# Biological Assessment Report

Minneloa Solar Project

City of Newberry Springs

San Bernardino County, California

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Elevated Entitlements

**Summary**

This Biological Assessment Report will evaluate the potential environmental impacts of the proposed project, outlining specific impacts to sensitive, threatened, and/or endangered plants and wildlife, and will outline avoidance, minimization and/or mitigation measures to reduce impacts, if any should occur. Minimization and avioidance measures include but are not limited to conducting nesting bird surveys during bird nesting season (February 1st through September 1st), pre-construction Desert Tortoise Surveys during (April through May or September through October) implementing all appropriate Storm-water and Erosion Control Best Management Practices (BMPs) during construction.

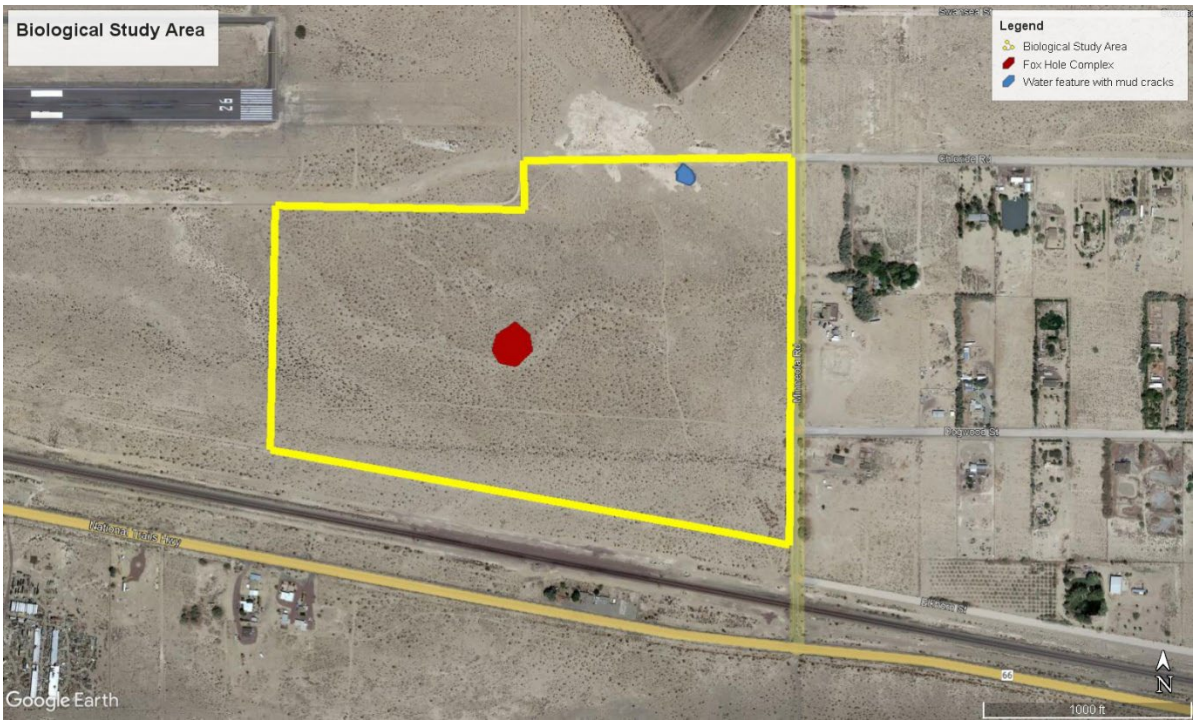
# 1 - Introduction

## Project Description

The proposed Minneola Solar project (the "Project"), is a community photovoltaic solar facility. The Project would cover an area of up to 24.5 acres and would have a capacity of 3 megawatts (MW) using photovoltaic solar modules mounted on ground mounted single-axis trackers. The Project will be interconnected to an existing distribution line adjacent to the project site, and the electricity generated by the solar facility will be sold to low and moderate income households under a Disadvantaged Community program managed by Clean Power Alliance (CPA). The Project will operate on an autonomous, unstaffed basis and will be monitored remotely from an existing off-site facility. The Project will provide clean, sustainable electricity into the local distribution grid for the benefit of disadvantaged community members.

The subject property is currently undeveloped vacant land. Offsite and onsite improvements will be constructed to allow for vehicle and pedestrian access to the site. The subject property is also largely surrounded by undeveloped vacant land, single family housing, and an airport. The property consists of approximately 91.9 acres, however only 24.5 acres would be developed. The property Assessor Parcel Number is 052-105-108. The County of San Bernardino Land Use Plan indicates that the parcel is zoned Rural Living (RL). The RL (Rural Living) land use zoning district provides sites for rural residential uses, incidental agricultural uses, and similar and compatible uses.

**Figure 1: Project Location Map.**




## 2 - Study Methods

The Biological Study Area (BSA) includes the project boundary within the open desert and unincorporated city of Newberry Spring in San Bernardino County.

Study methods included a review of the project description, project plans, aerial and ground imagery (i.e. Google Earth and Google Maps), and project species lists provided by the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website (Appendix A), and California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) (Appendix B), California Native Plant Society (CNPS) (Appendix C). The species lists were used to create "Table 1: Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area" (included in Section 3 of this report). The biologist surveyed the proposed project site by available aerial imagery (e.g., Google Earth and Google Maps) and conducted a site visit on April 16th, 2023 to determine the potential for impacts to native vegetation, sensitive biological resources, jurisdictional waters, and/or wildlife.

## Regulatory Requirements

*Migratory Bird Treaty Act (MBTA)*
All projects must adhere to the MBTA which governs take, possession, import, export, transport, selling, and purchasing of migratory birds, their eggs, and nests, except as authorized under a valid permit.

*Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA)*
FESA and CESA are the Federal and State laws that enforce protection of threatened and endangered species. Caltrans is responsible for consultation and coordination with the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) regarding the laws. All projects must be evaluated to make an effective determination for Threatened, Endangered, Proposed, and Candidate species and designated critical habitat.

*California Environmental Quality Act (CEQA); Species of Special Concern*
The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from "projects" in the State. Section 15380 of the CEQA Guidelines clearly indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

*Clean Water Act Section 404 and 401*
Section 404 of the Clean Water Act establishes a permit program administered by the United States Army Corps of Engineers (USACE) to regulate the discharge of dredged or fill material into waters of the United States. Waters of the U.S incorporates both deep-water aquatic habitat and special aquatic sites (wetlands are categorized as special aquatic sites).

Section 401 of the Clean Water Act requires a water quality certification from the State Board or Regional Board when a project: 1.) requires a federal license or permit and 2) will result in a discharge to Waters of the United States. Such certification may be conditioned. Project activities that typically result in a discharge subject to Section 401 water quality certification are the construction and subsequent operation of a facility, including roadways. The Regional Water Quality Boards (RWQCB) administer the certification program in California.

## Surveys Required

Pre-construction surveys for nesting birds and desert tortoises are required to prevent impacts to the sensitive biological resources.

## Literature Search

- USFWS IPaC species list for the project area.
- CDFW CNDDB species list for the project area.
- CNPS species list for the project area.
- USFWS National Wetland Inventory for the project area

**Survey Methods and Field Review**

Biologist Rico Ramirez and Biologist Nahbieana Ramirez surveyed the BSA and surrounding areas through aerial imagery and site visit on April 16th, 2023 to determine the potential for impacts to native vegetation, sensitive biological resources, jurisdictional waters, and/or wildlife. Flora and fauna within the BSA were documented.

**Personnel Survey Dates**

Field personnel: Rico Ramirez and Nahbieana Ramirez, Biologists

Survey date: April 16, 2023 at 9:00 am – 4:00 pm

**Agency Coordination and Professional Contacts**

Coordination with CDFW took place via the online species lists generated for this project.

Coordination with USFWS took place via the online species lists generated for this project.

Coordination with United States Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) was not necessary since this project will not have an impact to jurisdictional waters

**Limitations That May Influence Results**
At this time the is no limitation that may influence the results of the survey.

## 3 - Results: Environmental Setting

The proposed project locations are within rural open desert. The impact areas of this project consist of native creosote scrub (*Larrea tridentata*). The proposed project location is within suitable habitat for sensitive biological resources. This Biological Assessment Report will focus on the impacts that may take place during the installation of the solar energy system.

## Description of the Existing Biological and Physical Conditions

### Study Area

The Biological Study Area (BSA) consists of a 200-foot buffer from the project vicinity.

### Physical Conditions

The study area for this project consists of undeveloped open desert with adjacent residential and transportation land uses. The topography throughout the BSA consists of flat open desert. The surrounding areas outside of the project area consist of residential, agricultural, railroads, airport and highway uses.

### Biological Conditions in the Study Area

The existing biological conditions in the study area consist primarily of naturalized *Larrea tridentata* -Creosote scrub. The current site conditions provide suitable habitat for sensitive biological resources.

The plant species observed at the proposed project area include the following: creosote (*Larrea tridentata*), white bur-sage (*Ambrosia dumosa*), cattle spinanch (*Atriplex polycarpa*), desert sunflower (*Geraea canescens*), guadelupe cryptantha (*Cryptantha maritima*), soap plant (*Chlorogalum pomeridianum*), fiddleneck (*Amsinkia tessellata*), Arabian schismus (*Schismus arabicus*), and Esteve pincushion (*Chanaectis steviodes*).

### Habitat Connectivity

This project is not expected to negatively affect existing wildlife corridors and does not involve work at underpasses or bridges.

### Regional Species and Habitats and Natural Communities of Concern

**Table 1: Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area.**

| Scientific Name | Common Name | Status | General Habitat Description | Habitat Present/ Absent | Rationale |
|---|---|---|---|---|---|
| **PLANTS** | | | | | |
| *Mentzelia puberula* | Darlington's blazing star | CNPS 2B.2 | Mojavean desert scrub, Sonoran desert scrub | HP | 2 |
| *Mentzelia tridentata* | Creamy blazing star | CNPS 1B.3 | Mojavean desert scrub, Sonoran desert scrub | HP | 2 |

| | | | | | |
|---|---|---|---|---|---|
| **Wildlife** | | | | | |
| *Agelaius tricolor* | Tricolored blackbird | ST, SSC | Freshwater marsh, Marsh & swamp, Swamp, Wetland | A | 1 |
| *Aquilia chrysaetos* | Golden Eagle | FP | Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland | A | 1 |
| *Danaus plexippus* | Monarch butterfly | FC | Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. | A | 1 |
| *Erethizon dorsatum* | North American Porcupine | LC | Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest | A | 1 |
| *Falco mexicanus* | Prairie Falcon | WL | Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub , Valley & foothill grassland | HP | 2 |
| *Gopherus agassizii* | Desert tortoise | FT, ST | Joshua tree woodland Mojavean desert scrub Sonoran desert scrub | HP | 2 |
| *Ovis canadensis nelsoni* | Desert bighorn sheep | FP | Alpine, Alpine dwarf scrub, Chaparral, Chenopod scrub, Great Basin scrub, Mojavean desert scrub \| Montane dwarf scrub, Pinon & juniper woodlands, Riparian woodland, Sonoran desert scrub | HP | 2 |
| *Toxostoma lecontei* | LeConte's Thrasher | SSC | Desert wash, Mojavean desert scrub, Sonoran desert scrub | HP | 2 |
| **Plant Communities** | | | | | |
| Riversidian alluvial fan sage scrub | | | | A | 1 |

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Rationale [1] – the habitat associated with this species does not occur with the project area. Rationale [2]- General habitat for this species is present within the vicinity of the project. As the general habitat with the project area is patchy and marginal. Critical Habitat [CH] - project footprint is located within a designated critical habitat but does not necessarily mean that appropriate habitat is

present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); Candidate Endangered (CE); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc

# 4 - Results: Biological Resources, Discussion of Impacts & Mitigation

## Habitats and Natural Communities of Special Concern

The areas surrounding the project location predominantly consist of naturalized open desert. Other land uses within the vicinity include residential, agricultural and transportation uses. The immediate project location contains suitable habitat for the species listed in Table 1. The nearest habitat or natural resource community are the Newberry Spring Mountain wilderness and the National Mojave Preserve. No sensitive biological resources were observed during the site visits. Additionally, no construction activities are proposed within any jurisdictional waters based on the project type.

### Survey Results

The vegetation present within the project location is predominately creosote bush and white bursage scrub (*Larrea tridentata-Ambrosia dumosa* shrubland alliance).

### Project Impacts

The proposed project will impact 24.5 acres of Creosote bush and white bursage scrub. This impact will remove 24.5 acres of habitat for the common desert species such as desert iguana (*Dipsosaurus dorsalis*) and Mojave desert kit fox (*Vulpes macrotis arsipus*).

This project will not result in any impacts to jurisdictional drainages or "Waters of the United States".

This project will result in no impacts to federal/state threatened/endangered species, per the federal species list and the California Natural Diversity Database. This is per the investigation techniques as described in the Study Methods Section of this document.

### *Avoidance and Minimization Efforts/Compensatory Mitigation*

Avoidance and mitigation measures include the following:

1. The Project Biologist, Rico Ramirez, must be notified two weeks prior to construction (at (626) 367-9048 or (wowenviroco@gmail.com) so that preconstruction surveys may be conducted and exclusionary devices and methods may be discussed and implemented

2. The Project Biologist must be invited to the pre-construction meeting, with one week prior notice.
3. The use of invasive species, per the California Department of Agriculture list will not be allowed on this project, and the use of native species, such as creosote bush (*Larrea tridentata*) and white bur-sage (*Ambrosia dumosa*) will be maximized, to reduce environmental impacts and increase environmental benefits of the project.
4. When vegetation removal is needed, it is recommended that all vegetation removal occur outside of bird nesting season (Bird nesting season is February 1st through September 1st). Regardless if vegetation removal is required or not, the project Biologist shall be notified two weeks prior to the start of construction to determine if nesting birds are present. In the event that nesting birds are observed, the Contractor shall pause work until a qualified biologist has determined that fledglings have left the nest. If this is not possible, the contractor shall coordinate with the Project Biologist to minimize the risk of violating the Migratory Bird Treaty Act (MBTA). If nesting bird(s) are discovered, then the Project Biologist will recommend a buffer of 150 ft. for songbirds and a buffer of 500 ft. for raptors during all phases of construction. Nesting birds are protected under the MBTA and cannot be impacted by construction activities, including but not limited to noise, dust pollution, and habitat disturbance.
5. No work should commence until the vegetation to be removed has been surveyed for nesting birds, desert tortoise, desert wildlife and has been cleared by the Project Biologist.
6. If any species of concern are observed during construction activities, all work shall immediately cease, and the Project Biologist shall be immediately notified. Work shall not resume until clearance is given by the Project Biologist.
7. This project must employ all appropriate Storm-water and Erosion Control Best Management Practices (BMPs) during construction, and these must be incorporated into the project specifications. Prior to the start of construction all drain inlets must be protected with BMPs to prevent construction materials and debris from entering drainages. Therefore, this project has very little potential to create water quality impacts. Temporary construction BMPs that may be required include: wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.
8. All pollution and litter laws and regulations will be followed by the Contractor and all personnel on site.

9. If the project scope should change for any reason, the Project Biologist will be notified to determine whether current environmental documentation is adequate.

## Special Status Plant Species

According to CNDDB, IPAC and CNPS there are 2 rare, threatened and/or endangered plant species which have the potential to occur within the vicinity of the project and Biological Study Areas (BSA) (listed above in Table 1).

### Discussion of Special Status Plant Species

**Darlington's Blazing star (*Mentzelia puberula*)** is a perennial herb that grows in Mojavean desert scrub between 70-1280m amsl. Grows in sandy crevices in cliff or rocky outcrops, has a blooming period from March through May. The most recent and closest records of this plant are from 1983 in the Newberry Mountains just south of the project area and south of Interstate 40

**Creamy Blazing star (*Mentzelia tridentata*)** is a perennial herb that grows in Mojavean desert scrub between elevations of 545-1100m amsl. Grows in creosote scrub, has a blooming period from March through May. The most recent and closest records of this plant are from 2014 in the Newberry Mountains just south of the project area and south of Interstate 40.

### Survey results

The sensitive plant species listed above in Table 1 were not observed during the site visit on April 16th, 2023. As previously discussed, the current vegetation type contains suitable habitat for sensitive biological resources, however sensitive plant species were not observed during the site visit.

### Project Impacts

The proposed project is not expected to have impacts to any sensitive plants listed in Table 1 due to the absence of sensitive plants on site.

### *Avoidance and Minimization Efforts/Compensatory Mitigation*

With the implementation of spring-time pre-construction botanical surveys impacts to sensitive plant species will be avoided. Compensatory mitigation is not expected for this project due to the absence of sensitive plant during the site visits. If any species of concern are observed during any phase or construction, the RE will need to contact the Biologist, Rico Ramirez, at (626) 367-9048 and all work shall be postponed immediately.

## Special Status Animal Species Occurrences

Animals are considered to be of special concern based on (1) federal, state, or local laws; (2) limited distributions; and/or (3) the habitat requirements of special-status animals which occur on site. According to CNDDB, IPaC, and NMFS, 1 special status wildlife species have the potential to occur within the vicinity of the project and the Biological Study Areas (listed above in Table 1).

### Survey Results

There were no observations of any sensitive wildlife species within the BSA during the field visit. The BSA contains suitable habitat for endangered and threatened species and therefore the impact area should be surveyed prior to any construction activites include staging of equipment and clearing and grubbing of vegetation.

### Project Impacts

The proposed project is expected to impact 24.5 acres of creosote scrub habitat for common desert wildlife and habitat for sensitive wildlife, however impacts can be minimized with the use of proper avoidance measures

### Discussion of Special Status Animal Species

**Mojave desert tortoise (*Gopherus agassizii*)** is a medium-sized tortoise that occupies desert scrub habitats in desert valleys and on bajadas in the Mojave and Colorado Deserts in California, Nevada, Arizona, and Utah in the United States. The species is an adept burrower, and retreats to cover sites, such as self-excavated burrows, caliche caves, and rockshelters, where it spends more than 95% of its time to avoid harsh desert conditions. Shrubs, especially creosote bushes, are important habitat for Agassiz's desert tortoises, and are used as shade resources to avoid the hot desert sun. Agassiz's desert tortoises brumate in their cover sites during the winter, generally between early November through mid-March. They are active on the surface between mid-March through October.

### Discussion of Common Desert Animal Species

**Desert Iguana(*Disposaurus dorsalis*)** is a large lizard with a very long thick tail and a small head with a blunt nose. This animal lives in Creosote bush flats, scrub, dunes, washes, streambeds, and floodplains. Mostly common in sandy areas. This reptile species was observed within the proposed project area.

**Desert kit fox (*Vulpes macrotis arsipus*)** is a small to medium sized mammal that resides in dry mojavean desert environments. The desert kit fox prefers open desert with creosote flats and also within sandy dunes. They have complex dens multiple entrances and exits. Evidence of this mammalian species was found within the proposed project area.

***Avoidance and Minimization Efforts/Compensatory Mitigation***

Avoidance and Minimization measures are needed to prevent impacts to desert wildlife species within the construction areas.

1. **PRE-CONSTRUCTION SURVEYS** must be conducted within fourteen (14) days prior but no greater than thirty (30) days prior to vegetation clearing, earthwork and ground disturbing activities.

2. **BIOLOGICAL MONITOR** present during vegetation clearing, earthwork and ground disturbing activities.

3. **INSTALLATION OF DESERT TORTOISE EXCLUSIONARY FENCING** around the construction site to prevent the enterance of surrounding wildlife present.

4. **CHECK UNDER MOTORIZED EQUIPMENT & VEHICLES** – that have been parked over night or stationary for some length of time before moving the vehicle.

5. **CHECK AROUND MATERIAL STACKS & UNITS** - that have been stored in the open before moving them.

6. **VISUALLY CHECK AROUND THE WORK AREA** – for the presence of live tortoise that may have wandered into the disturbance zone. It is not intended to divert your attention from your work tasks and create a hazard for your or others on the job, but it is good practice to utilize a few seconds and visually scan the area around you when it is safe to do so.

7. **IF A TORTOISE IS PRESENT** – stop all work activities that could harm the tortoise and contact the Lead Engineer or designated contact person, or on-site biologist to have the tortoise removed to safety.

8. **DO NOT HANDLE OR MOVE A TORTOISE** – yourself. Only a qualified biologist is authorized to do so.

If any species of concern are observed during any phase of construction, the Contractor will need to contact the Project Biologist, Rico Ramirez, at (626) 367-9048 and all work shall be postponed immediately.

**Jurisdictional Waters**

During the site visit on location within the project area contained evidence of water resources with the presence of mud cracks on the surface of the soil. The mud cracks could have occurred during the release of water from a near-by water pump and pipe. According to National Wetland Inventory's Wetland Mapper there are no potential wetlands or jurisdictional water features found within the project area.

## 5 - Conclusions & Regulatory Determination

**Federal Endangered Species Act Section 7 Consultation Summary**

Suitable habitat for sensitive species is present, however with the implementation of proper avoidance and measures, there will be no effects on species listed under the Endangered Species Acts; therefore, no formal Endangered Species Act Section 7 consultation with federal agencies was is required. Informal consultation for Endangered Species Act Section 7 was initiated through the generation of IPaC species list.

**Wetlands and Other Waters Coordination Summary**

The proposed project will not result in any effects to wetlands or jurisdictional waters due to the absence of (Waters of the State, Waters of the U.S., etc.); therefore, no resource agency coordination or permits are required.

**Invasive Species**

In compliance with (Executive Order 13112), invasive species on the California Noxious Weed List shall not be included as part of the highway planting plan.

**Permits**

No federal or state agency permits are required because this project will not impact sensitive biological resources or jurisdictional waters (Waters of State/U.S.).

**Conclusion**

In conclusion, this project will impact 24.5 acres of creosote scrub. With the implementation of the proper avoidance measures provided there will be minimal effects to sensitive biological and natural resources listed under the Endangered Species Act. Any work outside of the prism of the roadway would be confined to areas that are immediately adjacent to the roadway in previously disturbed areas maintained by Caltrans. Based on literature review and survey results, it has been concluded that the proposed project will result in minimal to no effects to special status species, including state or federal endangered and/or state or federal threatened species. There will be no effects on any sensitive plant communities or designated critical habitat because of this project location. No resource agency permits are anticipated because of this project.

# References


- U.S. Fish and Wildlife Service - Information Planning and Consultation (IPaC). https://ecos.fws.gov/ipac/. Retrieved on, June 07, 2023.
- CA Department of Fish and Wildlife Service - California Natural Diversity Database (CNDDB). https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Retrieved on April 1, 2023
- California Native Plant Society (CNPS) - Inventory of Rare and Endangered Plants. http://www.rareplants.cnps.org/advanced.html. Retrieved on June 10, 2023
- National Wetland Inventory (NWI)- Wetland Mapper Wetlands Mapper | U.S. Fish & Wildlife Service (fws.gov). Retrieved on July 06, 2023


# Appendices

A. IPaC Species List
B. CNDDB Species List
C. CNPS Species List
D. NWI wetland map
E. Photo Exhibit