Appendix B

Biological Resources Assessment

Dillard (APN 104-29-2099)
Kern County, California

Biological Resources Assessment

Prepared for:

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Storage District
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December 9th, 2024

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I hereby certify that the statements furnished in the report and associated maps are true and correct to the best of my knowledge.

Signature

December 9th 2024
Date

EXECUTIVE SUMMARY

BPR Consulting (BPR) has prepared this Biological Resources Assessment (BRA) at the request of Rosedale Rio Bravo Water Storage District (RRBWSD) for the proposed construction of recharge ponds or solar panels (Project). The purpose of this BRA is to document the biological resources on the property and identify potential impacts to biological resources that could occur from the proposed Project activities. This document has been prepared in a format that is intended for use during future impact analysis required under the California Environmental Quality Act (CEQA).

The proposed Project is located on an agricultural parcel (Assessor's Parcel Number [APN] 104-29-2099). The parcel is currently being utilized for agricultural purposes only and has been farmed on an annual basis for several years. According to the landowner, has been fallow for the last few years. Unimproved roads provide access through along the perimeter of the parcel.

The proposed project includes the construction of recharge ponds or solar panels.

The results of this BRA are based on the following: 1) a review of the California Natural Diversity Database (CNDDB) and other databases and records documenting special-status species and sensitive habitat occurrence data from the region; 2) a review of previous biological surveys conducted within the area; 3) and one biological survey conducted outside of the appropriate blooming period for annual plant species.

As a result of this study, no special-status plant or wildlife species were observed during the surveys. Potential impacts identified during this assessment can be mitigated to a level that is less than significant with implementation of the recommended measures provided within this report. All standard best management practices required by the Kern County for such projects will also be implemented as part of the proposed Project, further reducing the potential for any additional impacts.

INTRODUCTION

BPR Consulting (BPR) has prepared this Biological Resources Assessment (BRA) at the request of RRBWSD for the proposed construction of recharge ponds or solar panels (Project) located west of Superior Rd and east of Enos Lane (Highway 43) in Kern County, California. Please refer to Figures 1 and 2.

The purpose of this BRA is to document the biological resources on the property and identify potential impacts that could occur from the proposed Project. This document has been prepared in a format that is intended for use during future impact analysis that is required under the California Environmental Quality Act (CEQA).

The proposed project includes the construction of recharge ponds or solar panels

EXISTING CONDITIONS

The proposed Project is located east Superior Rd and west of Enos Lane (Highway 43) and is easily accessed from Superior Road. The potential Project impacts will include the entire 50-acre parcel (Assessor's Parcel Number [APN] 104292099). This parcel is within the Stevens U.S. Geological Survey (USGS) 7.5-minute quadrangle and the site location is at a latitude of 35.3615007°N and a longitude of 119.2426459°W (WGS84) at an elevation of approximately 0 feet above mean sea level.

For the purposes of this report, the Biological Study Area (BSA) includes the entire 50-acre portion of the parcel that would be impacted by the Project and areas visible within 50-feet of the Project (Refer to Figure 3). Areas on adjacent parcels that were adjacent to the work areas were surveyed visually from the subject public right-of-way.

Impacts from the project would include grading activities, staging of materials, and ground disturbance for ponds or solar panels. The BSA is bordered by an urban environment at the northwest corner of the parcel and agricultural practices to the north, east, and south.

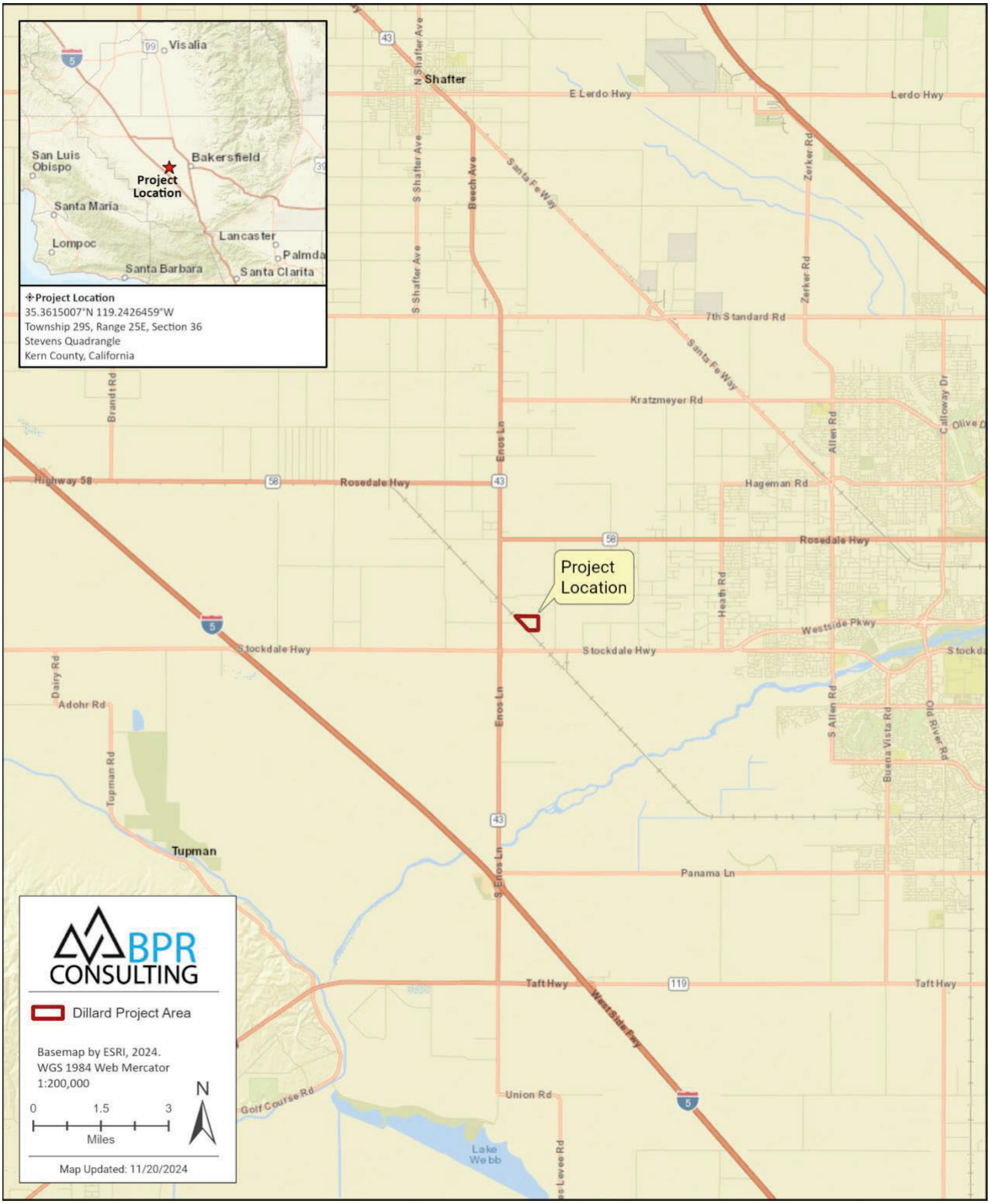

FIGURE 1. Project Location and Vicinity map

FIGURE 2. Project Study Area

Soils

The University of California Davis, Soil Resource Laboratory website, SoilWeb (http://casoilresource.lawr.ucdavis.edu/), maps two (2) underlying soil associations on within the BSA. Most of the site is within Granoso loamy sand, 0 to 2 percent slopes and a small portion of the project site falls within the Wasco sandy loam (243).

- *Granoso Sandy Loam: Granoso sandy loam is a well-drained soil type characterized by its sandy texture, which promotes good infiltration and reduces water retention. Found in arid regions like western Kern County, this soil typically supports sparse vegetation adapted to dry conditions. The sandy loam's composition makes it prone to wind and water erosion if left exposed but also allows for deep rooting, which benefits drought-tolerant plants.*

- *Wasco Sandy Loam: Wasco sandy loam is a well-drained, coarse-textured soil commonly found in the Central Valley of California. Its sandy composition is mixed with loam, creating a balance that provides adequate drainage while retaining some moisture for plant growth. This soil type is often associated with agricultural use due to its favorable structure for crop production but may support native vegetation in undeveloped areas, particularly those adapted to sandy environments.*

METHODOLOGY

Literature Review

Document and digital data review included information from federal, state, and local resource agencies, including the National Hydrography Dataset (NHD), National Wetland Inventory (NWI), California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants, the California Department of Fish and Wildlife (CDFW) Special Animals List, biological reports for nearby projects, and the U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPaC).

A nine-quadrangle query was conducted using the following U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles: Rio Bravo, Rosedale, Oildale, Tupman, Stevens, Gosford, Lake Buena Vista Bed, Millux, and Conner (CNDDB 2024). Refer to Attachment A and B.

In addition to the CNDDB, the CNPS Electronic Inventory of Rare and Endangered Plants of California (CNPS 2024) was reviewed to provide additional information on special-status plants that are known to occur in the area. Other databases and literature reviewed included the USFWS IPaC (unofficial species list), the CalFlora online database, and available environmental documents and reports conducted nearby.

The following other resources were also reviewed for information about the BSA:

- Aerial photographs of the BSA and general project vicinity.
- Stevens USGS 7.5-minute topographic quadrangle.
- UC Davis California Soil Resource Lab mapping tool.

- USFWS Critical Habitat Mapper.
- US Geological Survey National Hydrography Dataset; and,
- USFWS National Wetlands Inventory.

Field Surveys

Following the literature review and data queries, a field survey was conducted on March 5th 2024. During the surveys, existing site conditions were assessed and documented, plant communities and land cover types were characterized, plant species were identified, and the potential for occurrence of special-status plants and wildlife were evaluated. No protocol-level surveys for special-status wildlife species were necessary as part of this study and no formal wetland delineation efforts were conducted due to absence of jurisdictional features.

During the survey, botanical resources within the BSA were identified using dichotomous keys from *Jepson Manual, Second Edition* (Baldwin et al., 2012) as necessary. Vegetation classification and mapping followed Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986) and was cross- referenced with the updated California Natural Communities List and current alliance and association level taxonomy per *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009) to ensure consistency with current regulatory nomenclature for Sensitive Natural Communities.

Focused botanical surveys were not consistent with the botanical survey guidelines of the CDFW (CDFW 2018) due to the date in which Notice to Proceed was provided. However, for this project site it was obvious that the project was located within an area of heavy agricultural use and the potential for rare plant species to occur was considered low prior to conducting the field survey. Because of the out of season survey, professional judgment was necessary to determine if any future survey efforts for rare plant species would be necessary. Due to the vegetation communities present, limited species diversity, complexity, topography, and visibility, 100% visual coverage was easily achieved within the BSA. All plant species observed during the surveys were recorded and the complete list of plant species observed is included in Appendix C of this report.

RESULTS

Habitats

The surveys conducted within the BSA identified the following two habitat types: 1) Agriculture; and 2) Ruderal.

Below is a description of these habitats and the anticipated habitat value for wildlife species.

Agriculture – Agricultural habitat type is not a native plant community and is not described in the Manual of California Vegetation (2009) or in Holland's (1986) vegetation classification. Apart from the unimproved road, the entirety of the BSA within the parcel was actively farmed until a few years ago. Previously, the land was used in active orchards.

Ruderal – Ruderal habitat type is not a native plant community and is not described in the Manual of California Vegetation (2009) or in Holland's (1986) vegetation classification. This habitat type is common along roadsides, in un-maintained urban areas, and other areas that have been significantly altered by construction, agriculture, ornamental landscaping, or other types of regular activities that affect plant composition and growth. If vegetated, these areas are typically dominated by non-native annual grasses and herbaceous plants (occasionally native species are present) adapted to the regular cycle of disturbance from traffic, grading, and weed reduction practices such as mowing and herbicide application. Typical plants consist primarily of introduced species and escaped ornamentals that exhibit clinging seeds, adhesive stems, and rough leaves that assist their invasion and colonization of disturbed or unmaintained lands.

The ruderal areas within the parcel provide low habitat value for wildlife species.

SPECIAL-STATUS SPECIES

Special-Status Plant Species

For the purpose of this study, special-status plants are vascular plants listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the federal Endangered Species Act (ESA); those listed or proposed for listing as Rare, Threatened, or Endangered by the CDFW under the California Endangered Species Act (CESA); and plants occurring on the California Rare Plant Rank 1, 2, 3 and 4, as developed by the CDFW and the California Native Plant Society (CNPS).

The specific Rare Plant Rank code definitions are as follows:

- Rank 1A = Plants presumed extinct in California.
- Rank 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).

- Rank 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened).
- Rank 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known).
- Rank 2 = Rare, threatened or endangered in California, but more common elsewhere.
- Rank 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA); and
- Rank 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80% occurrences threatened).
- Rank 4.3= Plants of limited distribution (watch list), not very endangered in California.

Based on a literature review and database query, a total of eleven (11) special-status plant species were identified and evaluated for potential to be present in the vicinity of the BSA (refer to Appendix A). Because this list of species is regional and includes a wide variety of plant species, an evaluation of the list was conducted to identify which special-status plant species have the potential to occur within the BSA prior to conducting the field survey. This analysis compared the known habitat requirements of those species when compared to the parcel's existing conditions, elevation, and soils. The analysis also considered proximity to the BSA from known occurrence records.

Based on this analysis, it was expected that none of the species identified in Appendix A are expected to occur within the project impact area due to the active agricultural practices and the highly disturbed state of the ruderal habitat. Overall, the BSA lacks the presence of specialized habitat requirements such as serpentine rock slopes, granitic soils, alkali sinks, coniferous forests, stream banks or other aquatic habitats, vernal pools, sandy beaches, and elevational restrictions, that many of the listed species require.

Of the 11 species evaluated and based on review of the existing conditions within the BSA, it is the professional judgement of BPR that a follow up botanical survey is <u>not</u> warranted for this project.

<u>Special-Status Wildlife Species</u>

For the purposes of this section, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the FESA.
- Animals that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).

- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5).
- Animal species of special concern to CDFW.
- Animal species that are fully protected in California (CFGC Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Based on a CNDDB nine-quadrangle query and a review of existing literature, a total of eighteen (18) special-status wildlife species have been previously documented in the vicinity of the BSA. Because this list of species is regional and includes a wide variety of wildlife species, an analysis of the range and habitat preferences of those animal species was conducted to identify which special-status wildlife species have the potential to occur within the BSA prior to conducting the field surveys. Based on this analysis, it was anticipated that there could be suitable habitat for nesting migratory birds like the tricolored black bird within the BSA. The likelihood of these species occurring onsite is moderate (discussed below).

Tricolored Blackbird and other Migratory nesting birds

The BSA provides moderate nesting opportunities for bird species. During the survey the vegetation and other features showed some evidence of previous nesting activity (non-active nest within orchard). Given the extensive nesting opportunities within the orchard, it is very likely nesting will continue in future seasons. Ground-nesting species may utilize the BSA such as killdeer or other ground-nesting birds.

Sensitive Plant Communities and Critical Habitat Identification

Sensitive natural communities are those plant communities listed as rare in the CNDDB. The CNDDB search identified eleven sensitive plant communities within the nine-quadrangle query – California jewel flower (*Caulanthus californicus*), Hoover's eriastrum (*Eriastrum hooveri*), Horn's milk vetch (*Astragalus hornii*), Kern mallow (*Eremalche kernensis*), Great Valley Mesquite scrub (*Prosopis glandulosa* and associated species), Mason's neststraw (*Stylocline masonii*), Great Valley cottonwood riparian forest (*Populus fremontii* and associated species), Recurved larkspur (*Delphinium recurvatum*), Valley saltbush scrub (*Atriplex polycarpa* and associated species), San Joaquin woolly threads(*Monolopia congdonii*), and Valley sink scrub (*Allenrolfea occidentalis* and associated species). None of these sensitive communities are located within the BSA and therefore and therefore are no longer discussed.

Based on review of the USFWS Threatened & Endangered Species Active Critical Habitat Report (https://ecos.fws.gov/ecp/report/table/critical-habitat.html), the BSA does not overlap any federal designated critical habitat.

IMPACT ASSESSMENT AND MITIGATION

Sufficiency of Biological Data

The analysis of the BSA includes a botanical survey that was not conducted during the appropriate blooming period. However, given that the development would occur directly within an agricultural field, and utilize existing unimproved road, there is no potential for impacts to any rare plant species. Further botanical surveys to justify the absence of rare plant species does not seem warranted based on BPR's professional opinion.

Impacts

This section focuses on identifying potential biological impacts associated with the proposed Project. The emphasis is on determining the potential effects of the Project on special-status species and sensitive habitats within the BSA. Adverse impacts could occur if construction and/or future uses of the property would result in temporary or permanent modification to sensitive habitats, or to habitats occupied by special-status species. Where potential impacts to sensitive resources have been identified, measures for avoiding, minimizing, or mitigating adverse effects to these resources are recommended.

The following impact analysis section follows CEQA guidelines:

Will the project:

1. **Result in a loss of unique or special status species or their habitats?**

With respect to plant species, there are no unique or special-status plant species that occur within the BSA. While the survey was conducted out of the typical blooming season for annual plant species, the BSA does not contain any suitable habitat for any of the species that have been documented in the vicinity. The BSA is located directly within an active agricultural field. Furthermore, ruderal habitat within the perimeter of the parcel would not be suitable habitat for special-status plant species, nor would this area be impacted by project activities. Therefore, impacts are anticipated to be less than significant under CEQA guidelines.

For special-status wildlife, marginal nesting habitat is present for migratory birds protected under the MBTA. It is possible that nesting birds may utilize the existing orchard and ground-nesting species may utilize this area for nesting purposes. These areas could be impacted by construction activities, grading and vegetation removal, and noise or other disturbances may cause an individual to abandon a nest resulting in an indirect impact. Pre-disturbance surveys for nesting birds would be necessary to ensure these species are not impacted.

2. **Substantially reduce the extent, diversity, or quality of native or other important vegetation?**

The proposed Project will not substantially reduce the extent, diversity or quality of native or other important vegetation. The BSA is mostly devoid of any native vegetation. Of the plant species identified during the out-of-season survey, only fourteen percent of the species are native (2 of 14 plants identified). Therefore, impacts are anticipated to be less than significant under CEQA guidelines, and no mitigation is anticipated.

3. Impact wetland or riparian habitat?

The proposed Project is not anticipated to result in permanent or temporary impacts to any wetland or riparian habitat. No wetland or riparian habitats are located on the parcel. Therefore, no impacts to wetland or riparian habitat are anticipated.

4. Introduce substantial barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?

The proposed Project will consist of new structures that will be developed within a previously undeveloped location. Even though the new structures could act as a barrier for movement, the project is small and is not expected to create a significant impact on the movement of wildlife.

Recommended Measures

The following measures are recommendations to avoid, protect, minimize, and mitigate impacts to special-status species during and following construction. These measures are recommended for inclusion in the CEQA document to be prepared for the Project.

Tricolored Blackbird and Nesting Birds:

BIO-1 If feasible, all vegetation removal and ground disturbance should be scheduled to occur from September 1 to February 15, outside of the typical nesting bird season, to avoid potential direct and/or indirect impacts to nesting birds.

BIO-2 If work, including but not limited to, vegetation removal and/or ground disturbance, is proposed to occur within the typical nesting season (between February 16 and August 31), a qualified biologist should conduct a pre-construction survey for active bird nesting activity within 100 feet of the disturbance limits no more than three (3) days prior to any disturbance activities.

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APPENDIX A: Special-Status Plants and Natural Communities from CNDDB Review of Nine 24k U.S. Geological Survey (USGS) Quadrangles

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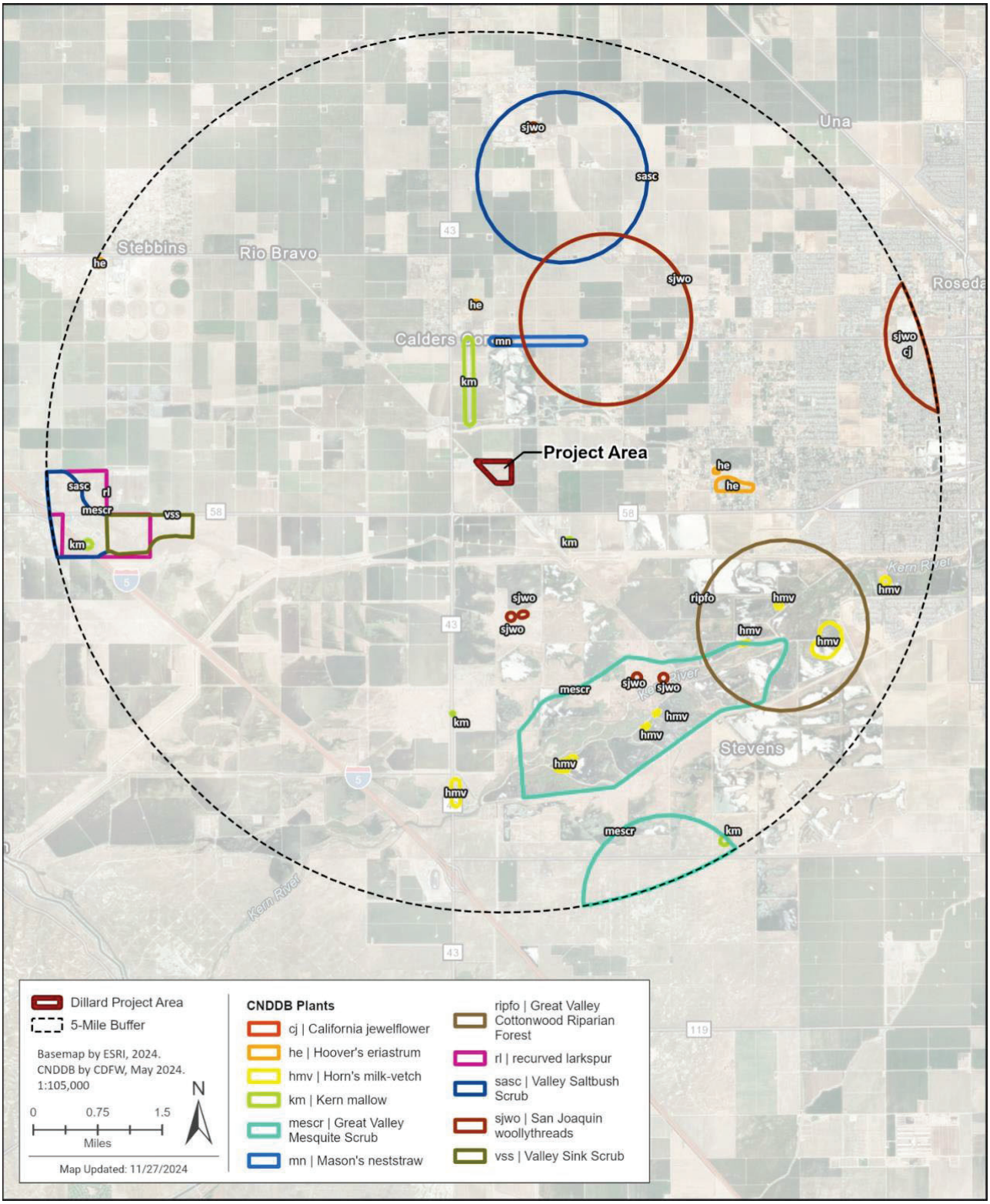
Una
Stebbins
Rio Bravo
Calders Corner
Roseda
Project Area
Stevens
Kern River
sjwo
sasc
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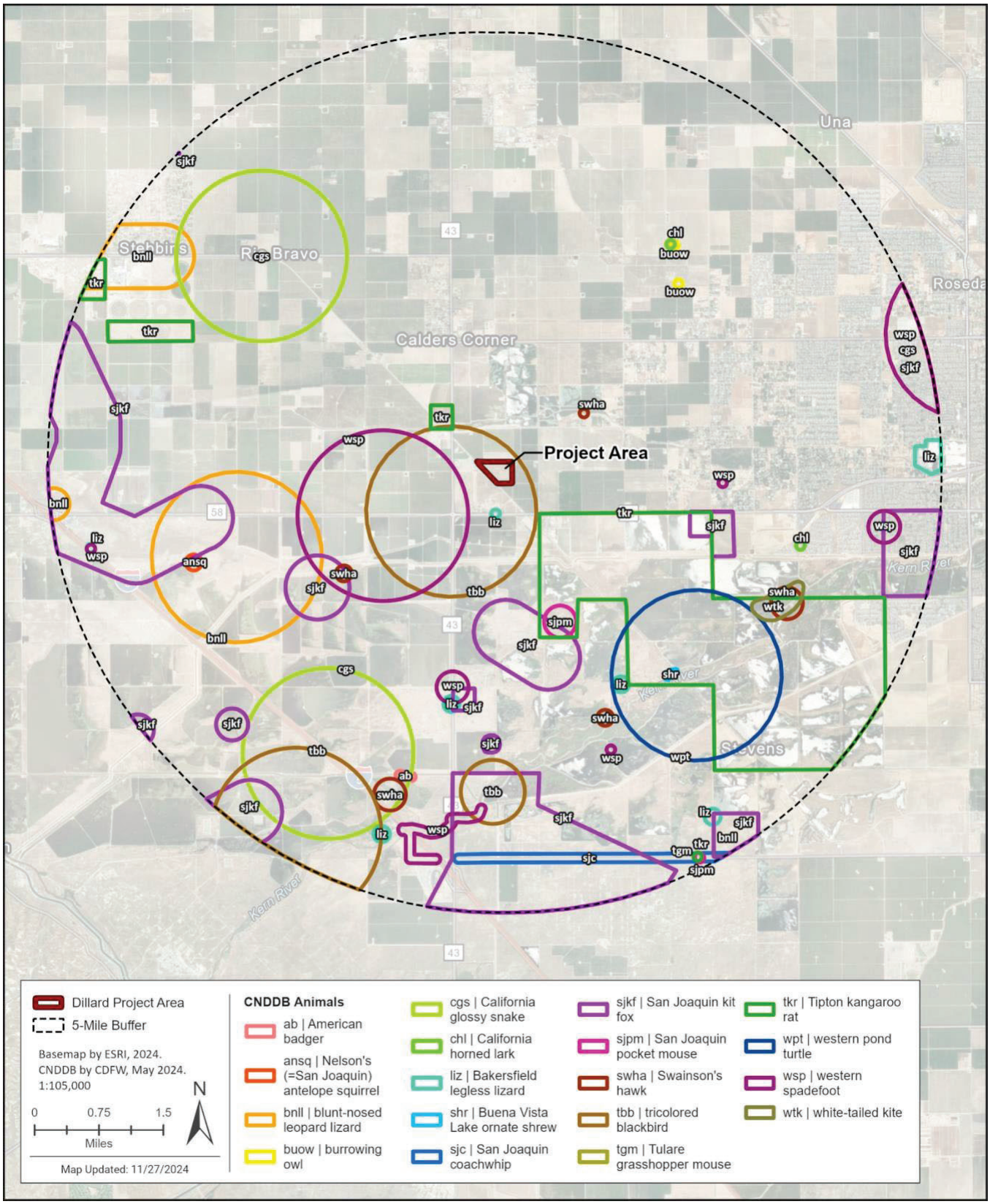
cj
km
mn
rl
mescr
vss
ripfo
hmv
Dillard Project Area
5-Mile Buffer
Basemap by ESRI, 2024.
CNDDB by CDFW, May 2024.
1:105,000
0 0.75 1.5
Miles
N
Map Updated: 11/27/2024
CNDDB Plants
cj | California jewelflower
he | Hoover's eriastrum
hmv | Horn's milk-vetch
km | Kern mallow
mescr | Great Valley Mesquite Scrub
mn | Mason's neststraw
ripfo | Great Valley Cottonwood Riparian Forest
rl | recurved larkspur
sasc | Valley Saltbush Scrub
sjwo | San Joaquin woollythreads
vss | Valley Sink Scrub

APPENDIX B: Special-Status Animals from CNDDB Review of Nine 24k U.S. Geological Survey (USGS) Quadrangles


Una
Stebbins
Rio Bravo
Calders Corner
Project Area
Stevens
Kern River
43
58
Dillard Project Area
5-Mile Buffer
Basemap by ESRI, 2024.
CNDDB by CDFW, May 2024.
1:105,000
0 0.75 1.5
Miles
N
Map Updated: 11/27/2024
CNDDB Animals
ab | American badger
ansq | Nelson's (=San Joaquin) antelope squirrel
bnll | blunt-nosed leopard lizard
buow | burrowing owl
cgs | California glossy snake
chl | California horned lark
liz | Bakersfield legless lizard
shr | Buena Vista Lake ornate shrew
sjc | San Joaquin coachwhip
sjkf | San Joaquin kit fox
sjpm | San Joaquin pocket mouse
swha | Swainson's hawk
tbb | tricolored blackbird
tgm | Tulare grasshopper mouse
tkr | Tipton kangaroo rat
wpt | western pond turtle
wsp | western spadefoot
wtk | white-tailed kite

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APPENDIX C: List of Observed Plant Species

Appendix C – List of Plant Species Observed within the Study Area.

Scientific Name	Common Name
*Brassica nigra**	Black mustard
*Bromus diandrus**	Ripgut brome
*Bromus madritensis**	Spanish brome
*Bromus rubens**	Red brome
*Erodium cicutarium**	Redstem stork's bill
Heliotropium curassavicum	Wild heliotrope
*Hirschfeldia incana**	Summer mustard
*Hordeum murinum**	Foxtail barley
*Hypochaeris glabra**	Smooth cat's ear
*Malva parviflora**	Cheeseweed mallow
*Medicago polymorpha**	Bur clover
*Melilotus indicus**	Annual yellow sweetclover
*Plantago lanceolata**	English plantain
Amsinckia spp	Fiddle neck

* Indicates non-native species

APPENDIX D: List of Observed Wildlife Species

Appendix D – List of Observed Wildlife Species.

Scientific Name	Common Name
Birds	
Otospermophilus beecheyi	California ground squirrel
Zenaida macroura	Mourning dove
Sceloporus occidentalis	Western fence lizard
Corvus corax	Raven
Mimus polyglottos	Mockingbird

APPENDIX E: Photo Documentation

Photo 1: Typical adjacent habitat. BSA on the right, and neighboring properties on the left of photos. March 5th, 2024

Photo 2: Photo of within BSA facing southeast. March 5th , 2024

Photo 3: Photo of ruderal habitat surrounding perimeter of BSA. March 5th, 2024