

5.2 Biological Resources

This section addresses potential biological resource impacts that may result from construction, operation, closure and post-closure maintenance of the Desert Valley Company Monofil Expansion Project, Cell 4. It describes the existing biological conditions of the DVCM, the regulatory framework, the Project's direct and indirect impacts to biological resources and recommends mitigation measures to reduce or avoid these impacts. The regulatory framework discussion focuses on the federal, state, and local regulations that apply to sensitive plants, animals and their habitats. The affected environment discussion focuses on topography and soils; general vegetation; general wildlife; sensitive biological resources; riparian habitat and sensitive natural communities; jurisdictional waters; and habitat connectivity and wildlife corridors.

Applicant's Reports and Survey Results

Information used in preparing this section and in the evaluation of potential impacts to biological resources was derived from a number of sources, including the following surveys and reports that can be found in Appendices G-1 and G-2:

- A Biological Technical Report prepared by Chambers Group (Chambers Group, 2019; Appendix G-1). For the Biological Technical Report, Chambers Group's biologists conducted a general reconnaissance survey within the Biological Survey Area (BSA), which consisted of the entirety of Section 33 (640 acres) to identify the potential for occurrence of sensitive species, vegetation communities, or habitats that could support sensitive wildlife species. The survey was conducted on foot throughout the BSA between 10:00 AM and 4:00 PM on May 8, 2019.
- A Small Mammal Trapping Survey Report prepared by Ecorp Consulting, Inc. (Ecorp Consulting, Inc., 2019; Appendix G-1). Because the BSA contains suitable habitat for the Palm Springs pocket mouse (PSPM; *Perognathus longimembris bangsi*) and is located within the species range, a habitat assessment and focused surveys for small mammal species were conducted June 17 through June 22, 2019, to determine the presence of Palm Springs pocket mouse or any other nocturnal small mammal species. The Palm Springs pocket mouse is a CDFW Species of Special Concern (SSC).
- A Burrowing Owl Survey Report prepared by Hernandez Environmental Services (HES) (HES, 2019a; Appendix G-1). Focused surveys for burrowing owls (*Athene cunicularia*) (BOUS) were conducted by HES on April 10th, June 21st, July 12th, and August 7th, 2019. The study area included the Project site and a 150-meter (500-foot) buffer around the site, where accessible. Parallel transects spaced at no more than 30-meter intervals were walked across portions of Section 27 and Section 33. Handheld global positioning system (GPS) units were utilized to ensure that the transects were parallel and to maintain the desired spacing and transect orientation. All burrows of sufficient size to harbor BUOWs were

investigated for signs of use by the species, including the presence of pellets, feathers, whitewash, or nearby individuals.

- A Jurisdictional Delineation Report prepared by HES (HES, 2018: Appendix G-2). The Jurisdictional Delineation (JD) was conducted within the BSA on May 29 and May 30, 2018, which delineated the extent of drainages considered to be state or federal jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), the California Regional Water Quality Control Board (RWQCB), or the California Dept. of Fish & Wildlife (CDFW). The results of the JD were updated in October 2019 to reflect the change in the Environmental Protection Agency's (EPA) change in the definition of Waters of the United States.
- A focused rare plant survey prepared by (HES, 2019b; Appendix G-3) and included a survey area of approximately 320-acres. The botanical surveys were conducted on April 5th and April 10th, 2019.

Scoping Issues Addressed

During the scoping period for the Project, a public scoping meeting was conducted, and written comments were received from agencies. The following provides a concise summary of issues raised by the California Department of Fish and Wildlife (CDFW). A detailed listing is provided in **Table 2-1**.

- Evaluate habitat types located within the Project footprint.
- Include a general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present.
- Conduct a complete inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite affected areas.
- CDFW generally considers wildlife field assessments for to be valid for a one-year period, and rare plants to valid for a up to three years.
- Follow the recommendations and guidelines provided in the Staff Report on Burrowing Owl Mitigation.
- Review the Flat-tailed Horned Lizard Rangeland Management Strategy and develop the Draft EIR (DEIR) in accordance with all relevant sections.
- Conduct a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.
- Include information on the regional setting.

- Conduct a full accounting of all open space and mitigation/conservation lands within and adjacent to the Project.
- Conduct an assessment of potential impacts of the Project to groundwater-dependent ecosystems within the Ocotillo-Clark Valley Groundwater Basin.
- Identify potential impacts to San Felipe Creek, a groundwater-dependent ecosystem identified by the USFWS as Designated Critical Habitat for the state- and federally-endangered desert pupfish (*Cyprinodon macularius*). The creek contains one of the few remaining populations of desert pupfish in a totally natural environment.
- Provide a thorough discussion of the direct, indirect, and cumulative impacts to biological resources.
- Identify appropriate and adequate mitigation measures and alternatives that can avoid or minimize potential impacts, to the extent feasible.
- Analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors.
- Include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species.
- The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities with a statewide ranking of S-1, S-2, S-3, and S-4 from Project impacts.
- California Species of Special Concern (CSSC) that have the potential to occur within or adjacent to the Project area, include flat-tailed horned lizard, burrowing owl, Le Conte's thrasher, and Palm Springs pocket mouse and should be considered during the environmental review process.
- CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant and the DEIR should include mitigation measures.
- Mitigation measures should emphasize avoidance and reduction of impacts.
- For unavoidable impacts, on-site habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail. Where habitat preservation is not available onsite, offsite land acquisition, management, and preservation should be evaluated and discussed in detail.
- The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.
- If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DEIR.

- CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts. The mitigation should provide long-term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, in order for mitigation measures to be effective, they need to be specific, enforceable, and feasible actions that will improve environmental conditions.
- Include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and specific avoidance and minimization measures that will be implemented should a nest be located within the Project site.
- If pre-construction surveys are proposed, the CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities.
- CDFW recommends that the DEIR address all Project impacts to listed species and include a mitigation monitoring and reporting program that will meet the requirements of CESA.
- Lake and Streambed Alteration Program. Based on review of material submitted with the NOP and review of aerial photography at least two drainage features traverse the site. It is likely that the Project applicant will need to notify CDFW per Fish and Game Code Section 1602 prior to commencing any activity that may substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake.

Issues Scoped Out

The Imperial County Planning and Development Services Department determined in the Initial Study located in Appendix A-2, that the following environmental issue area resulted in “No Impact” and was scoped out of requiring further review in this draft EIR. Please refer to Appendix A-2 of this DEIR for a copy of the Initial Study and additional information regarding this issue.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. This criterion was eliminated from further evaluation because Imperial County does not have a Habitat Conservation Plan (HCP). Therefore, no conflicts or impacts would occur between the Project and an adopted HCP. The Bureau of Land Management (BLM) has adopted the Desert Renewable Energy Conservation Plan (DRECP), which provides protection and conservation of desert ecosystems while allowing for appropriate development of renewable energy Projects. The Draft DRECP was originally developed as an HCP/Natural Community Conservation Plan (NCCP) and as a BLM Land Use Plan Amendment covering both public and private lands across seven counties, including Imperial County. In 2016, BLM signed its Record of Decision approving the DRECP Land Use Plan Amendment and Final EIS, which addresses renewable energy, land use, and conservation on BLM lands only, was released. Although the DRECP plan area includes the Project area, the DRECP currently only applies

to renewable energy Projects on BLM managed lands and therefore would not be applicable to the Project. For this reason, the Project would not conflict with the goals and policies of the DRECP. The proposed Project is not located within any other local, regional, or state conservation planning areas. The Project site is not located within an area that is subject to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2.1 Environmental Setting

5.2.1.1 Regional Setting

The Project site is located within the Colorado Desert ecoregion, an area with vegetation and habitat that has adapted to an arid sub-tropical climate. Elevations within this ecoregion range from 230 feet below sea level at the Salton Sea to 2,200 feet above sea level at the boundary with the Peninsular Ranges. The region's climate is characterized by its hot summers with maximum temperatures ranging between 104 to 115°F (40-46°C). Winters are mild and dry, including maximum daily temperatures between 65 to 75°F (18- 24°C). Annual rainfall is approximately 3 inches.

The County of Imperial is located on the Pacific Flyway for migratory waterfowl, shorebirds, and songbirds. Although this area is considered to be part of the Colorado Desert, approximately 500,000-acres of the Colorado Desert in County of Imperial have been converted to agricultural use. The irrigation system in the Imperial Valley attracts many bird species that are typically found in agricultural areas, including waterfowl, gulls, herons, cranes, ibises, egrets, doves, quail, sparrows, juncos, and finches. Some raptor species forage in this area as well, particularly the western burrowing owl (*Athene cunicularia hypugea*). Small mammals occupy habitat along the canals and drains. Some of the common species include western harvest mouse (*Reithrodontomys megalotis*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), valley pocket gopher (*Thomomys bottae*), brush rabbit (*Sylvilagus bachmani*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and muskrat (*Ondatra zibethicus*). Surrounding desert areas provide habitat for these species as well as larger mammalian species such as black-tailed jackrabbit (*Lepus californicus*), mule deer (*Odocoileus hemionus*), wild burro (*Equus asinus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), and mountain lion (*Puma concolor*).

Reptiles typically associated with the Colorado Desert include Sonoran gopher snake (*Pituophis catenifer affinis*), western diamond-backed rattlesnake (*Crotalus atrox*), Marcy's checkered gartersnake (*Thamnophis marcianus marcianus*), and Great Plains toad (*Anaxyrus cognatus*).

5.2.1.2. *Biological Study Area*

The biological study area for the proposed Project is located entirely within Section 33 and includes the existing landfill and surrounding lands. The 359.92-acre Biological Survey Area (BSA) is shown in **Figure 5.2-1**. The BSA is surrounded by agricultural fields and the Salton Sea to the north and west. State Route 86 (Highway 86) is located approximately 1-mile northeast of the Survey Area and runs northwest to southeast. The elevation at the Project site ranges from approximately 100 to 160 feet below mean sea level (bmsl).

5.2.1.3 *Vegetation Communities*

Field surveys conducted in June 2019 documented four (4) distinct vegetation communities within the BSA and the Project site: Creosote Bush Scrub, Creosote Bush – Honey Mesquite Scrub, Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance, and Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub. Bare ground and developed areas were also documented. Creosote Bush Scrub, Creosote Bush – Honey Mesquite Scrub, and Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance are not considered sensitive vegetation communities (Chamber Group, 2019, Appendix G-1).

The approximate acreages of each vegetation community is shown in **Table 5.2-1** (also depicted on **Figure 5.3-2**, Vegetation Communities).

TABLE 5.2-1: VEGETATION COMMUNITY AND LAND COVER ACREAGES WITHIN THE BSA AND PROJECT SITE

Vegetation Community	Biological Survey Area (acres)	Project Impacts (acres)
Creosote Bush Scrub	214.80	39.73
Creosote Bush – Honey Mesquite Scrub	9.50	0.7
Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance	1.85	1.57
Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub	0.36	0.7
Total Vegetation Communities	226.51	42.07
Land Cover		
Bare Ground	63.31	42.09
Developed	70.10	0.37
TOTAL	359.92	84.53

Source: Chambers Group, 2019 (Appendix G-1).

Full descriptions of each of these vegetation communities is provided in the Biological Technical Report prepared by (Appendix G-1) and are summarized below.

Creosote Bush Scrub

Creosote bush scrub areas are dominated by creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), and cattle spinach (*Atriplex polycarpa*) with scattered occurrences of desert tea (*Ephedra californica*). Vegetation within the community is primarily open with large bare ground areas between creosote bushes. Isolated herbaceous species were found in low concentrations throughout the habitat. A higher density of herbaceous species is found throughout the small drainage features compared to the Creosote Bush scrub vegetation located outside the drainages. Creosote Bush Scrub is generally of moderate to high quality with low plant density overall. Large areas of bare ground separate individual creosote bush shrubs with only limited plant species being located within the bare ground matrix of the habitat.

Creosote Bush – Honey Mesquite Scrub

Creosote Bush – Honey Mesquite Scrub is dominated by creosote bush, honey mesquite (*Prosopis glandulosa*), white bursage, four wing saltbush (*Atriplex canescens*), Acton brittlebush (*Encelia actoni*) and is found in areas where creosote bush and honey mesquite co-dominate the species makeup. Local topography is highly modified by the honey mesquite thickets and associated loose sand. This habitat is generally less species rich than the surrounding creosote bush scrub but provides high-quality burrowing habitat for various reptilian and mammalian species. This habitat is generally of high-quality with limited invasive species infiltration. Extensive networks of small mammal/reptile burrows extend throughout the dune complexes that form under the honey mesquite increasing habitat structural complexity and nutrient loads. This habitat is generally of high-quality with limited invasive species infiltration. Extensive networks of small mammal/reptile burrows extend throughout the dune complexes that form under the honey mesquite increasing habitat structural complexity and nutrient loads.

Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance

Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance habitat is dominated by herbaceous annuals including rigid spineflower (*Chorizanthe rigida*), hairy desert sunflower, Sahara mustard (*Brassica tournefortii*), desert plantain, common cryptantha (*Cryptantha sp.*), and shining pepperweed (*Lepidium nitidum*). This habitat is characterized as large open areas with very little plant density. Soils consisted primarily of gravely sand with some isolated areas of silty sand. These habitat areas are associated with locations that appear to experience ephemeral water infiltration and support a higher level of herbaceous species than surrounding areas. Species richness is higher than the surrounding Creosote Bush Scrub within this habitat type, but also have an increased level of invasive or non-native species present. Overall, this habitat quality is low due to the non-native species present within this community. A large

contributing factor for the low-quality aspect of this habitat type is influenced by the presence of Sahara mustard. This species is considered highly invasive, and while generally restricted to this habitat type, the potential for this species to spread into outlying areas is possible without proper management.

Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub

Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub is dominated by Tamarisk (*Tamarisk sp.*), honey mesquite, and four wing saltbush. Habitat is found along a large wash in the northwestern portion of the BSA and is the only location where arborescent vegetation is present. Vegetation remains very sparse, maintaining approximately the same vegetation density as the surrounding creosote bush scrub. This habitat type is restricted to a small area within the northwest corner of the BSA and in association with a large drainage. Overall a low level of non-native species were found within this habitat type with isolated native and non-native trees widely spaced. The Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub was characterized as Desert Riparian Scrub, a riparian habitat in the Jurisdictional Delineation prepared for the project (Appendix G-2). Tamarisk is a component of this community; an invasive species that competes for water in drainage features and changes the natural chemistry of the soil (salt-saturated) that inhibits the survival of native species. The presence of tamarisk decreases the habitat value of area.

Bare Ground and Developed Areas

Bare Ground (BG) and Developed areas are not vegetation classifications, but instead are land cover types. Bare ground is generally devoid of vegetation, but do not contain any form of pavement. These areas are typically associated with areas that have been previously cleared and compacted by earth moving machinery, dirt access roads, and maintained areas within the developed portions of the site. Compared to Developed areas, BG has higher water permeability and slightly higher fossorial rodent habitat potential.

Developed (DV) areas are those where various forms of pavement cover the soil surface, the ground has been highly compacted and is part of the existing monofill operations, or is used for semi-permanent vehicle placement, staging, or loading. This community type is recorded as separate from bare ground due to the erosional, use, and hydric features associated with the feature. Due to the lack of permeability, these areas channel water run-off and can result in unique erosional management considerations.

5.2.1.4 Jurisdictional Waters

A delineation of jurisdictional waters was conducted by Hernandez Environmental Services in 2018 (HES, 2018, Appendix G-2) to identify potential riparian vegetation, wetlands, and jurisdictional drainages. Ephemeral streams were identified throughout the BSA and are characterized as a braided channel system which contains multiple channels that divide and rejoin

to form a pattern of gently curved channel segments, separated by exposed ephemeral islands or channel bars. The ephemeral streams were found to be dominated by desert riparian scrub that included several tall shrubs and trees such as western honey mesquite (*P. glandulosa var. torreyana*) and the introduced saltcedar (*Tamarix ramosissima*) and Chinese tamarisk (*Tamarix chinensis*). The majority of the streams in the BSA flow from south to northeast and are tributaries to the Salton Sea a Traditional Navigable Water (TNW). The 0.59 acres of streams located within the northwest corner of the BSA flow northwest and are tributary to San Felipe Creek. Soils within the drainages consist of alluvial soils on alluvial fans, channel bottoms, flood plains, and terraces; and eolian soils on windblown sand and silt.

All 35.2 acres of the identified ephemeral streams located within the BSA (a total of 71,222 linear feet) would be considered CDFW jurisdictional drainage features, regulated by Section 1602 of the California Department of Fish and Game Code. Furthermore, approximately 29.4 acres of the ephemeral drainages would be considered RWQCB jurisdictional features, which are regulated by the RWQCB under Section 401 of the Clean Water Act.

The acreage of Jurisdictional Waters identified within Section 33 of the BSA and within the Project site are provided in **Table 5.2-2**. The location of the drainages in relation to project boundaries is depicted on **Figure 5.2-3**.

TABLE 5.2-2: JURISDICTIONAL WATERS WITHIN BIOLOGICAL SURVEY AREA AND PROJECT SITE

Agency	Biological Survey Area (acres)	Project Site (acres)
CDFW	35.2 (71,222 LF)	7.37 (24,895 LF)
RWQCB	29.4	6.15
USACE	0	0

Notes: CDFW = California Dept. of Fish and Wildlife
USACE = United States Army Corps of Engineers

RWQCB = Regional Water Quality Control Board

Source: Chambers Group, 2019 (Appendix G-1).

San Felipe Creek and San Sebastian Marsh, sensitive wetlands and home of the endangered desert pupfish (*Cyprinodon mucularius*), lie 3 to 6 miles northwest to west of the BSA and would not be affected by the Project.

5.2.1.5 Sensitive Plant Species

According to the focused rare plant survey conducted by HES in April of 2019 (Appendix G-3) the project area has the potential to support eight (8) species of listed or special status plant species (**Table 5.2-3**). Factors used to determine the potential for occurrence included the quality of habitat, elevation, and the results of the focused surveys. In addition, the location of prior

California Natural Diversity Database (CNDDDB) records of occurrence were used as additional data. However, because the CNDDDB is a positive-sighting database, this data was used only in support of the analysis from the previously identified factors.

The analysis of the CNDDDB search and field survey resulted in eight (8) species with a low potential to occur on the Project site. No previously recorded listed or sensitive species are anticipated to have a moderate or high potential for occurrence. Additionally, no federal-and/or state-listed threatened or endangered plants occur within five (5) miles of the Project site. A combination of low-quality habitat, historic records within 3 to 5 miles, and previous Chambers Group surveys in the surrounding area (Unpublished data, Chambers Group Inc., April 2015) support that determinations.

It should be noted however that while conditions for the botanical survey were considered suitable for most of the targeted rare species, general conditions were not conducive to finding flowering plants due to the low rainfall preceding the surveys.

TABLE 5.2-3: SPECIAL-STATUS PLANT SPECIES POTENTIALLY PRESENT ON THE PROJECT SITE

Scientific Name	Common Name	Status	Potential of Occurrence	Survey Results
<i>Euphorbia abramsiana</i>	Abram's spurge	CNPS List 2B.2	Low	Not Found
<i>Cryptantha costata</i>	Ashen forget me not	Not a CNPS List 4 plant	Low	Not Found
<i>Astragalus sabulonum</i>	Gravel milk vetch	CNPS List 2B.2	Low	Not Found
<i>Psorothamnus arborescens</i>	Mojave indigo bush	CNPS List 4.3	Low.	Not Found
<i>Pholisma sonorae</i>	sand food	CNPS List 1B.2	Low	Not Found
<i>Astragalus crotalariae</i>	Salton's milk vetch	CNPS List 4.3	Low	Not Found
<i>Lycium torreyi</i>	Torrey's box thorn	CNPS List 4.2	Low	Not Found
<i>Pilostyles thurberi</i>	Thurber's pilostyles	CNPS 4.3	Low.	Not Found

Source: HES, 2019b

Notes:

FE = Federally Endangered.

SE = State Endangered.

CNPS = California Native Plant Society.

1B = Plants that are rare, threatened, or endangered in California and elsewhere.

2B= Plants that are rare, threatened, or endangered in California and common elsewhere

4 = A watch list of plants of limited distribution.

0.1: Seriously endangered in California.

0.2: Fairly endangered in California.

0.3: Not very endangered in California.

5.2.1.6 Sensitive Wildlife Species

No federal-and/or state-listed threatened or endangered wildlife are known or expected to occur within the project area. The analysis of the CNDDDB search and field survey identified three (3) Species of Special Concern (SSC) with a low potential to occur within the Biological Survey Area due to low quality habitat, which are described below:

- Colorado Desert fringe-toed lizard (*Uma notata*)- SSC
- mountain plover (*Charadrius montanus*)- SSC
- pallid bat (*Antrozous pallidus*)- SSC

No habitat for fringe-toed lizard or the pallid bat occurs within the Project site and low- quality habitat occurs within and/or directly adjacent to the BSA. In addition, no occurrences of these species have been documented within or immediately adjacent to the Survey Area. Low quality habitat for the mountain plover occurs within the BSA; however, no occurrences have been documented within five miles and none were observed during the focused survey efforts for this EIR. Therefore, these species are not anticipated to occur within the Project area.

The analysis of the CNDDDB search and field survey resulted in two species with a moderate potential to occur on the Project site. Burrowing owl (*Athene cunicularia*) and Le Conte's thrasher (*Toxostoma lecontei*) have a moderate potential to occur and is described below:

Burrowing owl – SSC

The burrowing owl is listed as a California Species of Special Concern and is found throughout the state. Historically, this species occurred in pasturelands and grasslands throughout California, but in recent times it has been found in agricultural and desert areas with open vegetation communities. Burrowing owls inhabit dry, open, native or non-native grasslands, deserts, and other arid environments with low-growing and low-density vegetation. It typically uses burrows made by mammals such as California ground squirrels (*Spermophilus beecheyi*), foxes, or badgers. When burrows are scarce, the burrowing owl may use man-made structures such as openings beneath cement or asphalt pavement, pipes, culverts, and nest boxes. Burrowing owls often are found within, under, or in close proximity to man-made structures. Because suitable habitat/nesting territory exists for burrowing owls in the BSA and within the Project site, focused burrowing owl surveys were conducted on April 10th, June 21st, July 12th, and August 7th, 2019 (Appendix G-1).

No burrowing owls were observed during the 2019 survey. The survey identified a total of 14 burrows that could potentially be suitable for burrowing owls. Most were located within ephemeral drainages. None of these burrows were “active” in that they contained no burrowing owls or signs of burrowing owls (e.g., molted feathers, scat, pellets, prey remains, eggshell fragments, tracks, or excrement). **Figure 5.2-5** shows the burrowing owl survey area and burrow locations.

Le Conte's thrasher – SSC

Le Conte's thrasher is a California Species of Special Concern. It occurs in habitat including open desert wash, desert scrub, alkali desert scrub, desert succulent shrub. This species commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat. Suitable habitat for this species occurs within the BSA within the Creosote Bush Scrub, Creosote Bush – Honey Mesquite Scrub, and Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub communities; however, the Le Conte's thrasher has not been recorded within five (5) miles of the site and no individuals were observed during the reconnaissance or focused burrowing owl surveys. Therefore, this species has a moderate potential to forage and a low potential to nest within the BSA.

Palm Springs pocket mouse – SSC

The Palm Springs pocket mouse is a California SSC. Small mammal trapping surveys were conducted of the BSA in 2019 to determine the presence of Palm Springs pocket mouse or any other nocturnal small mammal species (Appendix G-2). The Palm Springs pocket mouse typically occurs in sparsely vegetated creosote bush scrub, desert scrub, and grassland communities containing loose, sandy soils. These habitats are typically flat or contain gentle slopes less than 15 percent in grade. This species is most commonly found in creosote-dominated desert scrub and is rarely found in areas containing rocky soils. This species is active only during the spring, summer, and fall and hibernates during the cold months (from approximately October to March). This species resides in the daytime in underground burrows that are plugged near the entrance for protection from predators and temperature regulation. These burrows consist of several different chambers and tunnels used for giving birth and raising young (breeding from January to August, with March to May being the peak months), food storage, and protection.

The focused surveys for this species were conducted between June 17 and June 22, 2019. Three trapping locations with approximately 430 traps were set in the BSA within Creosote Bush Scrub, small, isolated patches of Creosote Bush Scrub/Honey Mesquite Scrub, Rigid Spineflower/Hairy Desert Sunflower/Desert Pavement Alliance, and Tamarisk/Honey Mesquite/Four Wing Saltbush Scrub. A total of 263 small mammal were captured included six rodent species: desert pocket mouse (*Chaetodipus penicillatus*), desert kangaroo rat (*Dipodomys deserti*), Merriam's kangaroo rat (*Dipodomys merriami*), white-throated woodrat (*Neotoma albigula*), Palm Springs pocket mouse, and round-tailed ground squirrel (*Xerospermophilus tereticaudus*). All species are considered common throughout the Colorado desert with the exception of the Palm Springs pocket mouse.

A total of 47 Palm Springs pocket mouse were caught over a period of four days within 3 general trapping area locations within the BSA; however, only 3 individuals were caught within the Project area. The occurrences were concentrated in the natural habitat communities surrounding the Project site and along its northwestern edge. No individuals were observed within the developed or bare ground areas within the Project Site. Locations of Palm Springs pocket mouse are provided

in **Figure 5.2-6**. Trapping did not occur on the fifth day due to high winds and unsafe trapping conditions.

Flat-tailed horned lizard – SSC

The flat-tailed horned lizard (FTHL) is a California Species of Special Concern. It occurs in desert dunes, Mojavean scrub, and Sonoran scrub and it is restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. The species requires a high abundance of harvester ants, as this is their primary food source. Adult flat-tailed horned lizards begin hibernation as early as October and emerge as late as March. Breeding of flat-tailed horned lizards is believed to take place in early spring after emergence from winter hibernation.

Four FTHL individuals were observed within the BSA, directly adjacent to the Project site, during the small mammal trapping survey. All were observed within Creosote Bush Scrub habitat; however, this species likely occurs within the other three natural vegetation communities on the BSA as well. Flat-tailed horned lizard is not expected to occupy the disturbed bare ground and developed areas of the Project area, but could be present in low numbers along the edges and transition zones between suitable and unsuitable habitats. The locations of the individuals observed are provided in **Figure 5.2-6**.

5.2.1.7 Wildlife Movement

The concept of wildlife movement corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor is varied, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges, for example. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. Naturally, the nature of corridor use and wildlife movement patterns varies greatly among species. Drainages generally serve as movement corridors because wildlife can move easily through these areas, and fresh water is available. Corridors also offer wildlife unobstructed terrain to forage in and for the dispersal of young individuals. Movement corridors are particularly important to larger terrestrial species, such as mountain lions (*Felis concolor*), coyotes (*Canis latrans*), and desert kit foxes (*Vulpes macrotis*) due to the protective cover afforded by dense vegetation.

Figure 5.2-4, Sensitive Species and Habitats shows the project location in relation to nearby rivers, a Flat-Tailed Horned Lizard Species Management Area, the San Sebastian Marsh/San Felipe Creek Area of Critical Environmental Concern (ACEC) and documented occurrences of federal and state sensitive species as identified by the California Natural Diversity Database.

5.2.2 Regulatory Setting

Federal

Endangered Species Act

The federal Endangered Species Act of 1973 (ESA) provides a framework for the protection of plant and animal species that are at risk of becoming extinct. It is administered by the U.S. Fish and Wildlife Service (USFWS). Section 7 of the ESA requires each federal agency to consult with the USFWS about projects that may adversely affect species listed as threatened or endangered under the ESA ("listed species"). Habitat critical to these listed species may also be separately designated under the ESA.

The Section 7 consultation process requires each federal agency to prepare a "Biological Assessment" (BA) to determine if the project is likely to adversely affect listed species or designated critical habitat. In response, the USFWS prepares a "Biological Opinion" (BO) for listed species or a "Conference Opinion" (CO) for species proposed for listing, which states the USFWS position on whether the project would likely jeopardize the continued existence of the listed species or adversely modify designated critical habitat.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The MBTA is enforced by USFWS. This act prohibits the killing of any migratory birds. Any activity which contributes to unnatural migratory bird mortality could be prosecuted under this act. With few exceptions, most birds are considered migratory under this act.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) prohibits anyone without a permit issued by the USFWS from "taking" bald and golden eagles including their parts, nests, or eggs. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." For purposes of these guidelines, "disturb" means: "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

Bureau of Land Management’s California Desert Conservation Area (CDCA)

The CDCA encompasses 25 million acres of land in southern California that were designated by Congress in 1976 through the Federal Lands and Policy Management Act and under the jurisdiction of the Bureau of Land Management (BLM). BLM directly administers approximately 10 million acres of the CDCA. The CDCA Plan-designated Yuha Basin Area of Critical Environmental Concern (ACEC) Management Plan was prepared to give additional protection to unique cultural resource and wildlife values found in the region, while also providing for multiple use management. The ACEC Management Plan allows for the “traversing of the ACEC by proposed transmission lines and associated facilities if environmental analysis demonstrates that it is environmentally sound to do so.”

Federal Water Pollution Control Act (Clean Water Act)

The Clean Water Act (CWA) provides a structure for regulating discharges into the waters of the U.S. The Environmental Protection Agency (EPA) is given the authority to implement pollution control programs. Section 404 of the CWA regulates the discharge of dredged, excavated, or fill material in wetlands, streams, rivers, and other U.S. waters. U.S. Army Corps of Engineers (USACE) is the federal agency authorized to issue 404 Permits for certain activities conducted in wetlands or other U.S. waters. Section 401 of the CWA grants each state the right to ensure that the State’s interests are protected on any federally permitted activity occurring in or adjacent to Waters of the State. In California, the Regional Water Quality Control Boards (RWQCB) are the agency mandated to ensure protection of the State’s waters. For a Preferred Action that requires an USACE CWA 404 permit and has the potential to impact Waters of the State, the RWQCB will regulate the project and associated activities through a Water Quality Certification determination.

Executive Order 13112 – Invasive Species

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 and established the National Invasive Species Council. To the extent practicable and permitted by law, this EO requires agencies to prevent the introduction of invasive species; provide for control of invasive species; and minimize the economic, ecological, and human health impacts that invasive species cause.

State

California Endangered Species Act

The California Endangered Species Act of 1984 (CESA) provides a framework for the listing and protection of wildlife species determined to be threatened or endangered in California.

California Fish and Game Code 3503.5

Raptors (birds of prey) and active raptor nests are protected by the California Fish and Game Code 3503.5. This code prohibits the “taking” of any birds of prey or their nests or eggs unless authorized.

California Fish and Game Code 3513

Protects California’s migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame birds.

California Fish and Game Code, Section 1600, as amended

Under Section 1602 of the Fish and Game Code, CDFG regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFG has jurisdiction over riparian habitats (e.g., southern willow scrub) associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. Section 1602 of the Fish and Game Code requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed to notify the CDFW before beginning the project. If the CDFW determines that the project may adversely affect existing fish and wildlife resources within a CDFW-jurisdictional water, a Lake or Streambed Alteration Agreement (i.e., 1602 Permit) is required.

Native Plant Protection Act

The Native Plant Protection Act (*California Fish and Game Code Section. 1900-1913*) (NPPA) prohibits the taking, possessing, or sale within the state of any plant listed by CDFW as rare, threatened, or endangered. An exception to this prohibition in the Act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFG at least 10 days prior to the initiation of activities that would destroy them. The NPPA exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.”

Porter-Cologne Water Quality Control Act, as amended

The Porter-Cologne Act grants the State Water Resources Control Board (SWRCB) and the RWQCBs power to protect water quality and is the primary vehicle for implementation of California’s responsibilities under the federal Clean Water Act. Any person proposing to discharge waste into a water of the State must file a Report of Waste Discharge with the regional board that has jurisdiction over the area.

Local

County of Imperial General Plan

Relevant County of Imperial General Plan policies related to biological resources are provided below. **Table 5.2-4** summarizes the project’s consistency with the County’s General Plan policies.

While this EIR analyzes the project’s consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Planning Commissioners and Board of Supervisors ultimately determine consistency with the General Plan.

TABLE 5.2-4: CONSISTENCY WITH THE GENERAL PLAN’S BIOLOGICAL AND NATURAL RESOURCE POLICIES

General Plan Policies	Consistency	Analysis
Conservation and Open Space Element (COSE)		
<p>COSE Goal 1: Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value.</p> <ul style="list-style-type: none"> • COSE Objective 1.1: Encourage uses and activities that are compatible with the fragile desert environment and foster conservation. • COSE Objective 1.4: Ensure the conservation and management of the County's natural and cultural resources. 	<p>Yes</p>	<p>The Project site is located within the desert environment. Mitigation measures have been incorporated into the Project to reduce impacts to natural and cultural resources to below a level of significance.</p>
<p>COSE Goal 2: The County will integrate programmatic strategies for the conservation of critical habitats to manage their integrity, function, productivity, and long-term viability.</p> <ul style="list-style-type: none"> • COSE Objective 2.1: Designate critical habitats for Federally and State-listed species. • COSE Objective 2.2: Develop management programs, including preservation of habitat for flat-tailed horned lizard, desert pupfish, and burrowing owl. • COSE Objective 2.4: Use the CEQA and NEPA process to identify, conserve and restore sensitive vegetation and wildlife resources. 	<p>Yes</p>	<p>A Biological Resources Report was prepared for the project, which included a jurisdictional delineation, rare plant survey, small mammal trapping survey and burrowing owl survey. No critical habitats for federally or state listed threatened or endangered species occur on-site and no off-site designated habitats would be affected by the Project.</p> <p>The Biology Report concludes there are no threatened or endangered species impacts associated with the proposed Project. Impacts to flat-tailed horned lizard individuals and habitat will be mitigated as specified in the <i>Flat-Tailed Horned Lizard Resource Management Plan</i>. Potential impacts to burrowing owls will be avoided by preconstruction surveys to confirm their absence from the site.</p> <p>No desert pupfish habitat occurs within the project site and no off-site habitat would be affected. Therefore, the Project would be consistent with these objectives.</p>

TABLE 5.2-4: CONSISTENCY WITH THE GENERAL PLAN’S BIOLOGICAL AND NATURAL RESOURCE POLICIES

General Plan Policies	Consistency	Analysis
Conservation and Open Space Element (COSE)		
<p>Biological Resource Conservation Policy: Provide a framework for the conservation and enhancement of natural and created open space which provides wildlife habitat values.</p> <p>Program: Projects within or in the vicinity of a Resource Area should be designed to minimize adverse impacts on the biological resources it was created to protect.</p>	Yes	<p>The Project has been designed to minimize impacts on biological resources. Mitigation measures have been identified that will reduce to below a level of significant all biological resource impacts that could not be avoided. No riparian habitat or other types of wetland occur within the project site and therefore would not be affected.</p>
<p>Program: Notify any agency responsible for protecting plant and wildlife before approving a project which would impact a rare, sensitive, or unique plant or wildlife habitat.</p>	Yes	<p>The Biological Resources Report (Chambers 2019) and Clean Water Act permit applications will be submitted to CDFW and RWQCB for processing to address impacting non-wetland waters of the State upon completing the final engineering design. The CDFW and RWQCB will be consulted and provided an opportunity to comment on this EIR prior to the County’s consideration of any Project approvals. Therefore, the proposed Project is consistent with this program.</p>
<p>Program: Protect riparian habitat and other types of wetlands from loss or modification by dedicating open space easements with adequate buffer zones, and by other means to avoid impacts from adjacent land uses. Road crossings or other disturbances of riparian habitat should be minimized and only allowed when alternatives have been considered and determined infeasible.</p>	Yes	<p>The Project has been designed to minimize impacts on biological resources. Mitigation measures have been identified that will reduce to below a level of significant all biological resource impacts that could not be avoided.</p>

Sources: COSE, County of Imperial, 2016

5.2.3 Analysis of Project Effects and Significance Determination

Guidelines for Determination of Significance

A project would be considered to have a significant impact if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Approach to Impact Assessment

Consistent with the requirements of CEQA and local regulations, the significance of potential impacts is evaluated through the application of the significance criteria described above. The objective of the biological resources analysis is to identify potential adverse effects and/or significant impacts on biological resources. Avoidance is the preferred approach for the management of biological resources; however, it is not always possible to completely avoid impacts. If impacts can be avoided through project design, establishment of exclusion zones, or other means, then specific mitigation measures may be unnecessary. However, appropriate mitigation measures to avoid or minimize impacts are identified, as appropriate, including procedures to be followed if significant biological resources are discovered during construction.

Construction of the Project includes site preparation, modifications to the monofil's internal access road, installation of each waste disposal cell's liner system, construction of a leachate collection pond and collection/monitoring system, installation the perimeter diversion berms and drilling a new water well for use during construction. The construction and operation of the expanded monofil includes a number of impacts to biological resources. The specific impacts depend on the species, habitats, hydrology, and other resources present at the site. The following discussion provides an overview of the direct, indirect, and operation impacts that are expected to occur with the development of the Project.

Direct and Indirect Impacts

The CEQA Guidelines define direct impacts as those impacts that result from the project and occur at the same time and place. These include but are not limited to the removal of vegetation, disturbance to wildlife from construction activities, or the crushing of burrows. Indirect impacts are caused by the project, but can occur later in time or farther removed in distance while still reasonably foreseeable and related to the project. Indirect impacts can include the disruption of the native seed bank, the spread of invasive plant species, or changes to soil or hydrology that

adversely effects native species overtime, and the disruption of prey base or increased predation through alterations of the physical landscape from project features (i.e., fencing, solar panels, or power poles) that provide perch sites or shelter for predators. Indirect impacts may also include increased traffic and human disturbance.

Temporary Impacts

Temporary impacts are usually considered to be activities short in duration (i.e., 6 to 12 months) that do not result in a permanent land use conversion. These impacts include construction-phase ground disturbance activities, noise, human disturbance, vehicle traffic, and land or habitat changes that are subject to restoration at the completion of the project. The construction of each phase of the Project, that is construction of Cells 4A and 4B, would require approximately one year to complete.

Permanent Impacts

Project impacts are generally considered permanent if they involve the conversion of land to a new use, such as with the construction of the waste disposal cells, diversion berms, etc. Therefore, permanent impacts for certain species may include the footprint of the monofill facilities. Where this standard is applied specific language associated with each impact and a justification or rationale will be provided to support the conclusion. Permanent impacts that affect biological resources may also be associated with noise, dust generation or management actions such as weed abatement. These effects are described in more detail below under operational impacts.

Operational Impacts

Operational impacts include both direct and indirect impacts to biological resources that occur during the life of project operation, including maintenance activities. These impacts would remain an ongoing source of disturbance for many plants and wildlife species that occur within the fenced facility perimeter and in adjacent habitat.

Impact Analysis

Impact 5.2-1: Substantial effect on candidate, sensitive, or special status species.

The Project would impact individual flat-tailed horned lizards and their habitats within the West Mesa Flat-Tailed Horned Lizard Species Management Area. The flat-tailed horned lizard is a Special Status Species. This species was observed within the BSA, directly adjacent to the Project site during the small mammal trapping Survey. Impacts would be significant.

The Project would also impact individual Palm Springs pocket mouse individuals and their habitats. The Palm Springs pocket mouse is a special status species. This species was observed in the natural habitat communities surrounding the Project site and along its northwestern edge.

No individuals were observed within the developed or bare ground areas within the Project Site. Impacts would be significant.

In addition, the Project has a low to moderate potential to impact burrowing owl and Le Conte's thrasher during nesting and foraging, respectively. These two species are Species of Special Concern; however, neither were sited during current surveys. If these species are present during construction, impacts would be significant.

Impact 5.2-2: Substantial adverse effect on riparian habitat or other sensitive natural community.

Desert Riparian Scrub (reported as Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub in the Biology report) is documented onsite. No permanent impacts are proposed to this resource; however, temporary loss of 0.7 acre of the habitat are proposed. Loss of riparian habitat would be considered significant. Loss of 39.73 acres (5.76 acres temporary and 33.97 acres permanent) of Creosote Brush Scrub and 0.69-acre (0.16 acre temporary and 0.53 acre permanent) Creosote Bush – Honey Mesquite Scrub would be considered a significant impact. Loss of 1.57 acre (all permanent) of Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance would be considered significant.

Impact 5.2-3: Substantial adverse effect on federally protected wetlands.

The Project would not affect wetlands as defined in the Clean Water Act. However, project construction would cause temporary and permanent direct impacts to about seven (7) acres of drainages.

Based on EPA's revised definition of Waters of the U.S., none of the ephemeral streams found on site are considered Waters of the U.S. and thus are not jurisdictional under Section 404 of the Clean Water Act. As shown on **Table 5.2-5**, approximately 7.37 acres within the Project are considered streambeds under California Fish and Game Code and are regulated by the CDFW. Temporary and permanent impacts to streambeds would be 2.64 acres and 4.73 acres, respectively.

TABLE 5.2-5 TEMPOARY AND PERMANENT IMPACTS TO JURISDICTIONAL WATERS

Agency	Temporary (acres)	Permanent (acres)	TOTAL (acres)
CDFW	2.64	4.73	7.37
RWQCB	2.2	3.95	6.15
USACE	0	0	0

Notes: CDFW = California Dept. of Fish and Wildlife
USACE = United States Army Corps of Engineers
Source: Chambers Group, 2019 (Appendix G-1).

RWQCB = Regional Water Quality Control Board

Approximately 6.15 acres within the Project are considered Waters of the State by the RWQCB and are jurisdictional under Section 401 of the Clean Water Act. Temporary and permanent impacts to Waters of the State would be 2.2 acres and 3.95 acres, respectively. These impacts

would be substantial and significant as they would result in a loss of associated functions and values.

Temporary impacts to jurisdictional non-wetland waters of the state will be immediately addressed by recontouring to the natural grade and restoring as the appropriate type of wetland (**MM BIO-4**). Therefore, with implementation of these mitigation measures, the Project would not have a substantial adverse effect on Waters of the State through direct removal, filling, hydrological interruption, or other means. Impacts after mitigation would be less than significant.

Indirect impacts to non-wetland waters could also result from spillage of hazardous materials used during construction, as well as erosion and sedimentation. These potential impacts would be avoided and minimized through implementation of the Proposed Project's Construction and Industrial Storm Water Pollution Prevention Plan (SWPPPs). The SWPPPs would require that vehicles be checked daily and maintained in accordance with manufacturer's specifications to minimize the potential for leaks, and refueling and maintenance of vehicles would occur at least 50 feet from the edge of any aquatic feature. As such, indirect impacts from the spillage of hazardous materials on aquatic resources would be less than significant. As noted in Section 5.6, Hazards and Hazardous Materials, the DVCM maintains a Hazardous Material Business Plan that addresses the safe handling, transport, use, and disposal of hazardous materials. With the implementation of these project features indirect impacts would be avoided and minimized.

Impact 5.2-4: Substantially interfere with the movement of 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.

No migratory fish or wildlife movement corridors or nursery sites were identified in the Biology Technical Report (Appendix G-1); therefore, there would be no significant impacts to corridors or nursery sites.

Impact 5.2-5: Conflict with local policies or ordinances protecting biological resources.

The Imperial County General Plan Open Space and Conservation Element (County of Imperial 2016) contains an Open Space Conservation Policy that requires detailed investigations to be conducted to determine the significance, location, extent, and condition of natural resources in the County, and to notify any agency responsible for protecting plant and wildlife before approving a project which would impact a rare, sensitive, or unique plant or wildlife habitat. As noted above, the Project has the potential to result in significant impacts to candidate, sensitive, or special status species, and ephemeral streams wildlife corridors. Such impacts could conflict with Open Space and Conservation Element and are considered potentially significant.

5.2.4 Mitigation Measures

The following Mitigation Measures would reduce impacts to below a level of significance.

MM BIO-1a: Mitigation of Impacts to flat-tailed horned lizards, Palm Springs pocket mouse, and their habitat

Prior to the initiation of any ground disturbances and the issuance of grading permits for Cells 4A or 4B, a Capture/Relocation Plan for flat-tailed horned lizard shall be prepared by a qualified biologist. The plan shall include preconstruction survey and monitoring methods, capture and relocation methods, and suitable relocation areas. The plan may include additional protection measures during construction including:

- Creating areas of land or small paths/culverts between project facilities for wildlife movement,
- Installing silt fencing around work areas to prevent migration of adjacent wildlife into impact areas,
- Installing pitfall traps in spring/summer/fall to trap any individuals that remain on the site for removal from work areas), and/or
- Biological monitoring during construction to inspect fencing and pitfall traps and relocate wildlife species out of harm's way, if required;
- Only persons authorized by the CDFW shall be permitted to handle flat-tailed horned lizards.
- Mitigation of FTHL shall be consistent with the Flat-tailed Horned Lizard Rangeland Management Strategy, 2003 Revision

The plan shall be approved by CDFW and the County of Imperial (or an agency delegated to oversee this program).

Prior to the initiation of any ground disturbances and the issuance of grading permits for Cells 4A or 4B, a Capture/Relocation Plan for Palm Springs pocket mouse shall be prepared by a qualified biologist. The plan shall include preconstruction survey and monitoring methods, capture methods, and suitable relocation areas. The plan may include additional protection measures during construction including:

- Creating areas of land or small paths/culverts between project facilities for wildlife movement,
- Installing silt fencing around work areas to prevent migration of adjacent wildlife into impact areas,
- Implementing vegetation removal and initial ground disturbance activities between September and December if possible, avoiding the peak breeding

season (March to May), and limiting activity as much as possible during the rest of the breeding season (January to February and June to August) to allow dispersing juveniles to potentially move out of the impact area, and/or biological monitoring during construction to inspect fencing, if required.

- The plan shall be approved by CDFW and the County of Imperial (or an agency delegated by the department to oversee this program).

An environmental training program shall be developed and presented to all crew members prior to the beginning of all project construction (See MM BIO-5).

A biological monitor shall be present prior to initiation of ground disturbing activities to demark limit of disturbance boundaries. Flagging and/or staking will be used to clearly define the work area boundaries and avoid impacts to adjacent native communities. The biological monitor will be present to conduct preconstruction sweeps and inspect compliance with project protection measures. If a sensitive species is found, the species shall be relocated out of harm's way according to the capture/relocation plan. Any mortalities shall be reported to the agencies and County of Imperial. A final monitoring report will be submitted to CDFW and County of Imperial. The annual report shall include a summary of preconstruction surveys, biological monitoring, avoidance measures implemented, and whether the avoidance measures were effective.

A qualified biologist shall work with construction crews to determine access routes that will avoid native habitat and burrows as much as feasible. Furthermore, during construction activities, the biological monitor shall ensure that connected, native habitat with sandy soils are avoided and remain intact to the greatest extent possible. If vegetation removal cannot be avoided, clearing of habitat shall be avoided during the peak breeding season (March to May), and activity shall be limited as much as possible during the rest of the breeding season (January to February and June to August).

Timing/Implementation: *Prior to issuance of a grading permits*

Enforcement/Monitoring: *Imperial County Planning and Development
Services Department and CDFW.*

MM BIO-1b: Burrowing Owl Preconstruction Surveys

While the 2019 Burrowing Owl Survey concluded that this species is absent from the project area, given the phased approach for construction of Cells 4A and 4B, Burrowing Owl Preconstruction Surveys will be required.

Pre-construction focused surveys for the burrowing owl shall be conducted, pursuant to the CDFW 2012 Staff Report on Burrowing Owl Mitigation (Staff Report), no less than 14 days prior to the start of initial ground disturbing activities for Cells 4A and Cell 4B, respectively, to ensure no portion of the construction footprint is being utilized by western burrowing owls. The survey shall be conducted by an experienced and qualified biologist, knowledgeable with the species. In conformance with federal and State regulations regarding the protection of raptors, surveys for burrowing owls shall be conducted in conformance with the California Staff Report's protocols, or updated guidelines as they become available.

If burrowing owls are detected on site, no ground-disturbing activities will be permitted within 656 feet of an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the nonbreeding season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 165 feet from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.

If avoidance of active burrows is infeasible during the nonbreeding season, then, before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance and/or scoping, a qualified biologist shall implement a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 Staff Report. Passive relocation consists of excluding burrowing owls from occupied burrows by closing or collapsing the burrows and providing suitable artificial burrows nearby for the excluded burrowing owls.

Where required buffering will not be feasible, passive relocation is an option in consultation with CDFW, but it is preferred to install appropriate artificial burrows (in accordance with the negotiated Plan) and then let the owls decide whether they would like to abandon the existing burrow. Only burrows that are in danger by construction should be collapsed if at all possible.

A Burrowing Owl Relocation Plan will be prepared and approved by CDFW prior to commencement of burrowing owl exclusion activities if this method of mitigation is required. The plan will detail the procedures of the passive relocation effort, the location of constructed replacement burrows, design of replacement burrows, and post relocation monitoring requirements.

<i>Timing/Implementation:</i>	<i>No more than 14 days prior to ground-disturbing activities/qualified wildlife biologist.</i>
<i>Enforcement/Monitoring:</i>	<i>Imperial County Planning and Development Services Department and CDFW.</i>

MM BIO-2: Mitigation of Impacts to Le Conte Thrasher, Nesting Birds and Breeding Birds

While the 2019 surveys concluded that Le Conte Thrasher is absent from the project area, given the phased approach for construction of Cells 4A and 4B, Preconstruction Surveys will be required.

Prior to any site disturbance (i.e., mobilization, staging, grading or construction) the Applicant shall retain a County qualified biologist to conduct pre-construction surveys for nesting birds and Le Conte Thrasher in all areas within 500 feet of construction activities to comply with CDFW Code 3503 and 3503.5 and the Migratory Bird Treaty Act in effect at the time of the surveys. Surveys for raptors shall be conducted for all areas from February 1 to August 15.

The survey(s) shall occur no more than 7 days prior to initiation of proposed Project activities, and any occupied passerine and/or raptor nests occurring within or adjacent to the proposed Project area shall be delineated. Additional follow-up surveys may be required by the resource agencies and the County of Imperial.

If breeding birds with active nests are found prior to or during construction, a biological monitor shall establish a 300-foot buffer around the nest for ground-based construction activities (or within a buffer determined by the avian biologist). In all cases, the buffer zone shall be sufficient in size to prevent impacts to the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails.

Once nesting has ceased, the buffer may be removed. A nesting bird survey report shall be provided to the County of Imperial within 30 days of survey completion.

If active Le Conte's Thrasher nests are located on the project site or within a 500-foot buffer, then a 500-foot no-work buffer will be established around the nest during the Le Conte's thrasher breeding season until it is no longer active.

Timing/Implementation: No earlier than 7 days prior to any on-site grading and construction activities that occurs during the nesting season/ Project biologist

Enforcement/Monitoring: Imperial County Planning and Development Services Department

MM BIO-3: Mitigation of Impacts to Creosote Bush Scrub, Creosote Bush – Honey Mesquite Scrub, Rigid Spineflower – Hairy Desert Sunflower Sparsely Vegetated Desert Pavement Alliance, and Riparian Habitat (Tamarisk – Honey Mesquite – Four Wing Saltbush Scrub)

Prior to construction, a qualified restoration specialist shall evaluate the habitats within the areas to be temporarily disturbed/impacted to determine if habitat restoration is possible. Habitat restoration may not be possible given prevailing winds and the potential inoculation of additional invasive species from adjacent areas.

If the specialist determines restoration is possible, then a Habitat Restoration Plan (HRP) for the temporarily impacted area shall be prepared. The plan shall include sufficient detail to address all aspects of the restoration effort (further site evaluation, site preparation, planting, maintenance, and monitoring to determine success (i.e., plant survival, etc.) and additional maintenance needs. In general restoration of temporarily impacted areas involves recontouring the land, decompaction, replacing the topsoil (if collected), planting seed and/or container stock, maintaining (i.e., weeding, replacement). Locations within Section 27, adjacent to the Project site and under the control of the Applicant, will be used for off-site restoration, if on-site restoration is not feasible.

Timing/Implementation: Prior to Construction

Enforcement/Monitoring: Imperial County Planning and Development Services Department

MM BIO-4: Mitigation of Impacts to Jurisdictional Waters

- Permanent impacts to all jurisdictional resources shall be compensated through a combination of habitat creation (i.e., establishment), enhancement, preservation, and/or and restoration at a minimum of a 2:1 ratio or as required by the permitting agencies. Any creation, enhancement, preservation, and/or restoration effort shall be implemented pursuant to an HRP, which shall include success criteria and monitoring specifications, and shall be approved by the permitting agencies and County of Imperial. A habitat restoration specialist

(1) will be designated and approved by the permitting agencies and will determine the most appropriate method of restoration. The restoration plan will be submitted to and reviewed/approved by the CDFW, and the County of Imperial Planning and Development Services Department.

- Temporarily impacted drainage features shall be recontoured to preconstruction conditions. Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the permitting agencies (depending on the location of the impact). If restoration of temporary impact areas is not possible to the satisfaction of the appropriate agency, the temporary impact shall be considered a permanent impact and compensated accordingly.
- A biological monitor shall be present prior to the initiation of ground disturbing activities to demark limits of disturbance boundaries. Flagging and/or staking will be used to clearly define the work area boundaries and avoid impacts to adjacent drainage features.
- Erosion protection and sediment control BMPs would be implemented in compliance with the General Construction General Permit and the Stormwater Pollution Prevention Plan (SWPPP).
- Graded areas would be stabilized to promote infiltration and reduce run-off potential.
- Any excess soil would be spread on site outside of jurisdictional drainages.

Timing/Implementation: *Prior to issuance of a grading permit/
In accordance with RWQCB and CDFW
requirements*

Enforcement/Monitoring: *Imperial County Planning and Development
Services Department*

MM BIO-5: Prepare and Implement a Worker Environmental Awareness Program

The Applicant shall prepare and implement a project-specific Worker Environmental Awareness Program (WEAP) to educate on-site workers about the Proposed Project's sensitive environmental issues. The WEAP shall be presented by the lead biologist or a biological monitor to all personnel on-site during the construction phase(s). If the WEAP presentation is recorded on video, it may be presented by any competent project personnel. Throughout the duration of construction, the Applicant shall be responsible for ensuring that all on-site project personnel receive this training prior to beginning work. A construction worker may

¹ The term "qualified restoration specialist" refers to a person with specialized knowledge, education, and experience in the revegetation of disturbed areas.

work in the field along with a WEAP-trained crew for up to 5 days prior to attending the WEAP training. The Applicant shall maintain a list of all personnel who have completed the WEAP training. This list shall be provided to the County ICPDSD personnel upon request.

The WEAP shall consist of a training presentation, with supporting written materials provided to all participants. At least 60 days prior to the start of ground-disturbing activities, the Applicant shall submit the WEAP presentation and associated materials to the County ICPDSD for review and approval in consultation with the USFWS and CDFW.

The WEAP training shall include, at minimum:

- Overview of the federal and state Endangered Species Acts, Migratory Bird Treaty Act, and the consequences of non-compliance with these acts.
- Overview of the project mitigation and biological permit requirements, and the consequences of non-compliance with these requirements.
- Sensitive biological resources on the project site and adjacent areas, including nesting birds, special-status plants and wildlife and sensitive habitats known or likely to occur on the project site, project requirements for protecting these resources, and the consequences of non-compliance.
- Construction restrictions such as limited operating periods, Environmentally Sensitive Areas (ESAs), and buffers and associated restrictions, and other restrictions such as no grading areas, flagging or signage designations, and consequences of non-compliance.
- Avoidance of invasive weed introductions onto the project site and surrounding areas, and description of the project's weed control plan and associated compliance requirements for workers on the site.
- Function, responsibilities, and authority of biological and environmental monitors and how they interact with construction crews.
- Requirement to remain within authorized work areas and on approved roads, with examples of the flagging and signage used to designate these areas and roads, and the consequences of non-compliance.
- Procedure for obtaining clearance from a biological monitor to enter a work site and begin work (including moving equipment), and the requirement to wait for that clearance.

- Nest buffers and associated restrictions and the consequences of non-compliance. Procedure and time frame for halting work and removing equipment when a new buffer is established. Discussion of nest deterrents.
- Explanation that wildlife must not be harmed or harassed. What to do and who to contact if dead, injured, or entrapped animals are encountered.
- General safety protocols such as hazardous substance spill prevention, containment, and cleanup measures; fire prevention and protection measures; designated smoking areas (if any) and cigarette disposal; safety hazards that may be caused by plants and animals.
- Project requirements that have resulted in repeated compliance issues on other recent transmission line projects, such as dust control, speed limits, track out (dirt or mud tracked from access roads or work sites onto paved public roads or other areas), personal protective equipment (PPE), work hours, working prior to clearance, and waste containment and disposal.
- Printed training materials, including photographs and brief descriptions of all special status plants and animals that may be encountered on the project, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements and procedures, and protection measures. The material shall also include the function of flagging designated authorized work areas along with the importance of exercising care when commuting to and from the project area to reduce mortality of all special status animals.
- Contact information for construction management, and contractor environmental personnel, and who to contact with questions.
- Training acknowledgment form to be signed by each worker indicating that they understand and will abide by the guidelines, and a hardhat sticker so WEAP attendance may be easily verified in the field.

WEAP Lite. An abbreviated version of WEAP training (“WEAP lite”) may be used for individuals who are exclusively delivery drivers or visitors to the project site, and will be provided by a qualified project biologist, biological monitor, or environmental field staff prior to those individuals entering or working on the project.

Short-term visitors (total of 5 days or less per year) to the project site who will be riding with and in the company of WEAP-trained project personnel for the entire duration of their visit(s) are not required to attend WEAP or WEAP lite training. WEAP lite presentations shall be tailored to delivery/concrete truck drivers and

visitors as well as the situation and emphasize project requirements that are relevant to those individuals and that situation.

WEAP Refreshers. Biological monitors or environmental field staff will periodically present brief WEAP refresher presentations at tailboards to help construction crews and other personnel maintain awareness of environmental sensitivities and requirements. A 5- to 10-minute informal talk will be presented at each of the project's main contractor/ subcontractor tailboards at least once a week.

When a contractor or subcontractor resumes work after a long break, a biological monitor or environmental field staff will provide an extended WEAP refresher presentation (10-20 minutes) at each of the contractor/subcontractor tailboards on the first day back to work.

Timing/Implementation: *During construction and operation, as appropriate/Applicant, Project Contractor and Operator*

Enforcement/Monitoring: *Imperial County Planning and Development Services Department.*

MM BIO-6 State Agency Permits

To comply with the state regulations for impacts to jurisdictional resources regulated by the California Department of Fish and Wildlife and the Regional Water Quality Control Board, the following permits and agreement(s) shall be obtained, or evidence shall be provided from the respective resource agency satisfactory to the County that such an agreement or permit is not required if development activities are proposed within jurisdictional waters:

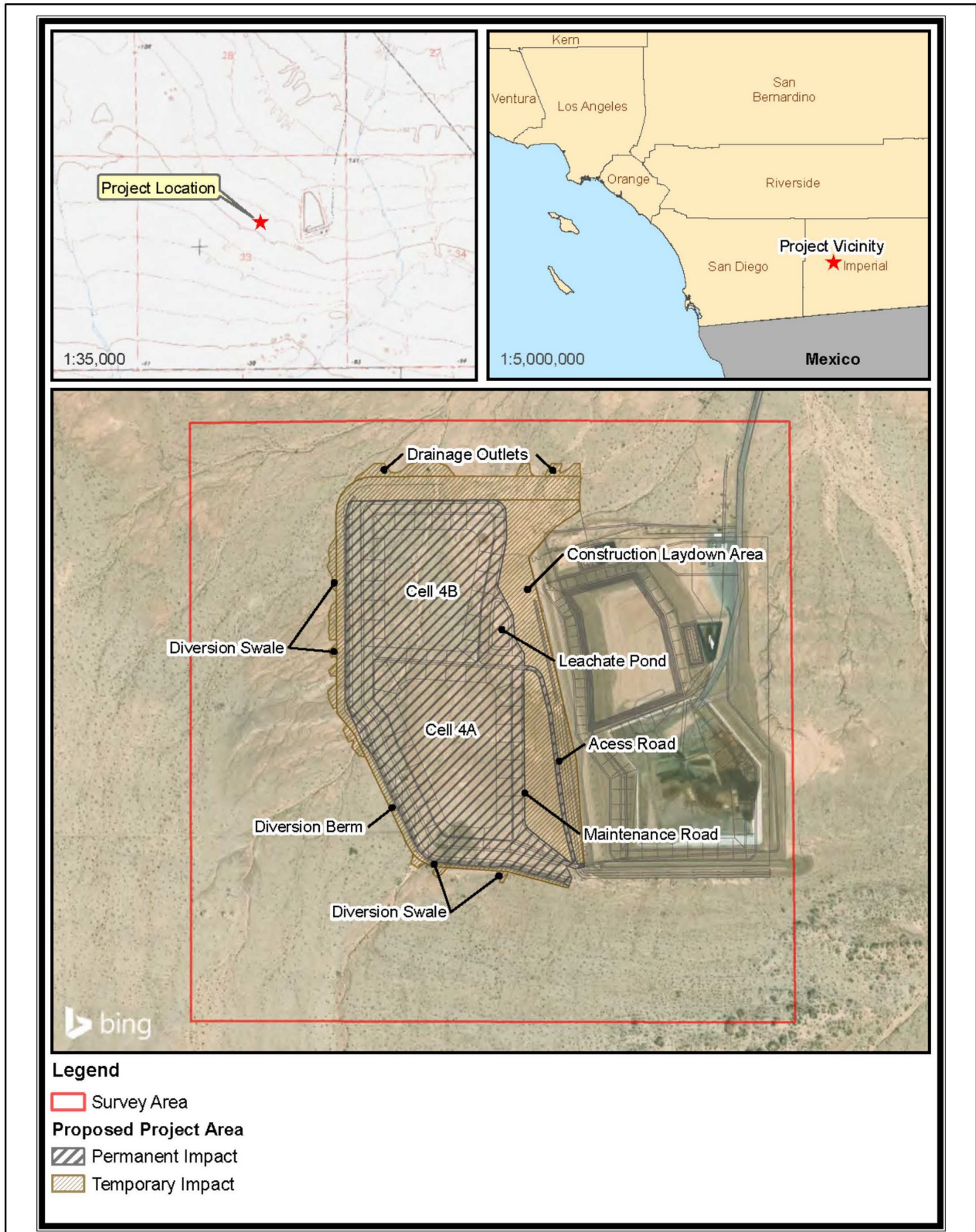
- A Clean Water Act Section 401 permit issued by the RWQCB for all Project-related disturbances of jurisdictional non-wetland waters of the State.
- A Section 1602 Streambed Alteration Agreement issued by the CDFW for all Project-related disturbances of any streambed and associated riparian habitat.

Timing/Implementation: *Prior to issuance of a grading permit and in accordance with CDFW and RWQCB requirements.*

Enforcement/Monitoring: *Imperial County Planning and Development Services Department, RWQCB and CDFW.*

Level of Significance After Mitigation

The Project will have less than significant impacts after implementation of MM BIO-1 through BIO-6 because these measures require the performance of professionally accepted and legally compliant procedures for the avoidance; preservation and/or and restoration; and monitoring of sensitive biological resources.

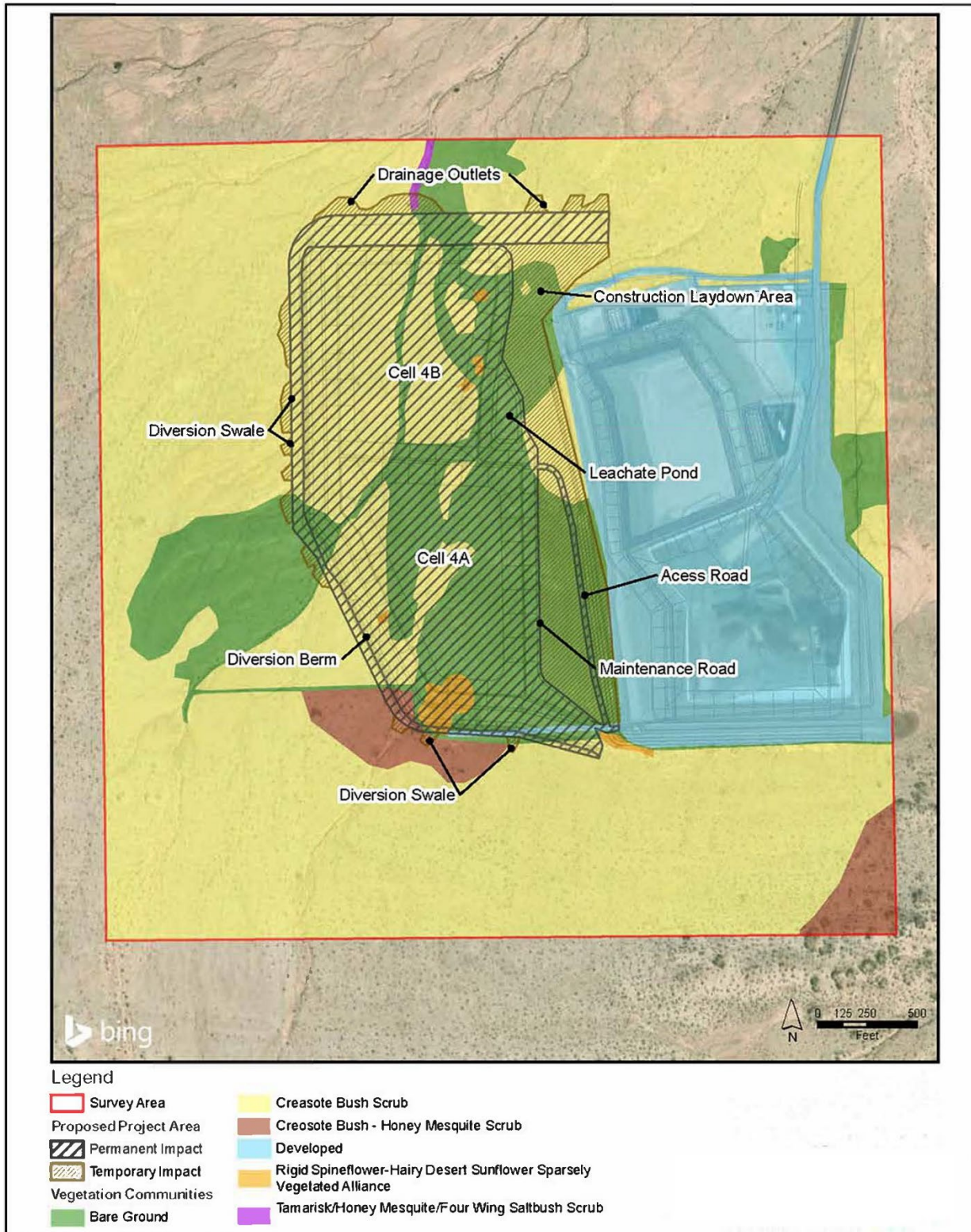


SOURCE: Chambers Group, 2019



Biological Survey Area
Desert Valley Company Monofil Expansion Project, Cell 4
Figure 5.2-1

This page intentionally left blank.

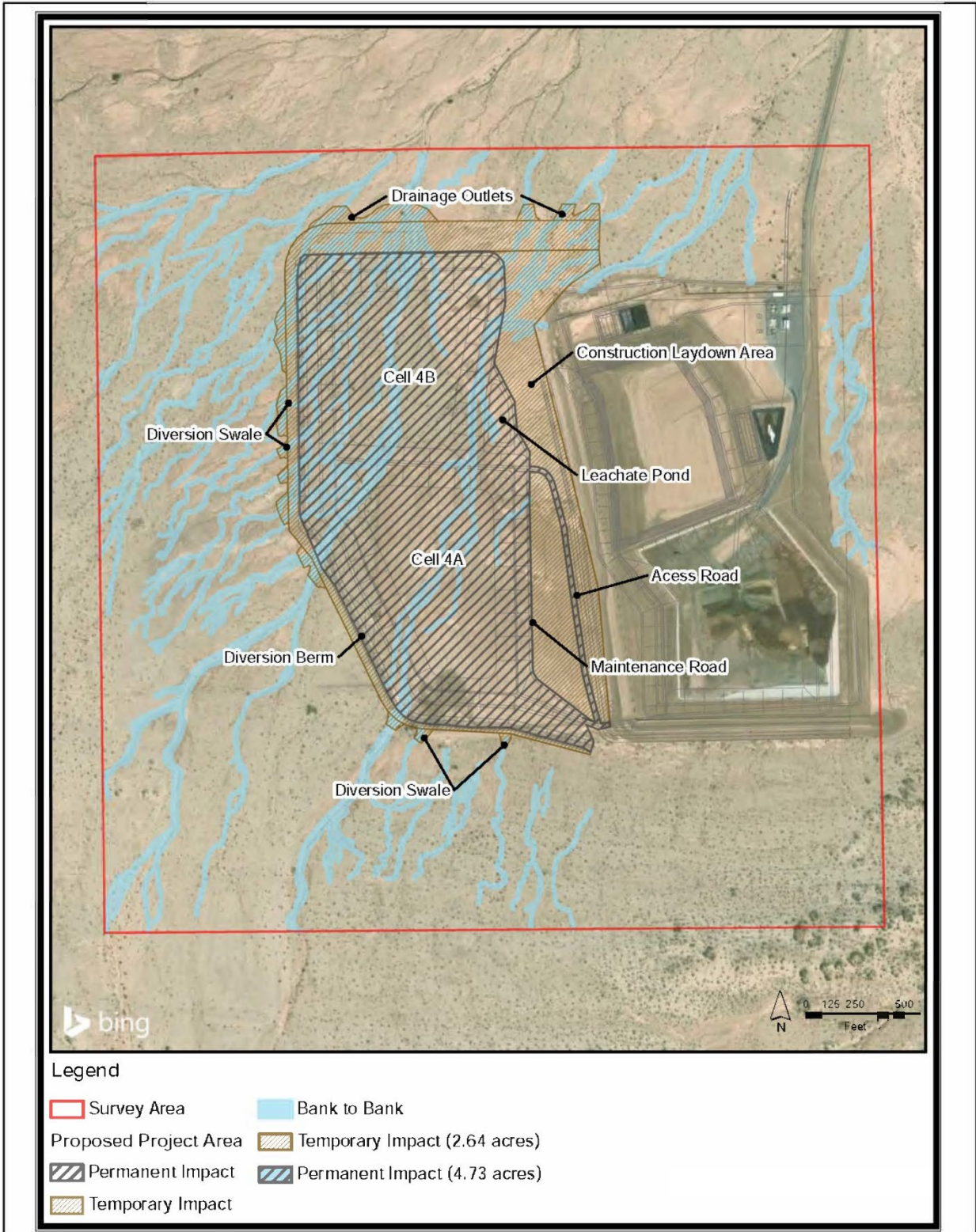


SOURCE: Chambers Group, 2019



Vegetation Communities
Desert Valley Company Monofil Expansion Project, Cell 4
Figure 5.2-2

This page intentionally left blank.



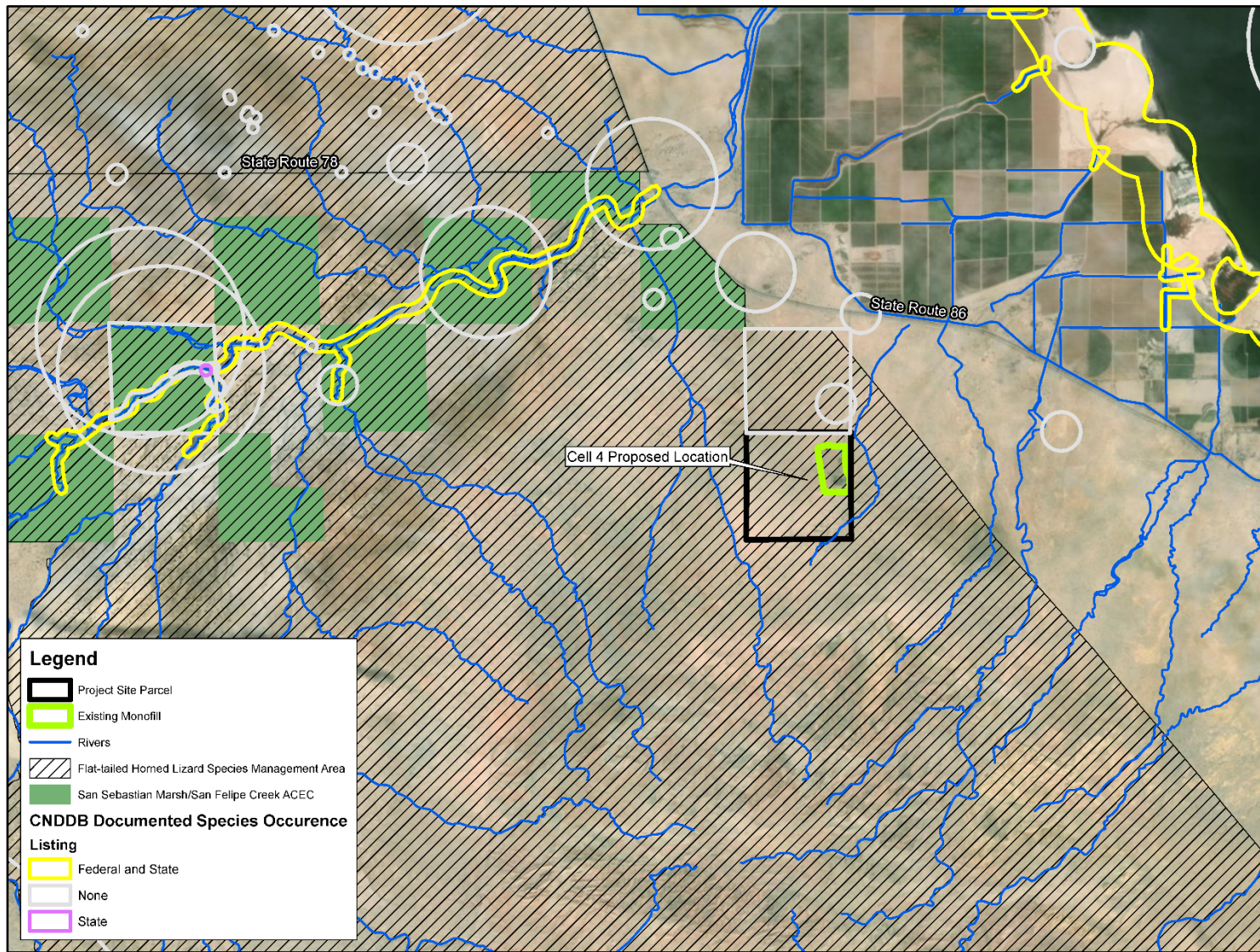
SOURCE: Chambers Group, 2019



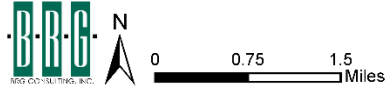
Jurisdictional Waters
Desert Valley Company Monofil Expansion Project, Cell 4

Figure 5.2-3

This page intentionally left blank.



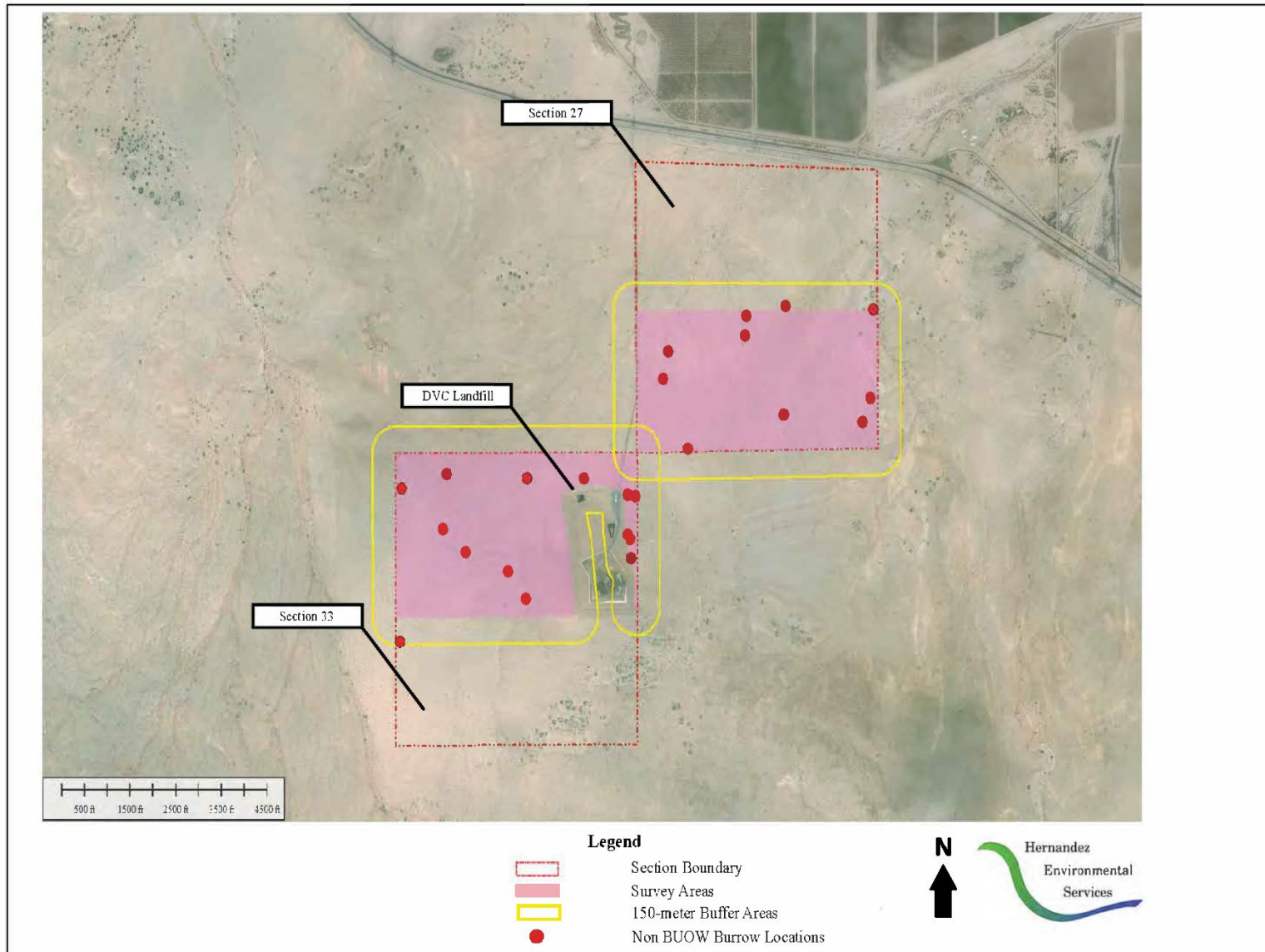
SOURCE: Imperial County Conservation and Open Space Element



Desert Valley Monofil Sensitive Species and Habitats
Desert Valley Company Monofil Expansion Project, Cell 4
Figure 5.2-4

1 This page intentionally left blank.

2

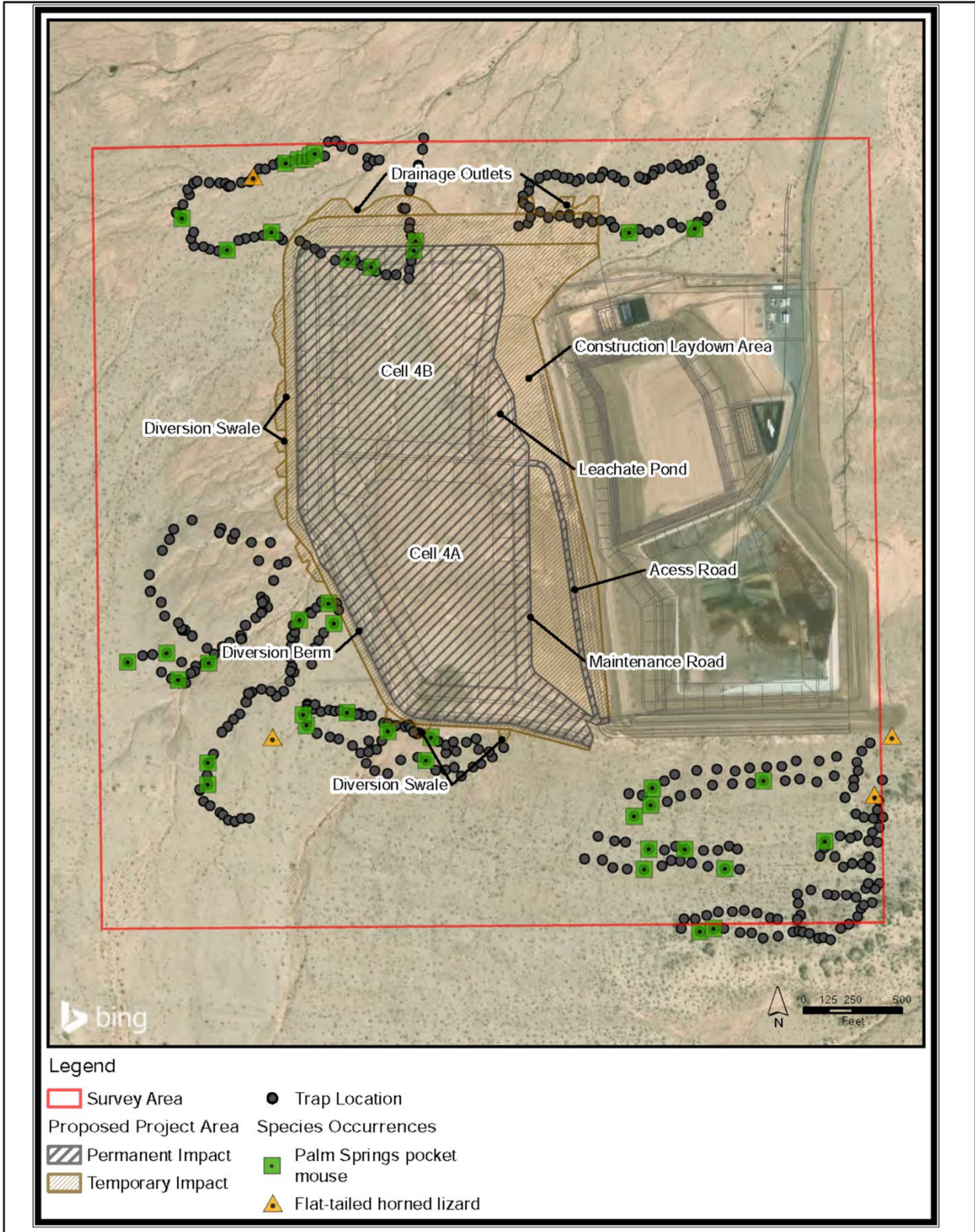


SOURCE: Hernandez Environmental Services, 2019a



Results of Burrowing Owl Survey
Desert Valley Company Monofil Expansion Project, Cell 4
Figure 5.2-5

- 1 This page intentionally left blank.



SOURCE: Chambers Group, 2019



Results of Small Mammal Trapping Survey
Desert Valley Company Monofil Expansion Project, Cell 4
Figure 5.2-7

1 This page intentionally left blank.

2