L No owls or active burrows found; no suitable habitat. Survey results included in this report
Couch's spadefoot <i>Scaphiopus couchii</i>	CDFW: Species of Concern	A small stout-bodied toad with short legs and warty skin. The eyes are wide-set with no boss in between. Pupils are vertical. A hard black sharp-edged spade shaped like a	Desert and arid regions of grassland, prairie, mesquite, creosote bush, thorn forest, sandy washes.	L No areas of water ponds on site observed to catch summer rains

		sickle is found on each hind foot. Parotoid glands are not present.		
ZOOLOGICAL SPECIES	STATUS¹	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/ SITE POTENTIAL
desert bighorn sheep <i>Ovis canadensis nelsoni</i>	CDFW: FP	Desert bighorn sheep are stocky, heavy-bodied sheep, similar in size to mule deer. Weights of mature rams range from 115 to 280 pounds (52 to 127 kg), while ewes are somewhat smaller. Due to their unique concave elastic hooves,[3] bighorn are able to climb the steep, rocky terrain of the desert mountains with speed and agility.	native to the deserts of the USA's intermountain west and southwestern regions, as well as northwestern Mexico.	L No habitat; no food source
desert tortoise <i>Gopherus agassizii</i>	State: Threatened Federal: Threatened	The head of a desert tortoise is scaly, and the body has thick skin. Desert tortoises also have extremely long nails, which are used in digging through the desert sand to find shelter. The upper shell of a desert tortoise ranges in length from 15 to 36 centimeters, and its color varies from dull brown to a dull yellow.	Desert tortoises are found in the southwestern United States and northwestern Mexico. They range from northern Sinaloa up through Sonora and western Arizona to southeastern California, southern Nevada, and the southwestern tip of Utah. (Van Devender, 2002)	L Found to the east near Mesquite mine but no signs of old tortoise presence or burrows observed
flat-tailed horned lizard <i>Phrynosoma mcallii</i>	CDFW: Species of Concern	A medium-sized flat-bodied lizard with a wide oval-shaped body and scattered enlarged pointed scales on the upper body and tail. The back skin is smooth with small spines. 8 horns extend from the back of the head. The two central horns are long, slender and sharp.	it is endemic to the Sonoran desert of the southwestern United States and northwestern Mexico.	M Habitat is present off site to the north; no scat or lizards were observed during general survey. Not within a FTHL Management Area
Gila Woodpecker <i>Melanerpes uropygialis</i>	CDFW: Endangered	Bill black to grayish black with dark red to reddish hazel eyes. About 9.3 inches long with brownish green or bluish legs and feet. Black and white barring on back male has red cap on head. Buff-brown face, neck and breast with barred rump and central tail feathers.	Found in desert; likes to nest in large cacti or trees suitable for nesting such as cottonwoods, palm trees.	L No suitable palm trees; none observed or heard.
American Badger <i>Taxidea taxus</i>	CDFW: Species of Concern	Burrowing animals that feed on ground squirrels, rabbits, gophers and other small animals. Prefer grasslands, agricultural	Found in drier open areas with friable soils	L None seen; no burrows observed

		areas.		
Le Conte's thrasher <i>Toxostoma lecontei</i>	CDFW: Species of Concern	LeConte's thrasher weighs from 55 to 75 g (1.9 to 2.6 oz) and are 24.5–29 cm (9.6–11.4 in), and there is no sexual dimorphism within the species. Their wings are typical of birds that are sedentary, as they are short and rounded. There are noted differences among the subspecies. The crown, back, shoulders, and rump of T.c. lecontei possess a sandy pale-gray color.	resident of the deserts of the American Southwest and northwestern Mexico	M Could be found foraging or nesting in area
ZOOLOGICAL SPECIES	STATUS¹	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/ SITE POTENTIAL
Loggerhead shrike <i>Lanius ludovicianus</i>	CDFW: Species of Concern	This shrike is a medium-sized passerine. As with many song birds, the Loggerhead Shrike has several different colors whose arrangement is considered important in attracting a mate (along with displayed hunting prowess). The shrike's greyish back and black wings are evident against its white breast and other body areas.	Prominent in many parts of central Canada, border states of Canada, and in the Greater Midwest of the United States. During its spring / summer migration, however, it can sometimes be seen as far south and west as California though in ever decreasing numbers.	M Could be found foraging in area
pallid bat <i>Antrozous pallidus</i>	CDFW: Species of Concern	Adults range from 60 to 85 mm long from head to tail. The tail can be 35 to 57 mm long alone. Forearm length is 45 to 60 mm long and body weight ranges from 17 to 28 grams. Their fur has a woolly feel with a cream-yellow to light brown color on the dorsum and very pale to white color on the venter. This species has a U-shaped ridge on the top of the muzzle with the nostrils located underneath the ridge on the front of its muzzle. The face has small wart-like parrahinal glands that produce a skunk-like odor, which is thought to be used as defense mechanism.	They occur from the Okanagan valley in British Columbia, south through eastern Washington, Oregon, and California to Baja California Sur, Sonora, Sinaloa, Nayarit, Jalisco, Queretaro, and Nuevo Leon in Mexico. They are found as far east as western Texas, Oklahoma, southern Kansas, southern Wyoming, and southern Idaho. There is a disjunct population on the island of Cuba. (Nowak, 1999; Verts and Carraway, 1998) Inhabit rocky, outcrop areas where they commonly roost in rock crevices, caves, and mine tunnels	L No roosting habitat
Western Yellow bat <i>Lasiurus xanthinus</i>	CDFW: Species of Concern	Consumes small to medium-sized, night flying insects. Yellow color/short ears.	Roosts in leafy vegetation in the deserts of the southwestern United States. Roosts among the dead fronds of palm trees and cottonwoods	L No palm trees for roosting; not expected

Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	CDFW: SC	Bat has a free-tail which extends beyond the edge of the interfemoral membrane. With a forearm of 45-49 mm, it is smaller than all other North American molossid species except <i>Tadarida brasiliensis</i> . It is slightly larger than <i>T. brasiliensis</i> and has its ears joined at the midline. The body length measures 3 7/8 to 4 5/8", with a wingspan of 14". The fur is dark gray or brown above and below and nearly white at base. Ears are joined at base. Possesses a wrinkly upper lip; about half of the tail extends past edge of tail membrane	Lives in rocky areas of desert scrub or coniferous forests. During day roosts in crevices on cliff faces.	L Not expected; no cliff crevice habitat.
ZOOLOGICAL SPECIES	STATUS¹	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/ SITE POTENTIAL
Western mastiff bat <i>Eumops perotis californicus</i>	CDFW: Species of Concern	Biggest North American bat, with a body length of 5 1/2 to 7 1/2"; wingspan of over 22". Fur is thin, dark brown, hairs white at base. Huge ears joined at base and extending out over forehead like a bonnet. Eats moths, insects. Forms small colonies of up to about 100 bats. Very vocal bat, emits many loud cheeping sounds while flying, audible to the human ear. Sometimes forages by crawling on the ground, with tail held up in the air. Bears single young each year, in the early summer.	Southern California and Arizona, extending down to Mexico. Lives in rocky areas and cliff faces. Roosts in cliff crevices and buildings.	L No cliff crevice habitat.
Colorado Desert fringe-toed lizard <i>Uma notata</i>	CDFW: Species of Concern	Color is white, with a contrasting pattern of broken black lengthwise lines and round, eye-like spots. The color and pattern create a successful camouflage which allows a lizard to blend into its sandy habitat.	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, flats with sandy hummocks formed around the bases of vegetation, washes, and the banks of rivers. Needs fine, loose sand for burrowing.	L Habitat not suitable; no fine loose sand for burrowing
California leaf-nosed bat <i>Macrotus californicus</i>	CDFW: Species of Concern	The <i>Macrotus californicus</i> has short broad wings and huge ears and eyes (Tuttle 1998). It's skull has no post orbital processes and a complete premaxillae. endothermic bilateral symmetry	The California leaf-nosed bat, the most northern member of the Phyllostomidae, lives in southern Arizona, southern California and southern Nevada (Constantine 1998). inhabit rocky, outcrop areas where they commonly roost in rock crevices, caves, and mine tunnels	L No roosting habitat

Special Status Species that Occur in Imperial County (USFWS)

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
Plants				
Peirson's milk-vetch <i>Astragalus magdalenae</i> var. <i>peirsonii</i>	T/E/1B	Silvery, short-lived perennial plant that is somewhat broom like in appearance. A member of the pea and bean family, it can grow to 2.5 feet tall and is notable among milkvetches for its greatly reduced leaves. Peirson's milkvetch produces attractive, small purple flowers, generally in March or April, with 10 to 17 flowers per stalk. It yields inflated fruit similar to yellow-green pea pods with triangular beaks.	Desert dune habitats. In California, known from sand dunes in the Algodones Dunes system of Imperial County. Was known historically from Borrego Valley in San Diego County and at a site southwest of the Salton Sea in Imperial County	L None observed. No dune habitat
Birds				
California brown pelican <i>Pelecanus occidentalis</i> No longer endangered	E/E/-	Large size and brown color. Adults weigh approximately 9 pounds, and have a wingspan of over 6 feet. They have long, dark bills with big pouches for catching and holding fish. Pelicans breed in nesting colonies on islands without mammal predators. Roosting and loafing sites provide important resting	Open water, estuaries, beaches; roosts on various structures, such as pilings, boat docks, breakwaters, and mudflats	L No habitat

Common Name Scientific Name	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		habitat for breeding and non-breeding birds.		
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	E/-/-	Small; usually a little less than 6 inches in length, including tail. Conspicuous light-colored wingbars. Lacks the conspicuous pale eye-ring of many similar <i>Empidonax</i> species. Overall, body brownish-olive to gray-green above. Throat whitish, breast pale olive, and belly yellowish. Bill relatively large; lower mandible completely pale. The breeding range of <i>extimus</i> includes Arizona and adjacent states.	At low elevations, breeds principally in dense willow, cottonwood, and tamarisk thickets and in woodlands, along streams and rivers. Migrants may occur more widely. Prefers riparian willow/cottonwood but will use salt cedar thickets	L No habitat
Yuma clapper rail (Ridgeway Rail) <i>Rallus longirostris yumanensis</i>	E/T/-	A chickenlike marsh bird with a long, slightly drooping bill and an often upturned tail. Light brownish with dark streaks above. Rust-colored breast; bold, vertical gray and white bars on the flanks; white undertail coverts. Very shy.	Lives in freshwater and brackish marshes. Prefers dense cattails, bulrushes, and other aquatic vegetation. Nests in riverine wetlands near upland, in shallow sites dominated by mature vegetation, often in the base of a shrub. Prefers denser cover in	L No water source

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
			winter than in summer..	
Yellow-billed cuckoo <i>Coccyzus americanus</i>	C/E/-	Medium-sized cuckoo with gray-brown upperparts and white underparts. Eye-rings are pale yellow. Bill is mostly yellow. Wings are gray-brown with rufous primaries. Tail is long and has white-spotted black edges. Sexes are similar.	Found in forest and open woodlands, especially in areas with dense undergrowth, such as parks, riparian woodlands, and thickets	L No habitat
Bald eagle <i>Haliaeetus leucocephalus</i>	T, PD/E/-	The distinctive white head and tail feathers Beak and eyes yellow. Bald Eagles are about 29 to 42 inches long, can weigh 7 to 15 pounds, and have a wing span of 6 to 8 feet.	Found on shores, lake margins, and near large rivers. Nests in large trees. Winters at lakes, reservoirs, river systems, and some rangelands and coastal wetlands (breeding range is mainly in mountainous habitats near reservoirs, lakes and rivers, mainly in the northern two-thirds of California)	L No habitat.
Least tern <i>Sterna antillarum</i>	E/E/-	Small tern. During breeding, black cap ending at white forehead. Short white eyestripe. Bill yellow with black tip. Back light gray.	Shallow areas of estuaries, lagoons, and at the joining points between rivers and estuaries	L No habitat

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		Underside white. Black leading edge to wing. In nonbreeding plumage has black eyestripe extending to back of head, white top of head, and black bill. Size: 21-23 cm (8-9 in) Wingspan: 48-53 cm (19-21 in) Weight: 30-45 g (1.06-1.59 ounces)		
Least Bell's Vireo <i>Vireo bellii pusillus</i>	E/E/-	Drab gray to green above and white to yellow below. It has a faint white eyering and two pale wingbars; has pale whitish cheeks and forehead and greenish wings and tail. longer tail and subtle wingbars. The song is a varied sequence of sharp, slurred phrases that typically end with an ascending or descending note.	Formerly a common and widespread summer resident below about 2,000 feet in western Sierra Nevada. Also was common in coastal southern California, from Santa Barbara County south, below about 4,000 feet east of the Sierra Nevada. Prefers thickets of willow, and other low shrubs afford nesting and roosting cover	L None observed; no habitat on site.
Mountain plover <i>Charadrius montanus</i>	FPT/SC/-	Medium-sized plover with pale brown upperparts, white underparts, and brown sides. Head has brown cap, white	Avoids high and dense cover. Uses open grass plains, plowed fields with little	L No habitat onsite.

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		face, and dark eyestripe. Upperwings are brown with black edges and white bars; underwings are white. Tail is brown-black with white edges. Sexes are similar.	vegetation, and open sagebrush areas. Likes to follow livestock grazing or burned off fields.	
Black rail <i>Laterallus jamaicensis coturniculus</i>	-T/-	The smallest of all rails, the black rail is slate-colored, with a black bill, red eyes and a white-speckled back. The legs are moderately long and the toes are unwebbed. The sexes are similar.	Most commonly occurs in tidal emergent wetlands dominated by pickleweed or in brackish marshes with bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass and in immediate vicinity of tidal sloughs. Typically occurs in the high wetland zones near upper limit of tidal flooding, not in low wetland areas with considerable annual or daily fluctuations in water levels. Nests are concealed in dense vegetation, often pickleweed, near upper limits of tidal flooding	L No habitat

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
Raptors Peregrine Falcon <i>Falco peregrinus</i> Northern Harrier <i>Circus cyaneus</i> Sharp-shinned Hawk <i>Accipiter striatus</i>	D/E/- -/SC/- -/SC/-	Large, powerful falcon; pointed winged falcon silhouette. Strong shallow wingbeats may dive at speeds up to 100 mph. Dark with dark hooded effect. Blue gray below with narrow bars Long-winged, long tailed hawk. Habitually flies low over open fields and marshes watching and listening for prey such as rodents and birds. (I observed Harrier with a white faced ibis as prey). Perches low or on ground. Low slow flight. Nests in reeds. Grey with black wingtips. Blue gray above pale reddish below; small size. Tip of tail squared off. Nesting occurs in dense	Most often found along coastlines or marshy habitats. Nest in cliffs and have been known to nest in tall buildings Marshes, open fields. Nests in reeds Sharp-shinned hawks may appear in woodland habitats	L None observed; rare visitors to area outside of the Salton Sea. No waterfowl for prey or cliffs/tall buildings for nesting L Low rodent, rabbit populations. Not observed on site. No nesting sites. L Low rodent, rabbit populations. Not observed

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
White tailed Kite <i>Elanus leucurus</i>	/E/	<p>tree stands which are cool, moist, well shaded and usually near water. Hunt in openings at the edges of woodlands and also brushy pastures.</p> <p>Gray and white with black on shoulders and under bend of wing. Graceful flyer. Adults have bright red eyes. Medium size hawk; about 15 inches long and about 12 ounces.</p>	<p>during winter and migration periods and are often common in southern California in the coastal lowlands and desert areas; winters in woodlands and other habitats except alpine, open prairie and bare desert</p> <p>Found in open country; like to perch on treetop. May be seen hovering prior to attack of a rodent.</p>	<p>L</p> <p>Low rodent, rabbit populations; None observed</p>
Ferruginous hawk <i>Buteo regalis</i>	/SC/	<p>Males pale with with rufous shoulders and thigh feathers. White tail washed with rufous. Wide head wings in shallow v when soaring.</p>	<p>Found in arid to semiarid regions, as well as grasslands and agricultural areas in southwestern Canada, western United States, and northern Mexico.</p>	<p>L</p> <p>Low rodent, rabbit populations; None observed</p>

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
Mammals				
Bighorn sheep <i>Ovis canadensis</i>	E/E/-	Sheep have short hair which is light gray to grayish brown, except around their stomachs and rump, where it is creamy white. Their tails are about four inches long. Full-grown rams weigh between 180 and 240 pounds,	Desert Bighorn sheep occupy a variety of plant communities, ranging from mixed-grass hillsides, shrubs. Avoids dense vegetation	L No habitat
Jaguar <i>Panthera onca</i>	-/-/-	Typically yellow-brown with black spots, called rosettes, but they can also be black with black spots. They are nocturnal and have a keen sense of smell and hearing. Excellent swimmers, tree climbers, and move easily on the ground.	Occurs in tropical rainforests, arid scrub, and wet grasslands. Prefers dense forests or swamps with a ready supply of water	L No habitat
Reptiles and Amphibians				
Desert tortoise <i>Gopherus agassizii</i>	T/T/-	A herbivore that may attain a length of 9 to 15 inches in upper shell (carapace) length. The tortoise is able to live where ground temperature may exceed 140 degrees F because of its ability to dig underground burrows and escape the heat. At least 95% of its life is spent in burrows.	Dry, flat, and gravelly or sandy ground in desert shrub communities where annual and perennial grasses are abundant. Frequent habitats with a mix of shrubs, forbs, and grasses	L Found to the east near Mesquite mine but no signs of old tortoise presence or burrows observed

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		Their shells are high-domed, and greenish-tan to dark brown in color. Desert tortoises can grow from 4–6" in height and weigh 8–15 lb (4–7 kg) when fully grown. The front limbs have heavy, claw-like scales and are flattened for digging. Back legs are more stumpy and elephantine		
Flat-tailed horn lizard <i>Phrynosoma mcallii</i>	PT/-/-	Closely related to Desert horned lizard (scat indistinguishable); only found in Imperial, Riverside County, Ca and Yuma area, Az. Small round lizard with distinguishing round spots on back. Diet of ants; needs sandy soil, shade bushes to survive.	Desert washes/sandy areas with vegetative cover. Diet of ants	M Habitat is present off site to the north; no scat or lizards were observed during general survey. Not within a FTHL Management Area
Fish				
Desert pupfish <i>Cyprinodon macularius</i>	E/E/-	Small, silvery-colored fish with 6 to 9 dark bands on its sides. Grows to a full average length of only 2.5 inches; develop quickly, sometimes reaching full maturity within 2	Springs, seeps, and slow-moving streams in Salton Sink basin and backwaters and sloughs of the Colorado River	L No habitat

Common Name <i>Scientific Name</i>	Status ¹ Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		<p>to 3 months. Although their average life span is 6 to 9 months, some survive more than one year.</p> <p>Pupfish have a short, scaled head with an upturned mouth. The anal and dorsal fins are rounded with the dorsal sometimes exhibiting a dark blotch. The caudal fin is convex at the rear.</p>		
Razorback Sucker <i>Xyrauchen texanus</i>	Fed/CA: Endanger ed	One of the largest suckers in North America, can grow to up to 13 pounds and lengths exceeding 3 feet. The razorback is brownish-green with a yellow to white-colored belly and has an abrupt, bony hump on its back shaped like an upside-down boat keel	Colorado River	L No habitat

Sources: CDFW/CNDDDB June, 2019, California Wildlife 2016; CNPS 2019; USFWS, 2008

¹Status: Federal:

E = Listed as an endangered species

T = Listed as a threatened species

C = Candidate for listing

D = Delisted

PD = Proposed for delisting/PT = Proposed for threatened status

State/CDFG:

E = Listed as an endangered species; or previously known as "rare, fully protected"

T = Listed as a threatened species

CNPS (California Native Plant Society):

1 = Rare, threatened, or endangered in California or elsewhere

2 = Plants rare, threatened, or endangered in Ca, but more common elsewhere

3 = Plants about which more information is needed

SC = species of special concern (designation intended for use as a management tool and for information; species of special concern have no legal status (www.dfg.ca.gov/wildlife/species/ssc/birds.html))

0.1 Seriously threatened in Ca (high degree/immediacy of threat)

0.2 Fairly threatened in Ca (moderate degree/immediacy of threat)

0.3 Not very threatened in Ca (low degree/immediacy of threats or no current threats known)

USFWS BIRDS OF CONSERVATION CONCERN 2016

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
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Bald Eagle	<i>Haliaeetus leucocephalus</i>	X	X	Nests on tall trees or on cliffs in forested areas near large bodies of water. Winters in coastal areas, along large rivers, and large unfrozen lakes.	Low Not expected. No tall trees; not observed in area
Swainson's Hawk	<i>Buteo swainsoni</i>		X	Breeds in open country such as grassland, shrubland, and agricultural areas. Usually migrates in large flocks often with Broad-winged Hawks. Winters in open grasslands and agricultural areas of Southern America.	Low Not expected on site; no agriculture. May migrate through. Not observed in area
Peregrine Falcon	<i>Falco peregrinus</i>	X	X	Inhabits open wetlands near cliffs for nesting. Also uses large cities and nests on buildings.	Low No open wetlands or nesting area.
Black Rail	<i>Laterallus jamaicensis</i>	X	X	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Low No salt or freshwater marshes; no or sparse vegetation

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Snowy Plover	<i>Charadrius alexandrinus</i>	X	X	Barren to sparsely vegetated sand beaches, dry salt flats in lagoons, dredge spoils deposited on beach or dune habitat, levees and flats at salt-evaporation ponds, river bars, along alkaline or saline lakes, reservoirs, and ponds.	Low No habitat
Mountain Plover	<i>Charadrius montanus</i>	X	X	Breeds on open plains at moderate elevations. Winters in short-grass plains and fields, plowed fields, and sandy deserts.	Low No habitat
Black Oystercatcher	<i>Haematopus bachmani</i>	X	X	Rocky seacoasts and islands, less commonly sandy beaches.	Low No habitat
Solitary Sandpiper	<i>Tringa solitaria</i>		X	Breeds in taiga, nesting in trees in deserted songbird nests. In migration and winter found along freshwater ponds, stream edges, temporary ponds, flooded ditches and fields, more commonly in wooded regions, less frequently on mudflats and open marshes.	Low No habitat
Lesser Yellowlegs	<i>Tringa flavipes</i>		X	Breeds in open boreal forest with scattered shallow wetlands. Winters in wide variety of shallow	Low No habitat

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
				fresh and saltwater habitats.	
Upland Sandpiper	<i>Bartramia longicauda</i>		X	Native prairie and other dry grasslands, including airports and some croplands.	Low No habitat
Whimbrel	<i>Numenius phaeopus</i>	X	X	Breeds in various tundra habitat, from wet lowlands to dry heath. In migration, frequents various coastal and inland habitats, including fields and beaches. Winters in tidal flats and shorelines, occasionally visiting inland habitats.	Low No habitat
Long-billed Curlew	<i>Numenius americanus</i>	X	X	Nests in wet and dry uplands. In migration and winter found on wetlands, grain fields, lake and river shores, marshes, and beaches.	Low on site No habitat
Short-billed Dowitcher	<i>Limnodromus griseus</i>	X	X	Breeds in muskegs of taiga to timberline, and barely into subarctic tundra. Winters on coastal mud flats and brackish lagoons. In migration prefers saltwater tidal flats, beaches, and salt marshes. Also found in freshwater mud flats and flooded	Low No habitat.

				agricultural fields.	
Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Aleutian Tern	<i>Sterna aleutica</i>		X	Nest on flat vegetated islands on or near the coast. Vegetation includes dwarf-shrub tundra, grass and sedgemeanows, and coastal marsh. Migration and winter habitat not known, probably pelagic.	Low No habitat
Least Tern	<i>Sterna antillarum</i>		X	Seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers, breeding on sandy or gravelly beaches and banks of rivers or lakes, rarely on flat rooftops of buildings.	Low No habitat
Gull-billed Turn	<i>Sterna nilotica</i>		X	Breeds on gravelly or sandy beaches. Inters in salt marshes, estuaries, lagoons and plowed fields, along rivers, around lakes and in freshwater marshes.	Low No habitat
Black Skimmer	<i>Rynchops niger</i>	X	X	Breeds in large colonies on sandbars and beaches. Forages in shallow bays, inlets, and estuaries.	Low No habitat
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	X	X	Open woodlands with clearings, orchards, dense scrubby vegetation, mainly cottonwood, willow, and adler, often along water.	Low No habitat

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Black Swift	<i>Cypseloides niger</i>	X	X	Nests on steep ledges on cliffs or canyons. Migrates and winters over coastal lowlands.	Low No habitat
Costa's Hummingbird	<i>Calypte costae</i>	X	X	Primarily low deserts and arid brushy foothills, but also chaparral and coastal sage scrub closer to the coast. Often visits ornamental plantings and feeders in desert communities. In migration and winter frequents a wider variety of habitats, occasionally ranging into pine-oak woodlands in adjacent mountains.	Low No habitat
Calliope Hummingbird	<i>Stellula calliope</i>	X	X	Open montane forest, mountain meadows, and thickets of willow and alder. In migration and winter also in chaparral, oak and pine-oak woodlands, deserts, and gardens.	Low No habitat

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Rufous Hummingbird	<i>Selasphorus rufus</i>		X	Breeds in a variety of forested habitats where flowers are found. Frequents montane meadows and just about anywhere else with flowers or feeders during migration. Winters primarily in pine and pine-oak forests in Mexico, but most birds wintering farther north are attracted either to flowers or feeders in gardens.	Low No habitat
Allen's Hummingbird	<i>Selasphorus sasin</i>	X	X	Breeds in coastal sage scrub, chaparral, and riparian corridors within coastal forests. In Mexico winters in forest edge and scrub clearings with flowers. The resident population on the mainland of southern California is largely restricted to suburban neighborhoods where feeders and flowers are plentiful.	Low No habitat
Lewis's Woodpecker	<i>Melanerpes lewis</i>	X	X	Breeds in open arid conifer, oak, and riparian woodlands: rare in coastal areas. Winters in breeding	Low No habitat

				habitat, and oak savannas, orchards, and even in towns.	
Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Olive-sided Flycatcher	<i>Contopus cooperi</i>	X	X	Montane and northern coniferous forests, at forest edges and openings such as meadows, and at ponds and bogs. Winters at forest edges and clearings where tall trees or snags are present.	Low No habitat
Willow Flycatcher	<i>Empidonax trailii</i>	X	X	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	Low No habitat
Loggerhead Shrike	<i>Lanius ludovicianus</i>	X	X	Open or brushy areas.	Low No habitat
Bell's Vireo	<i>Vireo bellii</i>	X	X	Dense, low, shrubby vegetation generally early successional stages in riparian areas, brushy fields, young second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands, often near water in arid regions.	Low No habitat

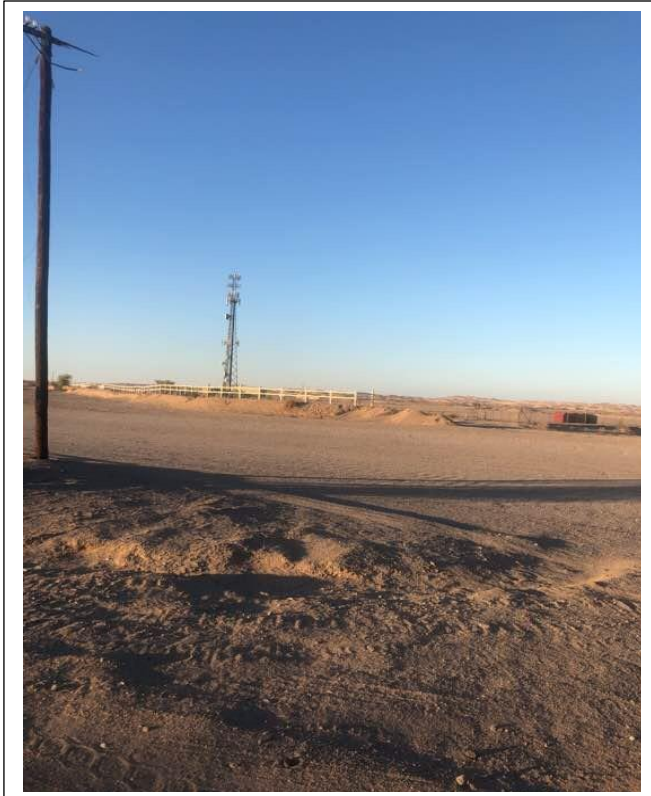
Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Gray Vireo	<i>Vireo vicinior</i>	X	X	Found in desert scrub, mixed oak-juniper and pinyon-juniper woodlands, dry chaparral, and thorn scrub in hot, arid mountains and high-plains.	Low No habitat
Horned Lark	<i>Eremophila alpestris</i>		X	Open, barren country including dirt fields, gravel ridges, and shores. Prefers bare ground to short grasses.	Low No habitat
LeConte's Thrasher	<i>Toxostoma lecontei</i>	X	X	Desert scrub, mesquite, tall riparian brush and, locally, chaparral.	M Could be found foraging or nesting in area
Yellow Warbler	<i>Dendroica petechia</i>	X		Breeds in wet, deciduous thickets, especially in willows and adler. Also in shrubby areas, old fields, gardens and orchards. In southern Florida and farther south, found in mangroves.	Low No habitat
Common Yellowthroat	<i>Geothlypis trichas</i>	X		Thick vegetation from wetlands to prairies to pine forests. Frequently near water.	Low No habitat
Rufous-winged Sparrow	<i>Aimophila carpalis</i>		X	Found in flat areas of tall desert grass mixed with brush and cactus, and thorn scrub.	Low No habitat

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Brewer's Sparrow	<i>Euphagus cyanocephalus</i>	X	X	Found in a variety of habitats, but prefers open, human-modified areas, such as farmland, fields, residential lawns, and urban parks.	Low No habitat
Black-chinned Sparrow	<i>Spizella atrogularis</i>	X	X	Arid brushland, commonly in tall and fairly dense sagebrush, and dry chaparral. Often in rocky, rugged country from sea level to around 8,900 ft (2700m).	Low No habitat
Tricolored Blackbird	<i>Agelaius tricolor</i>	X	X	Breeds in marsh vegetation, particularly cattails, near grain fields, riparian scrubland, and forests, but always near water. Dairies and feedlots also commonly used for foraging. Urban and suburban areas occasionally utilized, particularly park lawns. Cultivated lands also suitable for foraging. Large night-time roosts form during nonbreeding season in cattail marshes near foraging grounds.	Low No habitat

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Lawrence's Goldfinch	<i>Carduelis lawrencei</i>	X	X	Prefers dry interior foothills, mountain valleys, open woodlands, chaparral, and weedy fields. Often found near isolated water sources such as springs and cattle troughs.	Low No habitat

APPENDIX B PHOTOGRAPHS

PHOTOGRAPHS



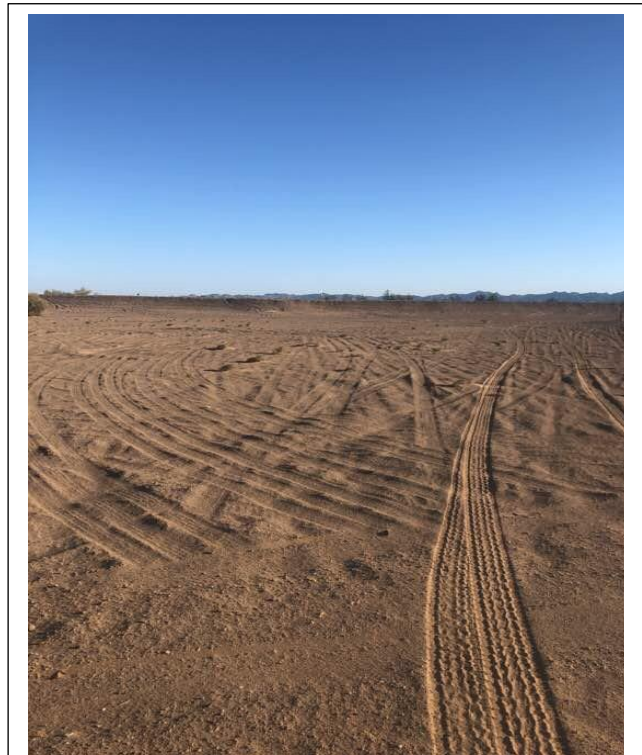
1. Looking south from intersection of the railroad and SR 78; cell phone tower



2. Fenced vendors area



3. Creosote area along railroad tracks
Glamis Specific Plan



4. Southwest corner facing north; disturbed area
Page 49 of 73



5 Fenced area north of RV park in northwest section of property.



6. Fenced area northwest of railroad crossing and SR 78



7. From eastern boundary northwest to intersection SR 78 and railroad crossing
Glamis Specific Plan



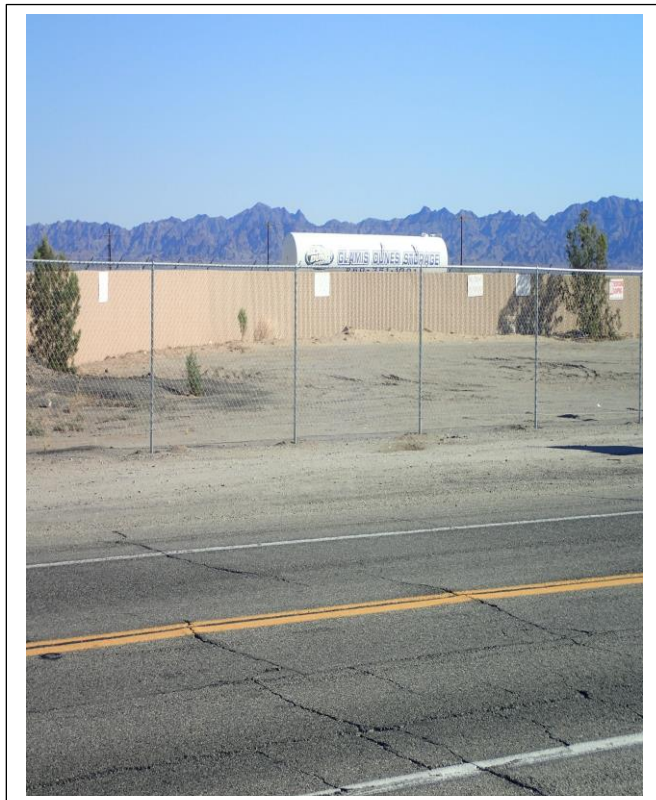
8. From northeast boundary looking south



9. Fenced area northwest of railroad crossing with SR 78



10. Railroad storage area west of railroad tracks north of SR 78



11. RV Storage on north side of SR 78

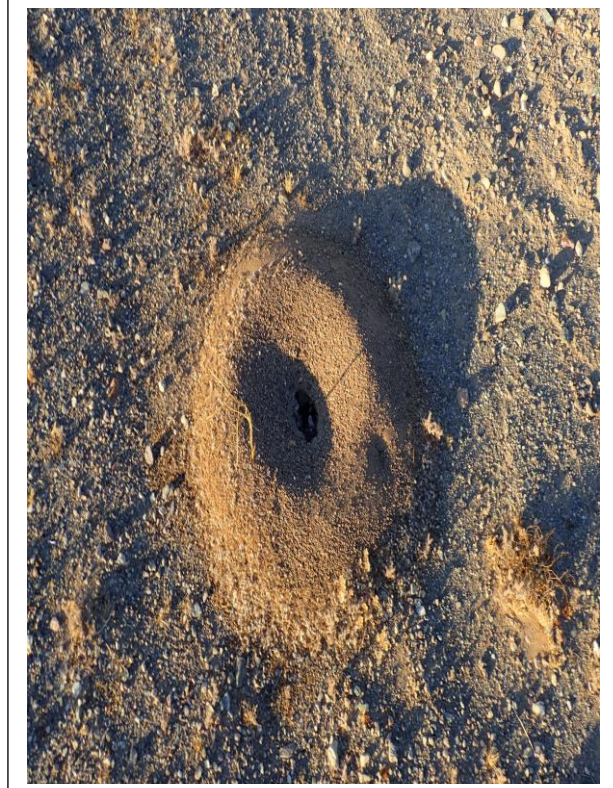


12. RV parking area on northeast portion of site

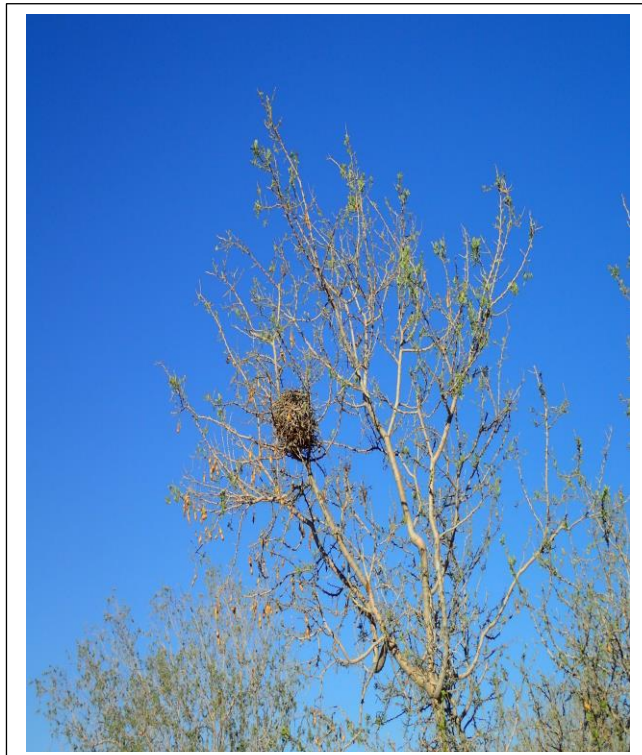
PHOTOGRAPHS



13. Burrow found on site; possibly used by rabbit; no burrowing owl signs



14. Ant mound found on site; small harvester ants



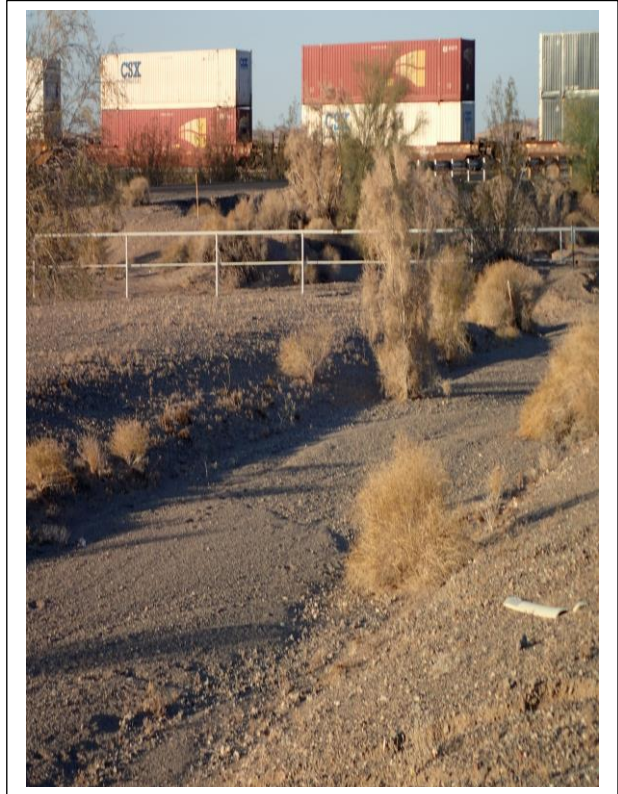
15. Inactive avian nest found in paloverde tree on
General Specific Plan of site



16. Inactive avian nest found in paloverde tree on
southeast portion of site Page 52 of 73



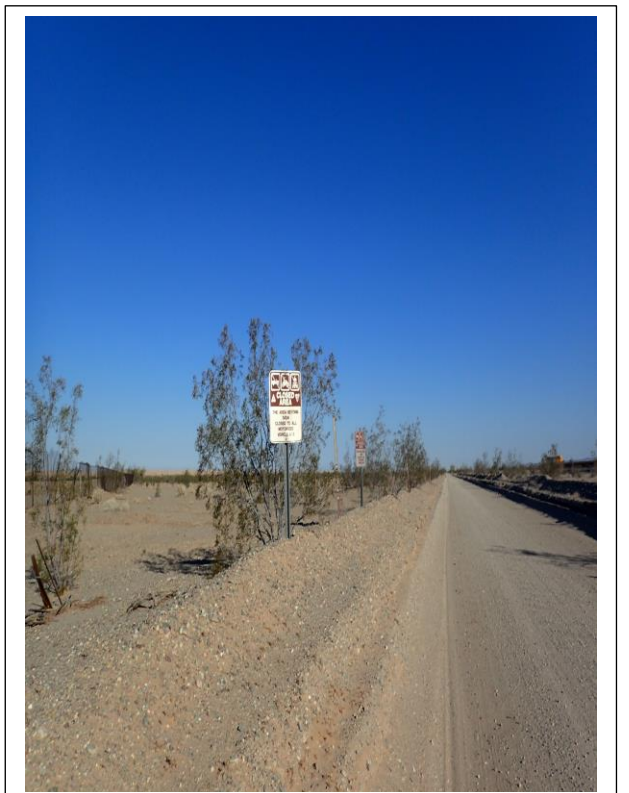
17. Pipe from wash to north side of SR 78 on southeast portion of site



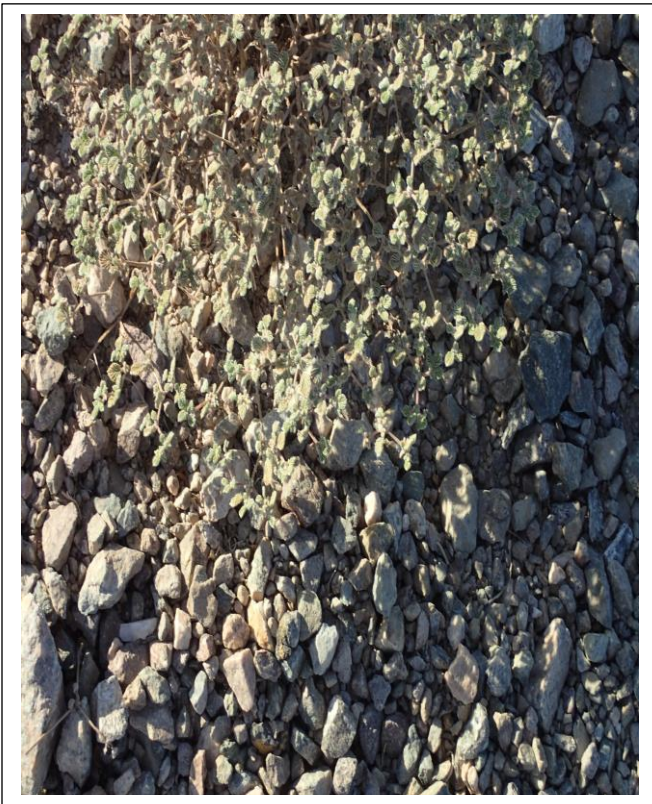
18. Wash on northeastern portion of site; culvert under railroad tracks.



19. Disturbed area; northeastern portion of site; old RV park



20. BLM signage north of site; Ted Kipf Road to right



21. Coldenia on site *Tiquila plicata*



22. Smoketree on site *Dalea spinosa*



23. Creosote *Larrea tridentate* along site fence



24. Disturbed on northeastern portion of site;
BLM area to right

APPENDIX C
SPECIES FOUND ONSITE
AND VICINITY

VEGETATION OBSERVED ON THE PROJECT SITE:

Common name	Scientific name	Cal-IPC Rating*
White bursage	<i>Ambrosia dumosa</i>	None
Smoketree	<i>Dalea spinosa</i>	None
Palo verde	<i>Parkinsonia floridum</i>	None
Brittlebush	<i>Encelia farinosa</i>	None
Creosote	<i>Larrea tridentata</i>	None
Fanleaf crinkleemat	<i>Tiquilia plicata</i>	None
Acacia	<i>Senegalia greggii</i>	None
Sahara mustard	<i>Brassica tournefortii</i>	Ca Noxious Weed Cal-IPC rating: High *
Saltcedar	<i>Tamarix sp.</i>	Ca Noxious Weed Cal-IPC rating: High *
Russian thistle	<i>Salsola tragus</i>	Ca Noxious Weed Cal-IPC rating: Limited*

*High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Limited – These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

ANIMALS/INVERTEBRATES OBSERVED ON SITE

Common name	Scientific name
Quail	<i>Callipepla gambelii</i>
Mourning dove	<i>Zenaida macroura</i>
Ants	<i>various</i>
Grasshoppers	<i>various</i>
Lizard tracks	<i>various</i>
Kangaroo rat tracks	<i>Various</i>
Canine tracks	<i>various</i>
Jackrabbit	<i>Lepus californicus</i>

APPENDIX D QUALIFICATIONS

GLENNA MARIE BARRETT

PO Box 636 Imperial, California 92251 (760) 425-0688
glennabarrett@outlook.com

PROFILE

Organized and focused individual, adept at implementing multifaceted projects while working alone or as an integral part of a team. Skilled in client/employee communications, report preparation, program analyses and development. Cost conscious, safety oriented and empathetic. A strong communicator with excellent interpersonal skills, which allows development of rapport with individuals on all levels. A sound professional attitude, strong work ethic and pride in personal performance.

WORK EXPERIENCE

Senior Biologist/Partner, Barrett's Biological Surveys, GP. Imperial County, CA April 2016-currently. Principal Biological Consultant, Barrett Enterprises. Imperial, CA December 2001 - currently. Compile information and complete local, state, and federal government forms; such as conditional use permits, reclamation plan applications, Financial Assurance Cost Estimates, zone changes, CEQA, Environmental Evaluation Committee responses, and 501 (c)(3) tax exemption applications. Act as liaison between local businesses and local, state, and federal government agencies. Certified to survey for Flat-Tailed Horned Lizards in California and Arizona. Certified to survey the Desert Tortoise.

Kruger- Environmental Compliance Coordinator (ECC) for Seville Solar Complex for a 626-acre solar farm in Imperial County, CA. Compiled and submitted data and reports for APCD such as equipment lists and man hours, water hours for dust suppression; Planning reports such as weekly monitoring reports and scheduling with the third party monitor for work on BLM land; Assisted in writing the Emergency Response Action Plan; CDFW quarterly reports for the Incidental Take Permit for the Flat Tail Horned Lizard (FTHL), CNDDDB reports, FTHL Observation Data Sheets, site tours and any other information required by CDFW; Agriculture Commissioner's Office quarterly reports; provided the hazardous reporting information for the CERS online reporting system; assisted writing the FTHL ITP; trained new hires; contacted various local businesses for different on-call services; also provided any updates for plans and schedules necessary throughout the life of the project; etc. (January 2015- March 2016).

Grant writing experience: Awarded two grants for BUOW educational programs for \$15,000 each from Imperial Valley Community Foundation. Awarded \$35,700 for a total of \$75,000 with matching funds to establish the Imperial Valley Small Business Development Center with the Imperial Reginal Alliance. Awarded \$450,000 from the California Public Utilities Commission for a broadband connectivity initiative in Imperial County with Imperial Reginal Alliance and Imperial Valley Economic Development Corporation (IVEDC). Awarded \$450,000 in grant funding from USDA for the RMAP program with IVEDC being the recipient of the funds. Assisted in writing two grants and obtaining grants with the Imperial County Film Commission (ICFC).

FIELD EXPERIENCE

Ms. Barrett has done the field work and contributed to the required reports for the following projects:

• **8ME-Burrowing Owl Monitoring and training for the Mount Signal Solar Three Project** in Calexico, CA (April 2016-currently)

NAF-EC – FTHL monitoring for Holtville Airstrip project with USMC personnel to widen a six-mile BLM road and re-strip an airfield. Monitored and consulted with above-mentioned agencies for FTHL. (October 2014)

- **Sol Orchard** - El Centro, CA: Successfully completed BUOW relocation and artificial burrow installation for six burrows.
- **Burrtec- FTHL Surveys** in Salton City, CA: Team leader for eight people to complete a pre-construction site sweep for 320 acres in Imperial County.
- **Applied Biological Consulting- Approved Biological Monitor on DPV2**: The 500kV transmission line traverses approximately 153 mi from Bythe, CA to Menifee in Riverside County, CA. Crossing private, state and Federal lands, such as the Bureau of Land Management [BLM], U.S. Forest Service [USFS]. (November 2011 to May 31, 2013)
- **Chandi Group**, Conduct Habitat Assessment Survey (as outlined in Western Riverside Multispecies Habitat Conservation Plan: Burrowing Owl/Narrow Endemic Species) within the City of Jurupa Valley, Riverside County, 2015

EDUCATION AND TRAINING

Received Bachelor of Science in Business Administration with a focus on Management, along with Economics and Leadership minors, December 2000. Humboldt State University, Arcata, CA.

Special Status/listed species observed/ identified, surveyed, monitored and/or relocated: Mohave desert tortoise, Coachella valley milkvetch, Desert kit fox, Mountain lion, Coachella valley fringe toed lizard, Mohave fringe toed lizard, Stephen's kangaroo rat, Mohave ground squirrel, Coast horned lizard, Flat-Tail Horned lizard, Burrowing Owl.

Extensive knowledge in southwestern United States, non-migratory and migratory avian biology and ecology. Strong knowledge of common Flora and Fauna communities associated with Southern California and surrounding environs. CEQA, NEPA, California Endangered Species Act (CESA) and Federal Endangered Species Act (ESA) knowledge gained through work experience. I have excellent analytical skills, multi-tasking and writing abilities. My past work experience has provided me with many years of hands on experience working with and managing others to find practical solutions to solve problems and achieve common goals.

CERTIFICATIONS/ WORKSHOPS

- FTHL Workshop, 2008 El Centro BLM office.
- USFW Desert Tortoise Egg Handling Desert Tortoise Council Survey Techniques Workshop Certificate, 2008 and 2010.
- Anza Borrego State Park Wildflower Identification Workshop, 2010.
- Southwest Willow Flycatcher Workshop Kernville, CA, 2010.
- SCE TRTP Construction Monitoring Training Class and WEAP Redlands, CA 2011.
- DPV2 Construction Monitoring Training Class and WEAP Santa Ana, CA 2011.
- Helicopter flight trained on DPV2, 2012.
- Certified to handle/ move venomous snakes on DPV2, 2012.
- Bat monitoring with Ms. Pat Brown BLM El Centro, CA Office, 2010.
- Salton Sea International Bird Festival 2007 Coordinator
- Mountain Plover/ Long-billed Curlew surveys, L.A. Museum of Natural History.
- Current First Aid certification to 2016.
- Presented at the Fourth Annual BUOW Symposium in Pasco, Washington, 2014.
- Board Member- Colorado River Citizens Forum, 2014-2016.
- BUOW Educational outreach grantee from IVCF, interacting with IID, IVROP, ICFB, Ag Commissioner's Office, 2015.
- Friends of the Sonny Bono National Wildlife Refuge, Member 2015

MARIE S. BARRETT

2035 Forrester Road, El Centro, CA 92243 (760) 352 4159 mariebarrett@roadrunner.com

LICENSES/CERTIFICATES

Flat Tailed Horn Lizard Surveyor CDFG/BLM

Burrowing Owl Surveyor (CDFG/USFWS)

USFW Desert Tortoise Egg Handling Desert Tortoise Council Survey Techniques Workshop Certificate

BCI Bat Conservation and Management Workshop (Acoustic) Certificate

Southwestern Willow Flycatcher Workshop Kernville, CA 2010

California Pest Control Advisor #70373 California Pest Control Operator #103123

CA Scientific Collection Permit 126/USFWS Salvage Permit MB52633B-1

CAREER HISTORY

Barrett's Biological Surveys, El Centro, California BIOLOGIST 3/95 -present

Helped established protocol and perform Vegetative Baseline Studies and Biological Surveys for

Mining Reclamation Plans in Imperial County. Have performed numerous (over 20,000 acres) surveys involving varied wildlife including burrowing owl, nesting birds and plant species and writing reports and biological assessments. Certified to perform Flat Tailed Horned Lizard Surveys; completed Desert Tortoise workshops; approved to handle desert tortoise (American Girl Mine/BLM project, 1/2013). Work closely with governmental agencies such as Bureau of Land Management, State Office of Mining Reclamation, California Department of Fish and Game. Written over ten Environmental Assessments for BLM, El Centro office. Over 150 days spent in field monitoring/surveying for FTHL; 98 days in field monitoring/surveying for desert tortoise and 32,000 acres surveyed for burrowing owl and nesting birds; 2 IID Burrowing owl surveys with AECOM (2011/12- 226 hrs). Wrote Imperial Irrigation District Artificial Burrow Installation Manual (2009). Over 25 active burrowing owl burrows passively relocated and 50 artificial burrows installed. Volunteered for desert tortoise work (20 hrs) with Dr. Jeff Lovich. Coachella Valley Projects: Torres-Martinez (Desert Cahuilla Composting Facility Biological Resource Technical Report/Surveys 60 acres, SR 86/Ave 84, 2013; Augustine Tribe (Solar Farm Biological Resource Technical Report/Surveys 10 acres, La Quinta, CA, 2010); Benitez Family Trust Therapeutic Community, Dillon and Cabazon Roads, 10 acres, 2008); Chandri Group (Dairy Queen Chill/Grill Project, 1.5 acres, Date Palm Drive/I-10, La Quinta, CA, 2014). Blythe 8Minutenergy Mt. Signal Solar 5000 acres Preconstruction surveys/construction monitoring and BUOW Post construction monitoring; Biological report. 2010-2017

Black Mt. MetTower Installation: desert tortoise survey and monitoring approved by BLM, El Centro office Salton City Burretec Landfill FTHL monitoring/clearance 2010-2014 (42.5 hrs); Superior Redi Mix: FTHL surveys, Oat Pit Environmental Assessment for BLM, El Centro, 2009-14. (20 hours) SDG&E La Rosite Pole Replacement FTHL Monitoring 2012-2013(410 hrs); Imperial County Department of Public Works, FTHL surveys for Coyote Mine Environmental Assessment, BLM, El Centro, 2008. (10 hours) All American Aggregates, FTHL surveys, Boyd Road Mine Environmental Assessment, BLM El Centro, 2007. (9.5 hours) All American Aggregates, FTHL surveys, Wheeler Road Mine Environmental Assessment, BLM, El Centro, 2006. (8.5 hours); ValRock, FTHL surveys, Ocotillo ByPass Road Environmental Assessment, County of Imperial/BLM, El Centro, 2004. (7 hours). USFWS Authorized desert tortoise biologist: American Girl Mine and Mesquite Mine.

Citizens' Congressional Task Force on the New River, Brawley, Ca PROGRAM COORDINATOR 1/98 - present

Assisted with design, construction, planting and monitoring of four constructed wetlands in Imperial County. Responsible for coordinating activities relating to student and public outreach education to promote the water quality opportunities of wetlands ponding systems on the New River.

Imperial Valley College, Imperial, California ENVIRONMENTAL MANAGEMENT PROJECT COORDINATOR 9/95-12/99

Responsible for establishing an Environmental Technology curriculum, presenting public forums, short courses and certificate courses in hazardous materials and safety areas. In conjunction with Division Chairman, established a budget for 96-98 program and obtained funding of \$131,000 based on 95-96 program performance. Established short courses that trained over 700 people in hazardous materials safety programs. Compiled a survey of employers, which provided direction for the program.

VOLUNTEER ORGANIZATIONS

CALIFORNIA NATIVE PLANT SOCIETY: Imperial Valley Coordinator, 2006-2016.

SALTON SEA INTERNATIONAL BIRD FESTIVAL: Coordinator: 2001-2010. Organize bird festival in the Imperial Valley that attracts over 300 birders.

COLORADO RIVER WATER QUALITY CONTROL BOARD: Board member Dec 05-Sept 06.

FRIENDS OF SONNY BONO NATIONAL WILDLIFE REFUGE: Board Chairman, May 2015- 16

EDUCATION

University of Arizona, Tucson, Arizona

Masters of Science Degree – AGRICULTURAL EDUCATION

Thesis: Survey and training protocol for documenting burrowing owls and habitat in Imperial County, California

California State Polytechnic College, Kellogg-Voorhis Campus, Pomona, California

Bachelor of Science Degree.- AGRICULTURAL BIOLOGY

Imperial Valley College, Imperial, California *Associate of Science Degree. AGRICULTURE*

Experience

Bishop Enterprises – El Centro, CA

2010 - Current

Biological surveys of over 18,000 acres for varied wildlife and plant species identification, with special focus on burrowing owls. Surveys / monitoring in association with Barrett's Biological Surveys.

Burrowing Owl Specific Experience:

- Imperial Irrigation District Burrowing Owl Population Surveys with AECOM, 2011-2012
- Imperial Irrigation District Burrowing Owl Mitigation Program Pilot Study, March 2015

Burrowing Owl/Migratory Bird Treaty Act Construction Related Experience:

- Mt. Signal Solar I- Pre-Construction Surveys, Monitoring, Post-Construction Surveys, 2010 - current
- Mt. Signal Solar II – Pre-Construction Surveys, 2015 - current
- Mt. Signal Solar III – Pre-Construction and Construction Monitoring, 2010 - current
- Midway II – Mortality Study, October 2017 - current
- Various other construction related surveys for solar development

Project Monitoring Approved by BLM:

- Union Pacific Glamis Train Derailment- Desert tortoise construction monitoring, July 2012
- SDG&E/La Rosita: Mexico to IV Substation Transmission Line Installation- FTHL/MBTA monitoring, Nov. 2012 – March 2013
- Burrtec Landfill- FTHL clearance, July 2013
- IID Energy Emergency Sand Removal- FTHL and Peirson's Milkvetch (*BLM Sensitive Specie*) monitoring, August 2013 & June 2014
- CalTans Berm repair- FTHL monitoring, June 2014
- Western Mesquite Mine- Desert tortoise clearance, October 2014

Bishop Ranches, Inc. – El Centro, CA

1982 - Current

- Management of an agricultural production operation with responsibilities in field production, irrigation, plant protection, hazardous materials, regulations, policy and plans- including PMT and water quality (TMDL), personnel, accounting and communications

Helena Chemical Company - Brawley, CA

3/2006 - 9/2009

- Field Scout in citrus and other crops identifying and quantifying insect pests, diseases and beneficial predators, taking petiole and soil samples, utilized mapping techniques with pheromone trapping and monitoring in outlying areas

Education

California Polytechnic State University, San Luis Obispo, California

Bachelor of Science Degree – Ornamental Horticulture (Environmental Horticultural Science)

Bachelor of Science Degree – Crop Science

Curriculum included: botany, taxonomy, plant pathology, plant materials, plant protection, soils, native plants, game bird management, and natural resource management

Certifications & Conferences

- Desert Tortoise Council's Handling Workshop and Exam: November 2010
- CDFW Flat-Tailed Horned Lizard Training and Authorization Letter: June 2011
- 4th International Burrowing Owl Symposium, Attendee and Presentation Collaborator: February 2014
- Raptors of the Northwest Symposium and The Wildlife Society, Washington Chapter Joint Mtg, Feb. 2014
- Southwestern Willow Flycatcher (USFWS approved) training by So. Sierra Research Station: May 2015

Glamis Specific Plan

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Danielle Figueroa

1023 Palmview Avenue El Centro, CA 92243
danifig2012@outlook.com (760) 791-4706

SUMMARY OF QUALIFICATIONS:

Ability to work well with others with a variety of different personalities. Compassionate and dedicated to helping others. Dependable and reliable.

SKILLS AND ABILITIES:

Over seven years of experience in biological surveying and construction monitoring for Burrowing Owls, Flat tail horned lizard, MBTA species, flora and general biological surveys. Adept at using GPS, binoculars, Trimble's, and other survey techniques.

EXPERIENCE

- Midway 2 mortality surveys in Calipatria, CA. October 2017 to currently.
- Mount Signal Solar 3 BUOW surveys and monitoring in Calexico, CA. October 2017 to currently.
- Mount Signal Solar 1 BUOW Surveys. Identify previous and new BUOW burrows for five years for a solar farm in Calexico, CA. August 2015- currently.
- Midway 2 Solar Farm BUOW Surveys in Calipatria, CA. July 2015 to currently.
- Brown Field Airport BUOW survey in San Diego, CA. March 2018
- Monitored a movie shoot in Imperial County for Sidewinders off Wheeler Road. June 2015
- Sun Edison BUOW Surveys. Completed multiple buow clearance surveys. December 2014 to May 2015
- Burrtec FTHL Clearance Survey. Completed a FTHL clearance survey of 320 acres in Imperial County.
- Worthington Road Bridge MBTA Construction Monitoring- Monitored construction activities to protect swallows in Imperial County. June-2013.
- Carter Road MBTA Construction Monitoring- Monitored construction activities to protect swallows in Imperial County. May- 2013.
- 8Minute Energy Iris Cluster- Biological technical survey to identify zoological and botanical species. April-July 2013
- 8Minute Energy Mount Signal/ Calexico Solar Farm Cluster- Field assistant for surveys for BUOW and MBTA species. Dec 2010- Jan 2011

EDUCATION

- Imperial Valley College – El Centro, CA 8/2012 – 3/2013
- California Nurses Educational Institute – Palm Springs, CA Certified Nursing Assistant 4/2012 – 7/2012
- Riverside Community College- Moreno Valley, CA 8/2008-1/2009

APPENDIX E
CDFW CNDDDB FTHL Occurrence
Report Records



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Species IS (Phrynosoma mcallii) AND Quad IS (Glamis (3211581))

Map Index Number: 06471	EO Index: 27918
Key Quad: East of Acolita (3311511)	Element Code: ARACF12040
Occurrence Number: 57	Occurrence Last Updated: 2016-07-21

Scientific Name: <i>Phrynosoma mcallii</i>	Common Name: flat-tailed horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: BLM_S-Sensitive
CNDDDB Element Ranks:	CDFW_SSC-Species of Special Concern
Global: G3	IUCN_NT-Near Threatened
State: S2	

General Habitat:	Micro Habitat:
RESTRICTED TO DESERT WASHES AND DESERT FLATS IN CENTRAL RIVERSIDE, EASTERN SAN DIEGO, AND IMPERIAL COUNTIES.	CRITICAL HABITAT ELEMENT IS FINE SAND, INTO WHICH LIZARDS BURROW TO AVOID TEMPERATURE EXTREMES; REQUIRES VEGETATIVE COVER AND ANTS.

Last Date Observed: 1969-05-06	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1969-05-06	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
GLAMIS, ALGODONES DUNES.

Detailed Location:
LOCATIONS STATED AS "1 MI N GLAMIS, ALGODONES DUNES" (LACM) AND "GLAMIS, ALGODONES DUNES AREA" (MVZ).

Ecological:

Threats:

General:
MUSEUM SPECIMENS (LACM) #74206, 74261. MVZ #S 85232, 85233, 85234, 85235 - 3 MALES AND 1 FEMALE COLLECTED BY ROBERT STEBBINS ON 6 MAY 1969.

PLSS: T13S, R18E, Sec. 27 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3653503 E680295	Latitude/Longitude: 33.00507 / -115.07001	Elevation (feet): 360

County Summary:	Quad Summary:
Imperial	Glamis (3211581), East of Acolita (3311511)

Sources:

HON65S0001	HONOROF, R. - LACM #74206 COLLECTED AT ALGODONES DUNES, 1 MI. N GLAMIS 1965-04-24
KUS65S0001	KUSTER, N. - LACM #74261 COLLECTED AT ALGODONES DUNE, 1 MI N GLAMIS 1965-04-25
STE69S0014	STEBBINS, R. - MVZ #85232 COLLECTED FROM GLAMIS, ALGODONES DUNES AREA 1969-05-06
STE69S0015	STEBBINS, R. - MVZ #85233 COLLECTED FROM GLAMIS, ALGODONES DUNES AREA 1969-05-06
STE69S0016	STEBBINS, R. - MVZ #85234 COLLECTED FROM GLAMIS, ALGODONES DUNES AREA 1969-05-06
STE69S0017	STEBBINS, R. - MVZ #85235 COLLECTED FROM GLAMIS, ALGODONES DUNES AREA 1969-05-06



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 48648
Key Quad: Glamis (3211581)
Occurrence Number: 86

EO Index: 48648
Element Code: ARACF12040
Occurrence Last Updated: 2002-08-22

Scientific Name: *Phrynosoma mcallii*

Common Name: flat-tailed horned lizard

Listing Status: **Federal:** None
 State: None
CNDDDB Element Ranks: **Global:** G3
 State: S2

Rare Plant Rank:
Other Lists: BLM_S-Sensitive
 CDFW_SSC-Species of Special Concern
 IUCN_NT-Near Threatened

General Habitat:

RESTRICTED TO DESERT WASHES AND DESERT FLATS IN CENTRAL RIVERSIDE, EASTERN SAN DIEGO, AND IMPERIAL COUNTIES.

Micro Habitat:

CRITICAL HABITAT ELEMENT IS FINE SAND, INTO WHICH LIZARDS BURROW TO AVOID TEMPERATURE EXTREMES; REQUIRES VEGETATIVE COVER AND ANTS.

Last Date Observed: 2002-07-14
Last Survey Date: 2002-07-14
Owner/Manager: BLM
Presence: Presumed Extant

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Poor
Trend: Unknown

Location:
 WEST SIDE OF THE ALGODONES DUNES, 6.4 MILES SSW OF GLAMIS.

Detailed Location:
 72 BELT TRANSECTS, EACH 0.5-MILE LONG; 1 FLAT TAILED HORNED LIZARD AND 5-6 PIECES OF HORNED LIZARD SCAT DETECTED.

Ecological:
 HABITAT CONSISTS OF DESERT DUNES INTERSPERSED WITH EPHEDRA SP.

Threats:
 THREATENED BY HEAVY ORV USE.

General:
 1 JUVENILE OBSERVED ON 14 JUL 2002.

PLSS: T14S, R18E, Sec. 28, NE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3642979 E676568	Latitude/Longitude: 32.91080 / -115.11190	Elevation (feet): 265

County Summary:	Quad Summary:
Imperial	Glamis (3211581)

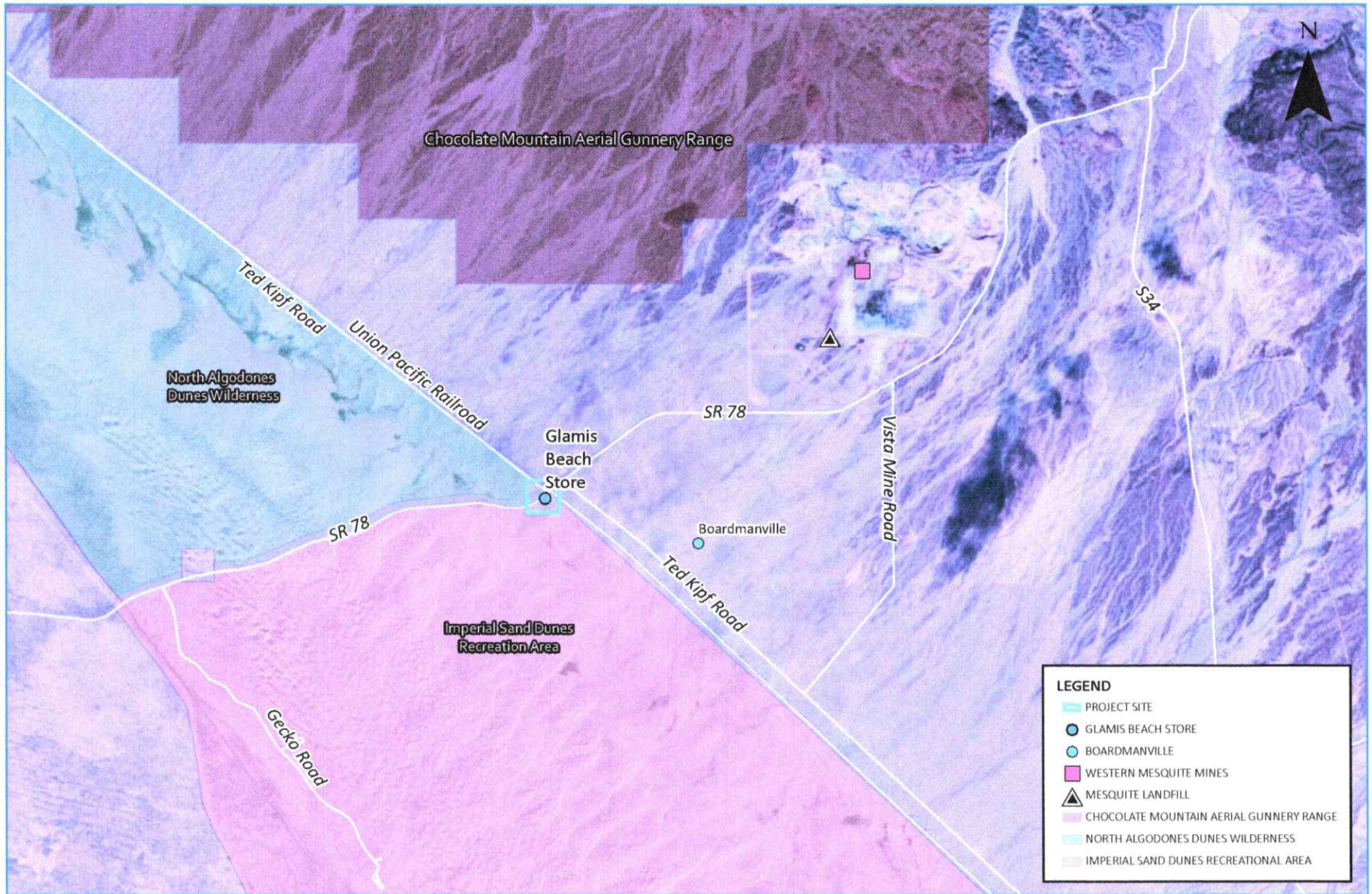
Sources:
 REI02F0001 REILEY, B. (FOSTER WHEELER ENVIRONMENTAL) - FIELD SURVEY FORM FOR PHRYNOSOMA MCALLII 2002-07-14

**FIGURE 1
REGIONAL LOCATION MAP**



REGIONAL MAP

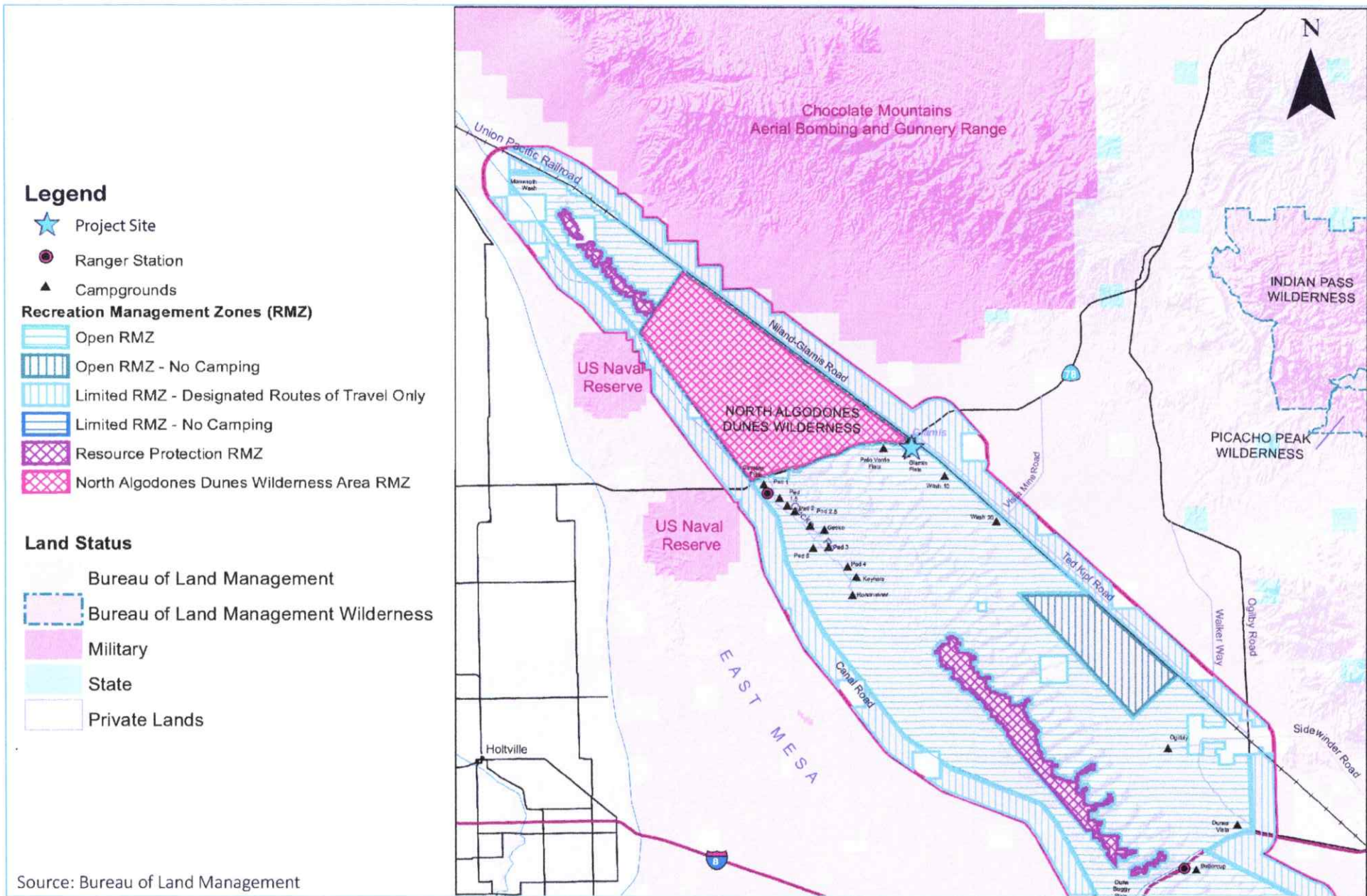
**FIGURE 2
PROJECT LOCATION MAPS**



1 IN = 2.5 MI

Project Vicinity

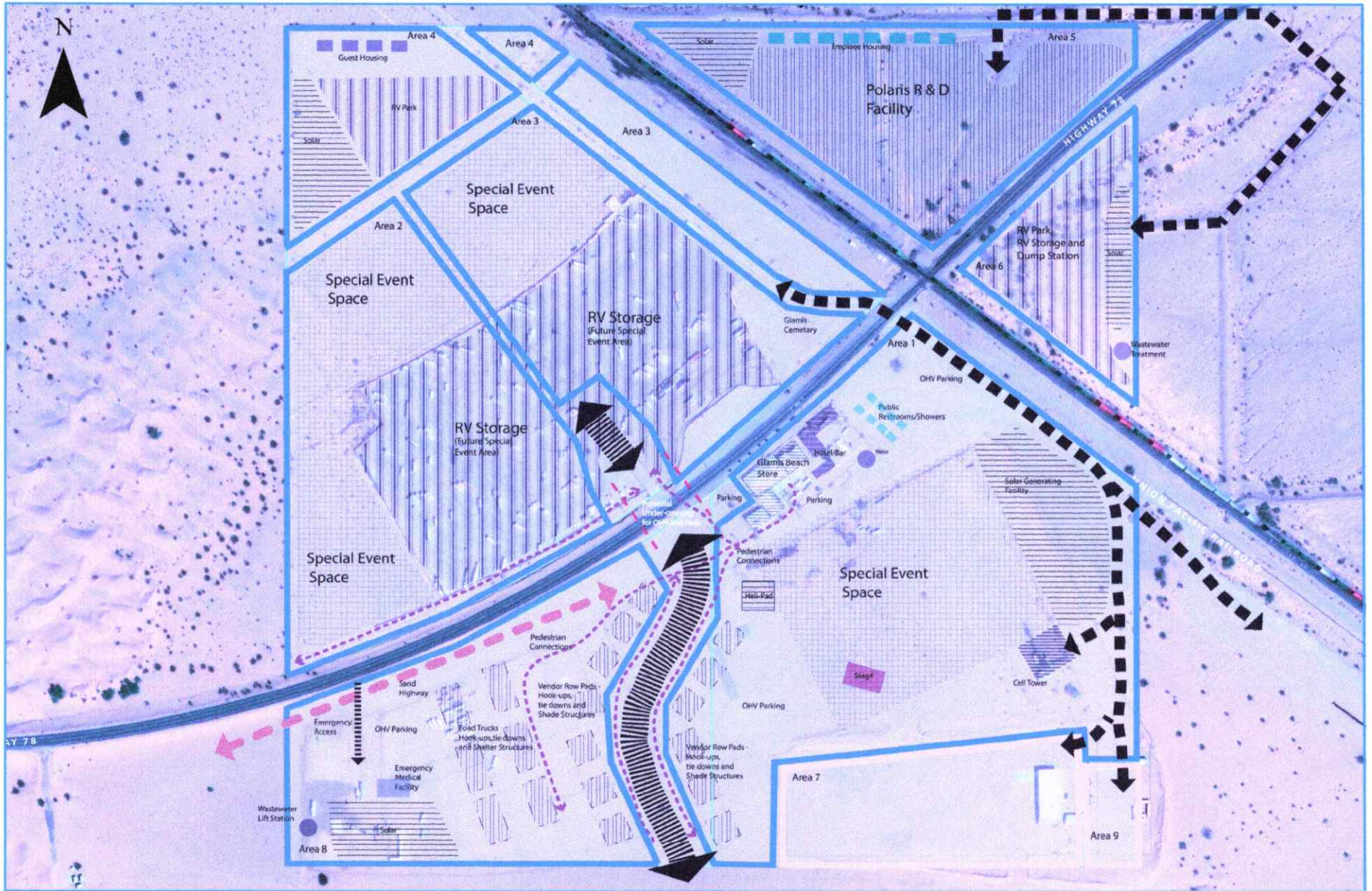
Exhibit I-2



Source: Bureau of Land Management

BLM Recreation Management Zones

Exhibit I-4



Conceptual Site Plan

Exhibit I-8

**FIGURE 3
BIOLOGICAL RESOURCES MAP**

Glamis Specific Plan

Biological Survey



Bureau of Land Management

Ted Kipf Road

Union Pacific Railroad

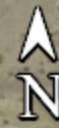
Imperial County Mine

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Ben House Hwy

Ted Kipf Rd

Glamis Flats Rd



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