

**RESPONSES TO PUBLIC COMMENTS**

**for**

**INITIAL STUDY/  
MITIGATED NEGATIVE DECLARATION**

**for**

**RENAISSANCE HIGH SCHOOL WATER SYSTEM  
IMPROVEMENTS PROJECT**

**Prepared for**



**Pajaro Valley Unified School District**

**Prepared by**



**Denise Duffy & Associates, Inc.**

**October 2024**

## **TABLE OF CONTENTS**

|                                             |    |
|---------------------------------------------|----|
| Section 1. Summary of Comments .....        | 1  |
| Section 2. Responses to Comments.....       | 4  |
| Section 3. Text Changes to the IS/MND ..... | 7  |
| Section 4. Conclusion .....                 | 11 |

## **ATTACHMENT**

Attachment A – Consolidated Public Comment Letters

    Comment Letter A – Amah Mutsun Tribal Band of San Juan Bautista

    Comment Letter B – County of Santa Cruz Community Development & Infrastructure

Attachment B – Revised Biological Resources Report

*This Page Intentionally Left Blank*

## SECTION 1. SUMMARY OF COMMENTS

The proposed project, described below, is located in the community of La Selva Beach in unincorporated Santa Cruz County. The project components are within the San Andreas Road right-of-way, within a railroad easement under the jurisdiction of Santa Cruz County Regional Transportation Commission (SCCRTC), and on the Renaissance High School campus.

Renaissance High School (School) is a continuation high school in the Pajaro Valley Unified School District (PVUSD or District) and is located in La Selva Beach in unincorporated Santa Cruz County, California. The School's single existing active water supply well draws water from the Pajaro Valley Groundwater Basin. The Department of Water Resources (DWR) classified the Basin as a high-priority groundwater basin in critical overdraft due to the ongoing threat of further seawater intrusion into Basin groundwater supplies. The Project is proposed to provide the School with safe and reliable drinking and irrigation water. The Project's key objectives are:

- Supply safe and reliable drinking water;
- Comply with regulatory requirements;
- Meet the water system's O&M needs;
- Be financially viable;
- Satisfy public concerns; and
- Meet environmental requirements.

The proposed project consists of consolidating the School's existing water system with the Soquel Creek Water District (SqCWD) water system. The project consists of a 540-foot water main, a 400-foot domestic water line, a 310-foot irrigation line, and a booster pump station.

An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared to evaluate the environmental effects of the project in accordance with the California Environmental Quality Act (CEQA). The IS/MND was circulated for local public review from July 17, 2024 to August 15, 2024. Two (2) comment letters were received on the Project during the public review period, as presented in the table below.

| List of Comments Received on IS/MND |                                                             |               |
|-------------------------------------|-------------------------------------------------------------|---------------|
| Comment                             | Name                                                        | Date Received |
| A                                   | Amah Mutsun Tribal Band of San Juan Bautista                | 7/17/24       |
| B                                   | County of Santa Cruz Community Development & Infrastructure | 7/26/24       |

This document contains a list of the agencies and persons that submitted comments on the IS/MND (see above) and the District's responses to comments received on the IS/MND. This document provides the responses to comments received on the IS/MND that address the contents of the environmental analysis. The specific comments have been excerpted from the letter and are presented as "Comment" with each response directly following as "Response." Copies of the actual letters and email submitted to the District are provided in Attachment A.

In summary, the comments received on the IS/MND did not raise any new issues about the project's environmental impacts or provide information indicating the project would result in new environmental impacts or impacts substantially greater in severity than disclosed in the IS/MND. CEQA does not require formal responses to comments on an IS/MND, only that the lead agency

consider the comments received [CEQA Guidelines §15074(b)]. Nevertheless, responses to the comments are included in this document to provide a complete environmental record.

*This Page Intentionally Left Blank*

## SECTION 2. RESPONSES TO COMMENTS

### Comment Letter A: Amah Mutsun Tribal Band of San Juan Bautista

**Comment A-1:** It is our pride and privilege to be of service for any Native American Cultural Resource Monitoring, Consulting and/ or Sensitivity Training you may need or require. We take our Heritage and History seriously and are diligent about preserving as much of it as we can. Construction is a constant in the Bay Area and with that new discoveries are bound to happen. If you choose our services, we will gladly guide all personnel through proper procedures to safely protect and preserve: Culture, Heritage, and History.

It is highly recommended, if not previously done, to search through Sacred Lands Files (SLF) and California Historical Resource Information Systems (CHRIS) as well as reaching out to the Native American Heritage Commission (NAHC) In order to determine whether you are working in a Cultural and/ or Historic sensitivity.

**Response A-1:** A Sacred Lands Files and California Historical Resource Information Systems search was completed for the Project as described on pages 43 and 75 of the IS/MND. This included contacting the Native American Heritage Commission.

**Comment A-2:** If you have received any positive cultural or historic sensitivity within 1 mile of the project area here are A.M.T.B Inc's and Amah Mutsun Tribal Band of San Juan Bautista's recommendations:

- All Crews, Individuals and Personnel who will be moving any earth be Cultural Sensitivity Trained.
- A Qualified California Trained Archaeological Monitor is present during any earth movement.
- A Qualified Native American Monitor is present during any earth movement.

**Response A-2:** The proposed project includes mitigation measures related to the protection of cultural and tribal cultural resources are described on pages 45 and 75 of the IS/MND. **Mitigation Measure CR-1** outlines procedures for halting construction in the event of the discovery of archaeological resources during construction, including procedures for evaluation by a qualified professional archaeologist in collaboration with a Native American representative as well as formulating appropriate mitigation measures in coordination with a qualified professional archaeologist in collaboration with a Native American representative if the find is determined to be significant. **Mitigation Measure CR-2** outlines procedures for stopping construction in the event of the discovery of human remains interred on the project site, including notifying the Native American Heritage Commission if the remains are determined to be of Native American origin.

## **Comment Letter B: County of Santa Cruz Community Development & Infrastructure**

**Comment B-1:** In reviewing the initial study for this project I noted a few corrections or issues I need to comment on and hopefully address before we process the Coastal Development Permit. First of all is the statement that “There are no adopted Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) associated with the project site.” Pg 29. The USFWS recently adopted a General Conservation Plan that covers the project site and includes CRLF, CTS, and SCLTS. Obtaining incidental take coverage under this GCP should facilitate this project.

**Response B-1:** The Biological Resources Report (BRR) has been updated to reflect the recently adopted *General Conservation Plan for Amphibians in Southern Santa Cruz County* (GCP), March 2024. As described in Section 4.0 of the BRR, consultation with USFWS must occur to confirm that take authorization for SCLTS, CTS, and CRLF may be authorized under the GCP. However, it is assumed that the project qualifies for GCP take authorization because 1) the project is located within the GCP plan area, 2) the project is being proposed by a public agency (PVUSD), and 3) the project involves the maintenance of existing public infrastructure (i.e., the existing Renaissance School water system). Section 2.5 of the BRR and **Mitigation Measure BIO-9(b)** have been updated to include the recently adopted GCP. Additionally, Section 2.5 of the BRR has been updated to provide additional detail on the Santa Cruz County Code salamander protection zone. See Section 3. Text Changes to the IS/MND.

**Comment B-2:** The second are the statements in the biotic section that incidental take permits may be obtained for take of the SCLTS. As a fully protected species, incidental take is not allowed by CDFW, so avoidance must be met. Avoidance may still be feasible in the routing of the pipeline through gaps in the oak woodland that are dominated by pampas/jubata grass, but if that is not supported by your biologist and the state and federal wildlife agencies, avoidance of the oak woodland could be met by running the line out to the school parking lot and back along San Andreas.

**Response B-2:** The BRR has been updated to reflect exceptions to California Fish and Game Code Section 5050, which includes pathways for take authorization of fully protected species that is incidental to projects related to critical regional or local water agency infrastructure. As described in Section 4.0 of the BRR, consultation with CDFW must occur to confirm that take authorization for SCLTS may be authorized under this exception; however, it is assumed that the project falls under the definition of critical local water agency infrastructure. Section 2.5 of the BRR and **Mitigation Measures BIO-9(a) and (b)** of the BRR and IS/MND have been updated to describe take authorization of special-status amphibians and fully protected species. See Section 3. Text Changes to the IS/MND.

**Comment B-3:** Finally, surveying prior to disturbance for a species that lives underground is not a viable way to determine presence or absence, and the presence of rodent burrows should be considered assumed presence of CTS is grassland and SCLTS in oak woodland etc. Along with the CDP the County has to process, we will need to review the biotic report for conformance with our sensitive habitat ordinance to obtain biotic approval. Please be sure it is included in that submittal.

**Response B-3: Mitigation Measure BIO-9(c)** is not intended to provide a presence/absence determination for CTS, SCLTS, or CRLF within the project site. The

potential presence of these special-status amphibians has been assumed based upon the analysis presented in the BRR. Take authorization from USFWS and CDFW will be required as described above in **Response B-2. Mitigation Measure BIO-9(c)** is intended to reduce impacts to these species during construction activities by ensuring that no individuals of these species are present within the project site immediately prior to initiation of construction activities. Pre-construction clearance surveys for these special-status amphibians are typically included with any take authorization from USFWS and/or CDFW. **Mitigation Measures BIO-1, BIO-5, BIO-6, and BIO-7** are provided in the BRR and IS/MND to further reduce and minimize impacts to special-status amphibians during project implementation, including but not limited to daily clearance surveys during ground disturbing or vegetation removal activities. If any life stage of CTS, SCLTS, or CRLF is observed at any time during construction, the qualified biologist shall be contacted, and work shall stop in the area until the special-status amphibian has moved on its own out of the work area and USFWS and/or CDFW have been contacted.

Additionally, the BRR includes a discussion of the Sensitive Habitat Protection Ordinance (Santa Cruz County Code (SCCC) Section 16.32) on pages 31 and 36 of the IS/MND and in Appendix B.

### SECTION 3. TEXT CHANGES TO THE IS/MND

The following section outlines changes to the text of the Draft IS/MND based on the comments received during the circulation period. New additions to the text are shown in underline. Deleted text is shown in ~~strikethrough~~.

| Page Number                                            | Description of Change                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IS/MND Page 31<br>Text added after third paragraph     | <p><b><u>General Conservation Plan for Amphibians in Southern Santa Cruz County</u></b></p> <p><u>USFWS developed a General Conservation Plan for Amphibians in Southern Santa Cruz County (GCP) to provide an efficient and effective permitting mechanism for private and public landowners to meet statutory and regulatory requirements while promoting conservation of the SCLTS. Although the focal species of the GCP is SCLTS, CRLF and CTS co-occur at various locations within the GCP plan area and take for these species may also be authorized under the GCP. The GCP is a conservation plan as required in section 10(a)(2)(A) of the ESA for issuance of an incidental take permit pursuant to section 10(a)(1)(B). To qualify for take authorization under the GCP, the project must 1) be located within the GCP Plan Area; 2) consist of actions discussed under Covered Activities including residential dwellings, construction and maintenance on public lands such as roads, drainages, parks, and habitat restoration activities; and 3) agree to implement the avoidance, minimization, and mitigation actions described in the GCP. Projects undertaken on public lands must be constrained to the maximum extent possible and must not contain barriers to Covered Species dispersal or drainage facilities that could result in the entrapment of Covered Species.</u></p> <p><b><u>Fully Protected Species</u></b></p> <p><u>The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (§5515), mammals (§4700), amphibians and reptiles (§5050), and birds (§3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed except with authorization from CDFW and only under specific circumstances. CDFW may authorize take of fully protected species for necessary scientific research, including efforts to recover fully protected or CESA-listed species, relocation of a fully protected bird species for the protection of livestock, or if the fully protected species is listed as a covered species whose conservation and management is provided for in a Natural Community Conservation Plan. Additionally, CDFW may authorize take of fully protected species that is incidental to a project only for projects related to the State Water Project, critical regional or local water agency infrastructure, or certain transportation, wind, and solar projects.</u></p> |
| IS/MND Page 36<br>Text added to end of third paragraph | <p><u>Additionally, the SCCC establishes a salamander protection zone (SP zone), which provides additional protection of the population and habitat of the SCLTS. However, the project site is not located within the SP zone.</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| Page Number                                                              | Description of Change                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IS/MND Page 38<br>Text of Mitigation<br>Measure BIO-9 item<br>a) revised | <p>The project applicant will comply with the CESA and California Fish and Game Code Section 5050 and will coordinate with the CDFW to determine whether incidental take authorization for CTS and SCLTS is required <u>and/or authorized</u> prior to issuance of a grading permit. If it is determined that authorization for the incidental take of these species is required <u>and/or authorized</u> from the CDFW, the project applicant will comply with the CESA to obtain a 2081 incidental take permit <u>for CTS and/or comply with California Fish and Game Code to obtain take authorization for SCLTS<sup>5</sup></u> from CDFW prior to the issuance of a grading permit.</p> <p><sup>5</sup><u>As described above in the Setting, fully protected species may not be taken or possessed except with authorization from CDFW and only under specific circumstances, including maintenance, repair, or improvement projects to critical regional or local water agency infrastructure. Consultation with CDFW must occur to confirm that take authorization for SCLTS may be authorized under this exception; however, it is assumed that the project falls under the definition of critical local water agency infrastructure.</u></p> |
| IS/MND Page 38<br>Text of Mitigation<br>Measure BIO-9 item<br>b) revised | <p>If it is determined that authorization for the incidental take of these species is required from the USFWS, the project will comply with the ESA to obtain <del>Section 7</del> <u>or Section 10 or GCP</u> authorization from USFWS at the project-level prior to the issuance of a grading permit. <u>Take authorization for SCLTS must be initiated through the GCP described above in the Setting.</u></p> <p><sup>6</sup><u>As described in the Setting, the GCP is intended to provide a permitting mechanism to meet statutory and regulatory requirements of the ESA for SCLTS, as well as CTS and CRLF. Consultation with USFWS must occur to confirm that take authorization for SCLTS, CTS, and CRLF may be authorized under the GCP; however, it is assumed that the project qualifies for GCP take authorization because the project is located within the GCP plan area, the project is being proposed by a public agency - the Pajaro Valley Unified School District, and involves the maintenance of existing public infrastructure (i.e., the existing RHS water system).</u></p>                                                                                                                                                 |
| IS/MND Page 39<br>Text of Mitigation<br>Measure BIO-9 item<br>c) revised | A qualified biologist will survey the proposed work area and immediately adjacent areas 48 hours before and the morning of the onset of work activities for <del>the presence of</del> special-status amphibians.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| IS/MND Appendix B                                                        | Appendix B is updated per attached revised BRR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

*This Page Intentionally Left Blank*

## **SECTION 4. CONCLUSION**

The comments received during the public circulation period for the Renaissance High School Water System Improvements Project IS/MND did not raise any new environmental issues or provide information signifying that the project would result in additional impacts or impacts of greater severity than described in the circulated IS/MND. In conclusion, the IS/MND provides a legally adequate level of environmental review for the project pursuant to California Public Resources Code §21080(c) and 21081.1(a), and CEQA Guidelines §15070.

*This Page Intentionally Left Blank*

## **Attachment A – Consolidated Public Comment Letters**

*This Page Intentionally Left Blank*



***The Amah Mutsun Tribal Band of San Juan Bautista  
&  
A.M.T.B. Inc.***

***Letter of Response***

***To whom it may concern:***

It is our pride and privilege to be of service for any Native American Cultural Resource Monitoring, Consulting and/ or Sensitivity Training you may need or require. We take our Heritage and History seriously and are diligent about preserving as much of it as we can. Construction is a constant in the Bay Area and with that new discoveries are bound to happen. If you choose our services, we will gladly guide all personnel through proper procedures to safely protect and preserve: Culture, Heritage, and History.

It is highly recommended, if not previously done, to search through Sacred Lands Files (SLF) and California Historical Resource Information Systems (CHRIS) as well as reaching out to the Native American Heritage Commission (NAHC) In order to determine whether you are working in a Cultural and/ or Historic sensitivity.

If you have received any positive cultural or historic sensitivity within 1 mile of the project area here are A.M.T.B Inc's and Amah Mutsun Tribal Band of San Juan Bautista's recommendations:

- All Crews, Individuals and Personnel who will be moving any earth be Cultural Sensitivity Trained.
- A Qualified California Trained Archaeological Monitor is present during any earth movement.
- A Qualified Native American Monitor is present during any earth movement.

If further Consultation, Monitoring or Sensitivity Training is needed please feel free to contact A.M.T.B. Inc. or Myself Directly. A.M.T.B. Inc. 650 851 7747

*Irenne Zwiierlein*

Irenne Zwiierlein



3030 Soda Bay Road, Lakeport  
CA 95453  
[amtbtnc21@gmail.com](mailto:amtbtnc21@gmail.com)  
(650)851-7447

***Amah Mutsun Tribal Band of San Juan Bautista  
&  
AMTB Inc.***

***3030 Soda Bay Road Lakeport, CA 95453***

Our rates for 2024 are

\$275.00 per hour.

4 hours minimum

Cancellations not 48 hours (about 2 days) prior will be charged as a 4-hour minimum. There is a round trip mileage charge if canceled after they have traveled to site.

Anything over 8 hours a day is charged as time and a half.

Weekends are charged at time and a half.

Holidays are charged at double the time.

For fiscal year (FY) 2024, standard per diem rate of \$412. (\$333. lodging, \$79 M&IE).

**M&IE Breakdown FY 2023**

| <b>M&amp;IE Total<sup>1</sup></b> | <b>Continental Breakfast/<br/>Breakfast<sup>2</sup></b> | <b>Lunch<sup>2</sup></b> | <b>Dinner<sup>2</sup></b> | <b>Incidental Expenses</b> | <b>First &amp; Last Day of Travel<sup>3</sup></b> |
|-----------------------------------|---------------------------------------------------------|--------------------------|---------------------------|----------------------------|---------------------------------------------------|
| <b>\$79.00</b>                    | \$18.00                                                 | \$20.00                  | \$36.00                   | \$5.00                     | \$59.25                                           |

Beginning 2024, the standard mileage rates for the use of a car round trip (also vans, pickups or panel trucks) will be: \$.67 cents per mile driven for business use or what the current federal standard is at the time.

Our Payment terms are 5 days from date on invoice.

Our Monitors are Members of the Amah Mutsun Tribal Band of Mission San Juan Bautista.

If you have any questions, please feel free to contact the A.M.T.B. Inc. at the below contact information.

Sincerely,

*Irenne Zwierlein*

Irenne Zwierlein

3030 Soda Bay Rd, Lakeport  
CA 95453  
amtbin21@gmail.com  
(650)851-7747



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/29/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

|                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRODUCER</b><br>Allied Brokers<br>591 Lytton Avenue<br><br>Palo Alto CA 94301                                   | <b>CONTACT NAME:</b><br><b>PHONE (A/C, No, Ext):</b> (650) 328-1000<br><b>FAX (A/C, No):</b> (650) 324-1142<br><b>E-MAIL:</b> BusinessVIP@alliedbrokers.com<br><b>ADDRESS:</b><br><br><b>INSURER(S) AFFORDING COVERAGE</b><br><b>INSURER A:</b> Scottsdale Insurance Company<br><b>INSURER B:</b> United States Liability Insurance Company<br><b>INSURER C:</b><br><b>INSURER D:</b><br><b>INSURER E:</b><br><b>INSURER F:</b> |
| <b>INSURED</b><br>Amah Mutsun Tribal Band Consulting & Monitoring, LLC<br>330 Soda Bay Rd<br><br>Lakeport CA 95453 | <b>NAIC #</b><br>41297<br>25895<br><br><br><br><br><br>                                                                                                                                                                                                                                                                                                                                                                         |

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE                                                                                                                                                                                                                                                                                                               | ADDL INSD | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS                                                                                                                                                                                                                                   |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|---------------|-------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A        | <input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b><br><input type="checkbox"/> CLAIMS-MADE   <input checked="" type="checkbox"/> OCCUR<br><br>GEN'L AGGREGATE LIMIT APPLIES PER:<br><input checked="" type="checkbox"/> POLICY   <input type="checkbox"/> PROJECT   <input type="checkbox"/> LOC<br>OTHER: |           |          | CPS7829150    | 07/09/2023              | 07/09/2024              | EACH OCCURRENCE \$ 1,000,000<br>DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000<br>MED EXP (Any one person) \$ 5,000<br>PERSONAL & ADV INJURY \$ 1,000,000<br>GENERAL AGGREGATE \$ 2,000,000<br>PRODUCTS - COMP/OP AGG \$ 1,000,000 |
|          |                                                                                                                                                                                                                                                                                                                                 |           |          |               |                         |                         | COMBINED SINGLE LIMIT (Ea accident) \$<br>BODILY INJURY (Per person) \$<br>BODILY INJURY (Per accident) \$<br>PROPERTY DAMAGE (Per accident) \$                                                                                          |
|          |                                                                                                                                                                                                                                                                                                                                 |           |          |               |                         |                         |                                                                                                                                                                                                                                          |
|          |                                                                                                                                                                                                                                                                                                                                 |           |          |               |                         |                         |                                                                                                                                                                                                                                          |
|          | <b>AUTOMOBILE LIABILITY</b><br><input type="checkbox"/> ANY AUTO<br><input type="checkbox"/> OWNED AUTOS ONLY<br><input type="checkbox"/> HIRED AUTOS ONLY<br><input type="checkbox"/> SCHEDULED AUTOS<br><input type="checkbox"/> NON-OWNED AUTOS ONLY                                                                         |           |          |               |                         |                         |                                                                                                                                                                                                                                          |
|          | <b>UMBRELLA LIAB</b><br><b>EXCESS LIAB</b><br>DED   RETENTION \$                                                                                                                                                                                                                                                                |           |          |               |                         |                         | EACH OCCURRENCE \$<br>AGGREGATE \$                                                                                                                                                                                                       |
|          | <b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b><br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)<br>If yes, describe under DESCRIPTION OF OPERATIONS below                                                                                                                                   |           |          |               |                         |                         | PER STATUTE   OTHER<br>E.L. EACH ACCIDENT \$<br>E.L. DISEASE - EA EMPLOYEE \$<br>E.L. DISEASE - POLICY LIMIT \$                                                                                                                          |
| B        | Professional Liability                                                                                                                                                                                                                                                                                                          |           |          | SP1573468C    | 06/21/2023              | 06/21/2024              | Each Claim \$1,000,000<br>Aggregate \$1,000,000                                                                                                                                                                                          |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Proof of Coverage

**CERTIFICATE HOLDER****CANCELLATION**

FOR YOUR INFORMATION

SHOULD ANY OF THE ABOVE-DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Mimi Watson

© 1988-2015 ACORD CORPORATION. All rights reserved.

Hello Herlindo,

In reviewing the initial study for this project I noted a few corrections or issues I need to comment on and hopefully address before we process the Coastal Development Permit. First of all is the statement that “There are no adopted Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) associated with the project site.” Pg 29. The USFWS recently adopted a General Conservation Plan that covers the project site and includes CRLF, CTS, and SCLTS. Obtaining incidental take coverage under this GCP should facilitate this project.

The second are the statements in the biotic section that incidental take permits may be obtained for take of the SCLTS. As a fully protected species, incidental take is not allowed by CDFW, so avoidance must be met. Avoidance may still be feasible in the routing of the pipeline through gaps in the oak woodland that are dominated by pampas/jubata grass, but if that is not supported by your biologist and the state and federal wildlife agencies, avoidance of the oak woodland could be met by running the line out to the school parking lot and back along San Andreas.

Finally, surveying prior to disturbance for a species that lives underground is not a viable way to determine presence or absence, and the presence of rodent burrows should be considered assumed presence of CTS is grassland and SCLTS in oak woodland etc.

Along with the CDP the County has to process, we will need to review the biotic report for conformance with our sensitive habitat ordinance to obtain biotic approval. Please be sure it is included in that submittal.



**Matt Johnston**

Principal Planner for Environmental  
Planning  
Community Development &  
Infrastructure

**Phone:** 831-454-5357  
701 Ocean Street, Room 400



**Attachment B – Revised Biological Resources Report**

# Renaissance High School Project Biological Resources Report

*Report Preparation Date* August 28, 2024~~July 10, 2023~~

*County of Santa Cruz Application Number* TBD

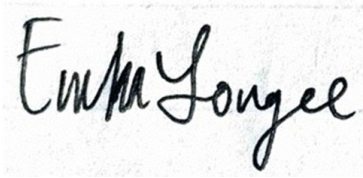
*Assessor Parcel Numbers* 046-02-108, 046-02-109

*Physical Address* 11 Spring Valley Road,  
Selva Beach, CA 95076

*Applicant* Soquel Creek Water District

*Reporting Biologist* Rikki Lougee  
Associate Environmental Scientist  
Denise Duffy & Associates, Inc.  
947 Cass Street, Suite 5  
Monterey, California 93940  
(831) 373-4341

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of Santa Cruz Planning Department and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visit(s) associated with this report.

A handwritten signature in black ink, reading "Emma Lougee". The signature is written in a cursive style with a large, stylized 'E' and 'L'.

Rikki Lougee, Associate Environmental Scientist  
DENISE DUFFY & ASSOCIATES, INC.

*This page was left intentionally blank*

## TABLE OF CONTENTS

|                                              |    |
|----------------------------------------------|----|
| 1.0 INTRODUCTION .....                       | 1  |
| 1.1 Summary of Results .....                 | 2  |
| 2.0 METHODS .....                            | 5  |
| 2.1 Personnel and Survey Dates .....         | 5  |
| 2.2 Data Sources.....                        | 5  |
| <i>Botany</i> .....                          | 5  |
| <i>Wildlife</i> .....                        | 6  |
| 2.3 Special-Status Species .....             | 6  |
| 2.4 Sensitive Habitats .....                 | 7  |
| 2.5 Regulatory Setting.....                  | 7  |
| <i>Federal Regulations</i> .....             | 7  |
| <i>State Regulations</i> .....               | 8  |
| 3.0 RESULTS .....                            | 12 |
| 3.1 Vegetation Types.....                    | 12 |
| <i>3.1.1 Developed</i> .....                 | 12 |
| 3.2 Sensitive Habitats .....                 | 14 |
| 3.3 Special-Status Species.....              | 15 |
| <i>Special-Status Wildlife Species</i> ..... | 15 |
| 4.0 IMPACTS AND MITIGATION .....             | 22 |
| 4.1 Impact Thresholds .....                  | 22 |
| 4.2 Impacts and Recommendations .....        | 22 |
| REFERENCES .....                             | 31 |

## APPENDICES

**APPENDIX A:** Special-Status Species Table

**APPENDIX B:** California Natural Diversity Database Report

**APPENDIX C:** Information for Planning and Consulting (IPaC) Resource List

## FIGURES

|                                                       |    |
|-------------------------------------------------------|----|
| Figure 1 - Project Location .....                     | 3  |
| Figure 2 - Survey Area.....                           | 4  |
| Figure 3 - Vegetation Types .....                     | 20 |
| Figure 4 - Special-Status Amphibian Occurrences ..... | 21 |

## 1.0 INTRODUCTION

Denise Duffy & Associates, Inc. (DD&A) was contracted by Weber, Hayes & Associates to prepare a Biological Resources Report for the Renaissance High School Project (project). The project is located at Renaissance High School (RHS) in La Selva Beach, Santa Cruz County, California (**Figure 1**). RHS's single water supply well draws water from the Pajaro Valley Groundwater Basin, which the Department of Water Resources classified as a high-priority groundwater basin in critical overdraft due to the ongoing threat of further seawater intrusion. RHS is proposing to consolidate their existing water system with Soquel Creek Water District (SCWD), which includes a new water main, water distribution lines, "jack & bore" steel casing installation under the railroad tracks, water meters, backflow prevention assemblies, a pressure pump, and associated appurtenances.

The existing SCWD water main currently terminates near the intersection of San Andreas Road and Sand Dollar Drive. A new, 12-inch diameter PVC C900 water main would extend from this intersection southeast approximately 800-feet along San Andreas Road. The proposed 12-inch diameter water main would terminate in front of the RHS property along San Andreas Road. Two, 2-inch diameter water distribution lines (domestic & irrigation) would extend perpendicularly from the 12-inch water main toward the RHS property. Two water meter boxes and two backflow prevention assemblies (i.e., one water meter box and one backflow prevention assembly for the domestic water line and one for the irrigation line) would be installed adjacent to the north side of San Andreas Road. The 12-inch water main would terminate approximately 4-feet southeast of the water distribution line connection points. A fire hydrant placed in this area would allow the 12-inch water main to be periodically flushed. A 12-inch blind flange would be placed on the southeast end of the 12-inch water main, which would help facilitate a water main extension at some point in the future.

From the water meter boxes and the backflow prevention assemblies mentioned above, the two water distribution lines would extend underneath the existing railroad tracks (the railroad tracks run parallel to and northeast of San Andreas Road). The two water distribution lines would be encased in a protective 50-foot long, 15.25-inch diameter steel casing that is centered on (and perpendicular to) the railroad tracks. The steel casing would be installed using "jack & bore", which is a trenchless steel casing installation method. This method consists of excavating one pit on each side of the railroad tracks spaced about fifty feet apart (i.e., one "sending" and one "receiving" pit). As the two water distribution lines exit the far side of the steel casing, they would extend onto the RHS property. The domestic distribution line would extend approximately 400-feet and tie into the RHS existing domestic water system located near the northwest side of Building E. The irrigation distribution line would extend approximately 550-feet and tie into the RHS existing irrigation system. A pressure pump would be placed on this distribution line to boost the water pressure.

This report describes the existing biological resources within and adjacent to the survey area, including any special-status species or sensitive habitats known or with the potential to occur within and adjacent to the site. This report also assesses the potential impacts to biological resources that may result from the project, and recommends appropriate avoidance, minimization, and mitigation measures necessary to reduce those impacts to a less-than-significant level in accordance with the California Environmental Quality Act (CEQA).

## 1.1 Summary of Results

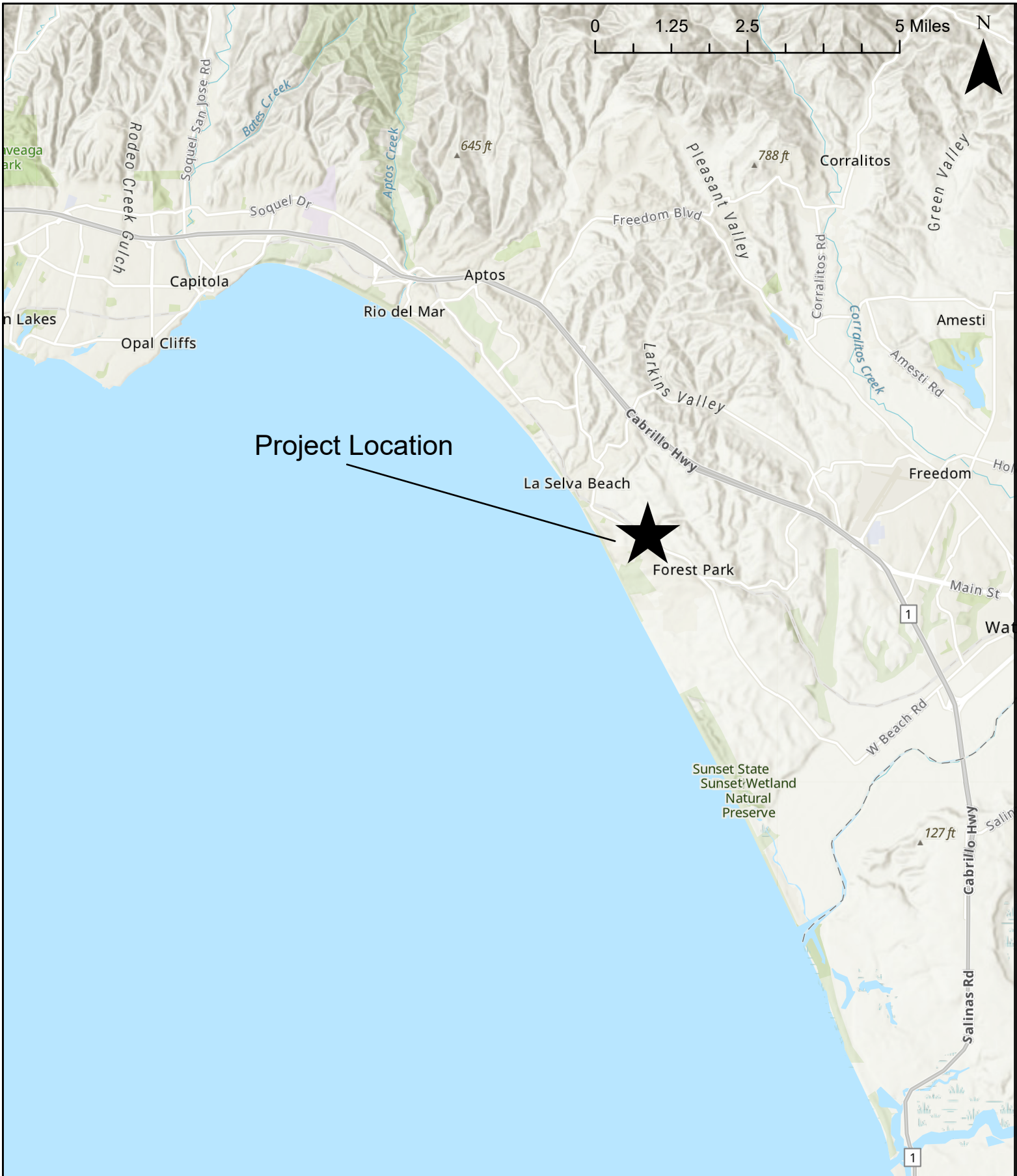
The project is located within the Coastal Zone, approximately 0.5 miles east of the Pacific Ocean. The survey area was provided by the project team and includes the RHS parcel and adjacent areas along San Andreas Road and Spring Valley Road that will be impacted by the project (**Figure 2**). Four vegetation types were observed within the undeveloped portions of the survey area: ruderal/disturbed, Monterey pine forest, oak woodland, and scrub. The remainder of the survey area consists of developed areas (paved areas and RHS facilities).

Multiple special-status wildlife species have the potential to occur within and adjacent to the survey area. Additionally, trees within and adjacent to the survey area may provide suitable nesting habitat for avian species. Sensitive habitats within the survey area include Critical Habitat for California red-legged frog (*Rana draytonii*; CRLF) and coast live oak woodland habitat. The following special-status species are known or have a moderate or high potential to occur within or immediately adjacent to the survey area:

- California tiger salamander (*Ambystoma californiense*; CTS) – FT/ST<sup>1</sup>,
- Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*; SCLTS) – FT/SE/FP,
- California red-legged frog (*Rana draytonii*; CRLF) – FT/CSC,
- San Francisco dusky footed woodrat (*Neotoma fuscipes annectens*) – CSC,
- Pallid bat (*Antrozous pallidus*) – CSC,
- Townsend’s big-eared bat (*Corynorhinus townsendii*) – CSC, and
- Raptors and other protected avian species.

Impacts to these special-status wildlife species and their habitats would be considered significant under CEQA; however, mitigation is provided to reduce potential impacts to a less-than-significant level, including avoidance of nesting and roosting season, pre-construction surveys, a worker education program, coordination and consultation with regulatory agencies, and acquisition of regulatory permits. Published occurrence data within the proposed project areas and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the survey area (**Appendix A**). All other species within the table are assumed “unlikely to occur” or have a low potential to occur for the species-specific reason presented in **Appendix A**.

<sup>1</sup> Status Definitions – CSC: California Species of Concern; FE: Federally Endangered; FT: Federally Threatened; SE: State Endangered; ST: State Threatened; SR: State Rare; FP: California Fully Protected Species; 1B: California Rare Plant Rank 1B.



## Project Location



**Denise Duffy & Associates, Inc.**  
Planning and Environmental Consulting

Date  
3/24/2023

Scale  
1:130,000

Figure  
**1**



 Survey Area

0 125 250 500 Feet



## Survey Area



**Denise Duffy & Associates, Inc.**  
Planning and Environmental Consulting

Date  
3/24/2023  
Scale  
1:3,200

Figure  
**2**

## 2.0 METHODS

### 2.1 Personnel and Survey Dates

DD&A Associate Environmental Scientist, Rikki Lougee, conducted a reconnaissance level survey of the survey area on March 20, 2023, to identify any special-status wildlife species or suitable habitat for these species, characterize vegetation types, and identify any sensitive habitats present within the survey area. Survey methods included walking the survey area using aerial maps and GPS to map biological resources. Available reference materials were reviewed prior to conducting the field survey (see “Data Sources” below). Data collected during the survey were used to assess the environmental conditions of the survey area and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

The survey area was surveyed for botanical resources following the applicable guidelines outlined in the U.S. Fish and Wildlife Service (USFWS) *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000), the CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018), and the California Native Plant Society (CNPS) *Botanical Survey Guidelines* (CNPS, 2001).

### 2.2 Data Sources

The primary literature and data sources reviewed to determine the occurrence or potential for occurrence of special-status species within and adjacent to the survey area include:

- Current agency status information from the USFWS and CDFW for species listed, proposed for listing, or candidates for listing as Threatened or Endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA), and those considered CDFW “species of special concern” (CDFW, 2023a);
- CDFW’s California Natural Diversity Database (CNDDDB) occurrence reports for the Watsonville West quadrangle and the surrounding quadrangles (Laurel, Loma Prieta, Mt. Madonna, Soquel, Watsonville East, Moss Landing, and Prunedale) (CDFW, 2023b; **Appendix B**);
- The USFWS’s Information for Planning and Consulting (IPaC) Resource List (USFWS, 2023a: **Appendix C**); and
- The CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2023).

From these resources, a list of special-status plant and wildlife species known or with the potential to occur within and adjacent to the survey area was created (**Appendix A**). The list presents these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur.

### **Botany**

Vegetation types identified in *A Manual of California Vegetation* (Sawyer et.al., 2009) were utilized to determine if vegetation types identified as sensitive on CDFW’s *California Natural Communities List* (CDFW, 2023c) are present within the survey area. Scientific nomenclature for plant species identified within this document follows *The Jepson Manual: Vascular Plants of California, Edition 2* (Baldwin et al., 2012); common names follow *The Plants of Monterey County: An Illustrated Field Key* (Matthews and

Mitchell, 2015). The California Invasive Plant Council (Cal-IPC) Inventory (Cal-IPC, 2023) was reviewed to determine if any invasive plant species are present within the survey area.

## **Wildlife**

The wildlife literature and data sources were reviewed include CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994), California Wildlife Habitat Relationships Program species-habitat models (Zeiner et al., 1988; and Zeiner et al., 1990), and general wildlife references (Stebbins, 1972, 1985, and 2003).

## **2.3 Special-Status Species**

Special-status species are those plants and animals that have been formally listed or proposed for listing as Endangered or Threatened or are Candidates for such listing under ESA or CESA. Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Section 15380 are also considered special-status species. Animals identified as “species of special concern” (most of which are species whose breeding populations in California may face extirpation if current population trends continue) on the CDFW’s “Special Animals” list (CDFW, 2023a) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA.

Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included in CNPS California Rare Plant Ranks (CRPR; formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380.<sup>2</sup> In general, CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere), and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2023) be fully considered during the preparation of environmental documents relating to CEQA.<sup>3</sup> In addition, species of vascular plants, bryophytes, and lichens listed as having special-status by the CDFW are considered special-status plant species (CDFW, 2023b).

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto.” In addition, fully protected species under the Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

<sup>2</sup> CNPS initially created five CRPR to categorize degrees of concern; however, to better define and categorize rarity in California’s flora, the CNPS Rare Plant Program and Rare Plant Program Committee have developed the new CRPR 2A and CRPR 2B.

<sup>3</sup> Species on CRPR 3 (Plants about which we need more information - a review list) and CRPR 4 (Plants of limited distribution - a watch list) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA.

## 2.4 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Vegetation types considered sensitive include those identified as sensitive on the CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2023c) and those that are occupied by species listed under ESA or are critical habitat in accordance with ESA, and those that are defined as ESHA under the CCA. Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act [CWA] and Executive Order 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

## 2.5 Regulatory Setting

The following regulatory discussion describes the laws that may be applicable to the project.

### ***Federal Regulations***

#### *Federal Endangered Species Act*

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally Listed Threatened or Endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by the USFWS or National Marine Fisheries Service (NMFS). In general, NMFS is responsible for the protection of ESA-Listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the fish or wildlife...including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.” In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

#### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. The USFWS is responsible for overseeing compliance with the MBTA.

#### *General Conservation Plan for Amphibians in Southern Santa Cruz County*

USFWS developed a General Conservation Plan for Amphibians in Southern Santa Cruz County (GCP) to provide an efficient and effective permitting mechanism for private and public landowners to meet statutory

and regulatory requirements while promoting conservation of the SCLTS. Although the focal species of the GCP is SCLTS, CRLF and CTS co-occur at various locations within the GCP plan area and take for these species may also be authorized under the GCP. The GCP is a conservation plan as required in section 10(a)(2)(A) of the ESA for issuance of an incidental take permit pursuant to section 10(a)(1)(B). To qualify for take authorization under the GCP, the project must 1) be located within the GCP Plan Area; 2) consist of actions discussed under Covered Activities including residential dwellings, construction and maintenance on public lands such as roads, drainages, parks, and habitat restoration activities; and 3) agree to implement the avoidance, minimization, and mitigation actions described in the GCP. Projects undertaken on public lands must be constrained to the maximum extent possible and must not contain barriers to Covered Species dispersal or drainage facilities that could result in the entrapment of Covered Species.

### ***State Regulations***

#### *California Endangered Species Act*

CESA was enacted in 1984. The California Code of Regulations (Title 14, §670.5) lists animal species considered Endangered or Threatened by the State. Section 2090 of CESA requires State agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an Endangered species or a Threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize "take" of any State Listed species.

#### *California Native Plant Protection Act*

The CNPPA of 1977 directed the CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and Endangered plants in the State." The CNPPA prohibits importing rare and Endangered plants into California, taking rare and Endangered plants, and selling rare and Endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA; however, these plants may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research.

#### *California Fish and Game Code*

**Birds:** Section 3503 of the Fish and Game Code states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits take of nongame birds.

**Fully Protected Species:** The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (§5515), mammals (§4700), amphibians and reptiles (§5050), and birds (§3511). Most fully protected species have also been listed as threatened or endangered species under the more recent

endangered species laws and regulations. ~~Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.~~ Fully protected species may not be taken or possessed except with authorization from CDFW and only under specific circumstances. CDFW may authorize take of fully protected species for necessary scientific research, including efforts to recover fully protected or CESA-listed species, relocation of a fully protected bird species for the protection of livestock, or if the fully protected species is listed as a covered species whose conservation and management is provided for in a Natural Community Conservation Plan. Additionally, CDFW may authorize take of fully protected species that is incidental to a project only for projects related to the State Water Project, critical regional or local water agency infrastructure, or certain transportation, wind, and solar projects.

**Species of Special Concern:** As noted above, the CDFW also maintains a list of wildlife “species of special concern.” Although these species have no legal status, the CDFW recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as Endangered in the future.

### *California Coastal Act*

The California Coastal Commission (CCC) was established by voter initiative in 1972 (Proposition 20) and later made permanent by the California State Legislature through adoption of the California Coastal Act of 1976 (CCA). The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California’s coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which are broadly defined by the CCA to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a Coastal Development Permit (CDP) from either the CCC or the local government if a Local Coastal Program (LCP) has been certified. After certification of an LCP, coastal development permit authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The Commission also has appellate authority over development approved by local governments in specified geographic areas as well as certain other developments. A CDP is required in addition to any other permit required from resource agencies.

The CCC or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the CCA defines an “environmentally sensitive area” as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the CCA states that “environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.” This section also states that “development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.”

In Santa Cruz County, the Coastal Zone extends approximately five miles inland from the North Coast and is regulated under the County's Local Coastal Program. In accordance with Santa Cruz County Code (SCCC) Section 13.20, any person who wishes to do any sort of land development must obtain a Level 5 development permit from the County. "Development" includes:

- Construction, reconstruction, size alteration, or demolition of a structure,
- Grading, removing, placement, and extraction of any earth material,
- Subdivision and minor land division,
- Change in the density or intensity of land use, and
- Harvesting of major vegetation, except for agriculture and timber harvesting.

#### *California Essential Habitat Connectivity Project*

In 2010, CDFW and the California Department of Transportation (Caltrans) commissioned a team of consultants to produce a statewide assessment of essential habitat connectivity using the best available science, data sets, spatial analyses, and modeling techniques. The goal was to identify Essential Habitat Connectivity Area (EHCA), which are large remaining blocks of intact habitat or natural landscape and model linkages between them that need to be maintained, particularly as corridors for wildlife. Over sixty federal, state, local, tribal, and non-governmental organizations collaborated in the creation of a statewide wildlife habitat connectivity map using a GIS-based modeling approach, an assessment of the biological value of identified connectivity areas, and a strategic plan that helps varied end users interpret and use the statewide map and outlines a methodology necessary for completing connectivity analyses at finer spatial scales. The project site is not located within an EHCA.

#### ***Local Regulations***

##### *Sensitive Habitat Protection Ordinance*

Santa Cruz County Code (SCCC) Section 16.32 regulates the disturbance of biological communities which are rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activity. These communities include but are not limited to oak woodlands. Because the survey area is within the Coastal Zone, oak woodland habitat also constitutes ESHA under the CCA. Per SCCC Section 16.32.060, no person shall commence any development activity within an area of biological concern until a biotic approval has been issued or unless such activity has been reviewed for biological concerns concurrently with the review of a development or land-division application.

Additionally, the SCCC establishes a salamander protection zone (SP zone), which provides additional protection of the population and habitat of the SCLTS. However, the project site is not located within the SP zone.

##### *Tree Protection*

Per SCCC Section 16.34, a tree removal permit from the County Planning Director is required to remove or damage significant trees, as defined in SCCC Section 16.34.030, in the County's Coastal Zone. Per SCCC Section 16.32, a tree removal permit is also required to remove or damage any tree located in a sensitive habitat, as defined by SCCC Section 16.32.040.

*This page was left intentionally blank*

### 3.0 RESULTS

#### 3.1 Vegetation Types

The survey results include mapping and quantification of the acreage of four vegetation types within the survey area (**Figure 3; Table 1**). The remainder of the survey area consists of developed areas. A description of these vegetation types can be found below along with the identification of the presence or potential presence of special-status species within each type. The following is the acreage of each vegetation type within the survey area:

**Table 1 – Quantification of Vegetation Types in the Survey Area**

| Vegetation Type      | Acreage |
|----------------------|---------|
| Ruderal/Disturbed    | 9.3     |
| Monterey Pine Forest | 3.0     |
| Oak Woodland         | 3.6     |
| Scrub                | 0.9     |

##### 3.1.1 Developed

- *A Manual of California Vegetation* classification(s): None
- *California Natural Communities List*: Not listed
- *Sensitive Habitat as Defined by SCCC Section 16.32*: Not Sensitive

Approximately 6.3 acres of the survey area is developed, including paved roads, parking areas, and structures (**Figure 3**). No special-status wildlife species were observed within the developed areas; however, raptors and other protected avian species may nest within trees present in developed areas.

##### 3.1.2 Ruderal/Disturbed

- *A Manual of California Vegetation* classification(s): None
- *California Natural Communities List*: Not listed
- *Sensitive Habitat as Defined by SCCC Section 16.32*: Not Sensitive

Ruderal and disturbed areas are those areas which have been subject to historic and ongoing disturbance by human activities and are devoid of vegetation or dominated by non-native and/or invasive weed species. Ruderal areas within the survey area include the RHS field and garden, the Union Pacific railroad tracks adjacent to RHS, landscaped areas, and other disturbed areas (**Figure 3**). These areas are dominated by non-native weedy species, are regularly maintained, or are devoid of vegetation. Dominant species observed include slender wild oat (*Avena barbata*), red-stemmed filaree (*Erodium cicutarium*), ribwort plantain (*Plantago lanceolata*), soft chess (*Bromus hordeaceus*), hairy cats-ear (*Hypochaeris radicata*), velvet grass (*Holcus lanatus*), wild radish (*Raphanus sativus*), black mustard (*Brassica nigra*), Bermuda buttercup (*Oxalis pes-caprae*), and bur clover (*Medicago polymorpha*). Approximately 9.3 acres of ruderal and disturbed habitat is present within the survey area.

Ruderal and disturbed areas provide only low-quality habitat for plants and wildlife. Common wildlife species which do well in urbanized and disturbed areas that may occur within the ruderal habitat include American crow (*Corvus brachyrhynchos*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), scrub jay (*Aphelocoma californica*), European starling (*Sturnus vulgaris*), western fence lizard (*Sceloporus occidentalis*), and rock dove (*Columba livia*). Protected avian species, including raptors, may nest within trees present throughout this habitat type. CTS may utilize ruderal areas as upland habitat where small mammal burrows are present, and CRLF have the potential to disperse through ruderal areas.

### 3.1.3 Monterey Pine Forest

- *A Manual of California Vegetation* classification(s): Monterey cypress – Monterey pine woodland stand (*Hesperocyparis macrocarpa* – *Pinus radiata* forest and woodland alliance)
- *California Natural Communities List*: Sensitive
- *Sensitive Habitat as Defined by SCCC Section 16.32*: Not Sensitive

Monterey pines occur in three disjunct populations throughout California: southern San Mateo County, the Monterey Peninsula, and the Cambria-San Simeon area; however, this species is widely planted throughout California. Monterey pine forest habitat in the survey area is comprised of a closed canopy of Monterey pine (*Pinus radiata*) with a limited understory due to a thick layer of duff and fallen trees on the forest floor. Where present, understory vegetation includes coast live oak (*Quercus agrifolia*) seedlings, and non-native annual plant species such as Italian thistle (*Carduus pycnocephalus*) and annual grasses. Blue gum (*Eucalyptus globulus*) trees are present on the edges of Monterey pine forest habitat. Approximately 3.0 acres of Monterey pine forest habitat is present within the survey area (**Figure 3**).

Monterey pine forest habitat may provide suitable habitat for black-tailed deer (*Odocoileus hemionus columbianus*), raccoon, red-tailed hawk (*Buteo jamaicensis*), scrub jay, chestnut-backed chickadee (*Poecile rufescens*), and American robin (*Turdus migratorius*). Monterey pine forest habitat may provide upland habitat for SCLTS and roosting habitat for special-status bat species. Multiple woodrat nests were observed within this habitat during the March 2023 reconnaissance level survey.

Monterey pine is a CNPS List 1B species and Monterey pine forest is a sensitive habitat as identified on CDFW's *California Natural Communities List*; however, the survey area is outside the native range of the species (CDFW, 2023b). Monterey pine forest located outside of the native range are typically not given the same management considerations and therefore are not considered sensitive.

### 3.1.4 Oak Woodland

- *A Manual of California Vegetation* classification(s): Coast live oak woodland (*Quercus agrifolia* woodland alliance)
- *California Natural Communities List*: Not sensitive
- *Sensitive Habitat as Defined by SCCC Section 16.32*: Sensitive

Coast live oak woodlands occur in the more mesic areas of coastal California from Sonoma County south into Baja California. They are dominated by open to nearly closed canopies of coast live oak. The oak woodland habitat within the survey area consists of a relatively open canopy of coast live oak with Monterey pine and golden wattle (*Acacia longifolia*) scattered throughout. Non-dominant plant species present within this habitat include coyote brush (*Baccharis pilularis*) and coffee berry (*Frangula californica*). The oak

woodland habitat on either side of the Union Pacific railroad tracks is highly disturbed by the presence of non-native species including jubata grass (*Cortaderia jubata*) and golden wattle. Approximately 3.6 acres of coast live oak woodland is present within the survey area (**Figure 3**).

Oak woodland is an important habitat for many wildlife species. Oaks provide nesting sites for many avian species and cover for a variety of mammals. Acorns provide an important food source for acorn woodpecker (*Melanerpes formicivorus*), western scrub jay, and black-tailed deer. Other common wildlife species found in coast live oak woodland are Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), bobcat (*Lynx rufus*), and coyote (*Canis latrans*). Coast live oak woodland habitat may provide upland habitat for SCLTS and roosting habitat for special-status bat species. Multiple woodrat nests were observed within this habitat during the March 2023 reconnaissance level survey. Coast live oak woodlands are not considered sensitive on the *California Natural Communities List*; however, this habitat is considered sensitive under the County's Sensitive Habitat Protection Ordinance (SCCC Chapter 16.32.40). Coast live oak woodland within the project site occurs within the Coastal Zone and, therefore, is considered ESHA.

### 3.1.5 Scrub

- *A Manual of California Vegetation* classification(s): Coyote brush scrub (*Baccharis pilularis* shrubland alliance)
- *California Natural Communities List*: Not sensitive
- *Sensitive Habitat as Defined by SCCC Section 16.32*: Not Sensitive

The structure of plant associations that comprise scrub habitat typically consist of low to moderate-sized shrubs with sclerophyllous leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Dominant species within scrub habitat in the survey area include coyote brush, coffee berry, and poison oak (*Toxicodendron diversilobum*). The understory vegetation includes mugwort (*Artemisia douglasiana*), California blackberry (*Rubus ursinus*), and Italian thistle. Approximately 0.9 acres of scrub habitat occur within the survey area (**Figure 3**).

Though vegetative productivity is lower in scrub habitat than in adjacent chaparral habitats associated with it, scrub habitat appears to support roughly the same number of vertebrate species (Gray, 1982; Stebbins, 1978). Common wildlife observed within scrub habitat include scrub jay, chestnut-backed chickadee, western fence lizard, and brush rabbit (*Sylvilagus bachmani*). Scrub habitat within the survey area may provide upland habitat for SCLTS and roosting habitat for special-status bat species. Multiple woodrat nests were observed within this habitat during the March 2023 reconnaissance level survey.

## 3.2 Sensitive Habitats

The eastern half of the survey area lies within Critical Habitat Mapping Unit SCZ-2 for CRLF, which the Service designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). Additionally, coast live oak woodland is considered a sensitive habitat under SCCC Section 16.32.040. Development within this habitat is subject to the approval of the County. Coast live oak woodland within the project site occurs within the Coastal Zone and, therefore, is considered ESHA.

### 3.3 Special-Status Species

Published occurrence data within the proposed project areas and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the survey area (**Appendix A**).<sup>4</sup> Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the survey area. The special-status species that are known to or have been determined to have a moderate to high potential to occur within or immediately adjacent the survey area are discussed below. All other species within the table are assumed “unlikely to occur” or have a low potential to occur for the species-specific reasons presented in **Appendix A**.

#### *Special-Status Wildlife Species*

##### *California Tiger Salamander*

The CTS is a federal and state threatened species. The CTS is a large, stocky salamander most commonly found in annual grassland habitat, but also occurring in the grassy understory of valley-foothill hardwood and chaparral habitats, and uncommonly along stream courses in valley-foothill riparian habitats (USFWS, 2004). Adults spend most of their lives underground, typically in burrows of ground squirrels and other animals (USFWS, 2004). The California tiger salamander has been eliminated from an estimated 55 percent of its documented historic breeding sites. Currently, about 150 known populations of California tiger salamanders remain. The CTS persists in disjunct remnant vernal pool complexes in Sonoma County and Santa Barbara County, in vernal pool complexes and isolated stockponds scattered along a narrow strip of rangeland on the fringes of the Central Valley from southern Colusa County south to northern Kern County, and in sag ponds and human maintained stockponds in the coast ranges from the San Francisco Bay Area south to the Temblor Range.

Above-ground migratory and breeding activity may occur under suitable environmental conditions from mid-October through May. Adults may travel long distances between upland and breeding sites; adults have been found two kilometers (1.24 miles) from breeding sites (USFWS, 2004). Breeding occurs from November to February, following relatively warm rains (Stebbins, 2003). The CTS breeds and lays eggs primarily in vernal pools and other temporary rainwater ponds. Permanent human-made ponds are sometimes utilized if predatory fish are absent; streams are rarely used for reproduction. Eggs are laid singly or in clumps on both submerged and emergent vegetation and on submerged debris in shallow water (Stebbins, 1972; Jennings and Hayes, 1994). Males typically spend 6-8 weeks at breeding ponds, while females typically spend only 1-2 weeks (Loredo et al., 1996). Eggs hatch within 10-14 days (USFWS, 2004) and a minimum of 10 weeks is required to complete development through metamorphosis (Jennings and Hayes, 1994), although the larval stage may last up to six months and some larvae in Contra Costa and Alameda Counties may remain in their breeding sites over the summer (USFWS, 2004).

The CNDDB reports 36 occurrences of CTS within the seven quadrangles evaluated. The nearest CNDDB occurrence is located approximately 0.3 miles (0.5 km) from the survey area in Ellicott Pond, a known CTS breeding resource (**Figure 4**). Ellicott Pond is located within Ellicott Slough National Wildlife Refuge, which is located adjacent to the survey area and is managed for the protection of multiple special-status species, including CTS (USFWS, 2023b). One additional occurrence is located within the known dispersal distance for this species (1.4 miles [2.2 km]) of the survey area, located approximately 1.3 miles (2.1 km)

<sup>4</sup> The USGS quadrangles in which published CNDDB data was searched included Laurel, Loma Prieta, Mt. Madonna, Soquel, Watsonville West, Watsonville East, Moss Landing, and Prunedale.

from the survey area. No suitable breeding habitat is present within the survey area; however, suitable upland habitat for CTS is present within all undeveloped areas of the survey area where small mammal burrows are present. Therefore, this species has a moderate potential to occur within the survey area.

#### *Santa Cruz Long-Toed Salamander*

The SCLTS is listed as a federal and state Endangered species and is also a California fully protected species. The SCLTS is a subspecies of long-toed salamander (*Ambystoma macrodactylum*) that occurs in a small number of restricted localities in Santa Cruz and Monterey Counties. This subspecies is known to use several different plant community types for upland habitat, including riparian, willow thickets, coast live oak woodlands, dense coastal scrub, coastal chaparral, and Monterey pine forest (USFWS, 1999). Adults use upland areas immediately adjacent to their breeding site, as well as the surrounding areas up to 0.6 km; however, SCLTS has been recorded as far as 1.6 km (1.0 mi) from the nearest breeding site (Ruth and Tollestrup, 1973). For much of the year SCLTS find refuge in cool, moist places, such as small mammal burrows or under decayed wood piles, logs, or thick leaf litter. The upland habitat must also support an abundance of prey. Adult and sub-adult SCLTS eat a variety of invertebrates, including earthworms, slugs, isopods, beetles, and spiders.

Adult SCLTS migrate to breeding sites at night during rain events between November and March, with peak activity between December and February. During migration, the SCLTS may be found under surface objects such as rocks or logs near the breeding site. Ideal breeding locations appear to be shallow, temporary, freshwater ponds that lack fish and hold water at least through the spring months; however, they may also breed in permanent waterbodies, such as sloughs. Males often arrive at breeding sites before females and may stay longer. Females lay approximately 300 eggs singly on submergent aquatic vegetation in shallow water, approximately five to eight cm (2-3.2 inches) below the surface. Eggs hatch within 15-30 days and the larvae metamorphose between 90 and 145 days after hatching, depending on water temperature and food availability (USFWS, 1999). Terrestrial juveniles may spend the entire first summer of life in mammal burrows or under surface objects in the immediate vicinity of the breeding pond.

The CNDDDB reports 26 occurrences of SCLTS within the quadrangles reviewed, one of which overlaps the eastern boundary of the survey area (**Figure 4**). This occurrence is mapped generally as the Ellicott Slough National Wildlife Refuge, which was established in 1975 to protect habitat for this species and includes two of the 24 known breeding populations of this species (USFWS, 2023b). SCLTS is known to occur in Ellicott Pond, which is located approximately 0.5 miles (0.7 km) from the survey area and is within the known dispersal distance for this species (1.0 miles [1.6 km]). Two additional CNDDDB occurrences are located within the dispersal distance of this species. No suitable breeding habitat is present within the survey area; however, suitable upland habitat for SCLTS is present within the oak woodland, scrub, and Monterey pine habitats within the survey area. Therefore, this species has a moderate potential to occur within the survey area.

#### *California Red-Legged Frog*

The CRLF is listed as a federally Threatened and is also a CDFW species of special concern (USFWS, 1996). The CRLF is the largest native frog in California (44-131 mm snout-vent length) and was historically widely distributed in the central and southern portions of the state (Jennings and Hayes, 1994). Adults generally inhabit aquatic habitats with riparian vegetation, overhanging banks, or plunge pools for cover, especially during the breeding season (Jennings and Hayes, 1988). They may take refuge in small mammal burrows, leaf litter, or other moist areas during periods of inactivity or to avoid desiccation (Rathbun et al.,

1993; Jennings and Hayes, 1994). Radiotelemetry data indicates that adults engage in straight-line breeding season movements irrespective of riparian corridors or topography and they may move up to two miles between non-breeding and breeding sites (Bulger et al., 2003). During the non-breeding season, a wider variety of aquatic habitats are used including small pools in coastal streams, springs, water traps, and other ephemeral water bodies (USFWS, 1996). CRLF may also move up to 300 feet from aquatic habitats into surrounding uplands, especially following rains, where individuals may spend days or weeks (Bulger et al., 2003).

This species requires still or slow-moving water during the breeding season where it can deposit large egg masses, which are most often attached to submergent or emergent vegetation. Breeding typically occurs between December and April depending on annual environmental conditions and locality. Eggs require 6 to 12 days to hatch, and metamorphosis generally occurs after 3.5 to 7 months, although larvae are also capable of over-wintering. Following metamorphosis, generally between July and September, juveniles are 25-35 mm in size. Juvenile CRLF appear to have different habitat needs than adults. Jennings and Hayes (1988) recorded juvenile frogs mostly from sites with shallow water and limited shoreline or emergent vegetation. Additionally, it was important that there be small one-meter breaks in the vegetation or clearings in the dense riparian cover to allow juveniles to sun themselves and forage, but to also have close escape cover from predators. Jennings and Hayes also noted that tadpoles have different habitat needs and that in addition to vegetation cover, tadpoles use mud. It is speculated that CRLF larvae are algae grazers, however, foraging larval ecology remains unknown (Jennings, et al., 1993).

It has been shown that occurrences of CRLF are negatively correlated with presence of non-native bullfrogs (Jennings and Hayes, 1986 and 1988), although both species are able to persist at certain locations, particularly in the coastal zone. It is estimated that CRLF has disappeared from approximately 75% of its former range and has been nearly extirpated from the Sierra Nevada, Central Valley, and much of southern California (USFWS, 1996).

The CNDDDB includes 61 occurrences of CRLF within the seven quadrangles evaluated, the nearest of which is located approximately 0.3 miles (0.5 km) from the survey area in Ellicott Pond, a known CRLF breeding resource (**Figure 4**). Ellicott Pond is located within Ellicott Slough National Wildlife Refuge, which is located adjacent to the survey area and is managed for the protection of multiple special-status species, including CRLF (USFWS, 2023b). Two additional occurrences are located within the known dispersal distance (1.0 mile [1.6 km]) of the survey area, located approximately 0.4 miles (0.6 km) and 0.9 miles (1.5 km) from the survey area. No suitable breeding or upland habitat is present within the survey area; however suitable dispersal habitat is present within all undeveloped portions of the survey area. Additionally, approximately half of the survey area is within Critical Habitat Mapping Unit SCZ-2 (**Figure 4**). Therefore, this species has a moderate potential to occur within the survey area.

#### *San Francisco dusky-footed woodrat*

The San Francisco dusky-footed woodrat is a CDFW species of special concern. This species is found in chaparral, hardwood, conifer, riparian woodlands, and mixed forests, typically in densely wooded areas with dense undergrowth. This species builds its nest with debris on the ground or in trees; nests tend to be in areas that are shaded, relatively cool, and provide cover. Nests may be used by many generations over several years (Carraway, 1991).

There is one CNDDDB occurrence of this species within the quadrangles reviewed, located approximately 12 miles from the survey area. However, approximately one dozen woodrat nests were observed within the

survey area during the March 2023 reconnaissance-level survey. Nests were observed on the ground and in trees/shrubs within Monterey pine forest, oak woodland, and scrub habitats. Therefore, this species is present within the survey area.

#### *Pallid bat*

The pallid bat (*Antrozous pallidus*) is a CDFW species of special concern and is a year-round resident in California. This species of bat occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California and forests ranging from sea level up through mixed conifer forests. Pallid bats are most common in open, dry habitats with rocky areas for roosting. Day roosts of this species include caves, crevices, mines, and occasionally hollow trees and buildings. This species seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Pallid bats make use of similar structures for night roosting and will use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts. Pallid bats feed on large insects (20 to 70 mm in length). Foraging takes place over open ground, at heights generally not greater than 7.5 feet, although prey is most often caught on the ground. Jerusalem crickets, scorpions and beetles make up most of the diet of pallid bats in central California. Copulation occurs in the fall, October through December. Females store the sperm and ovulation occurs in the following spring. Parturition timing is determined by local climate and embryonic development usually takes about 9 weeks with birth occurring in May or June. Twins are the norm in northern California but in other areas they are known to have triplets. Maternity colonies range from 20 to 200 individual adult bats. Males roost in much smaller groupings (Hermanson and O'Shea, 1983).

The CNDDDB reports two non-specific occurrences of the pallid bat within the quadrangles reviewed, the nearest of which is a historical (1928) occurrence located approximately eight miles from the survey area. The other occurrence, reported in 2003, is located approximately 12 miles from the project site. Suitable foraging habitat is present and trees in the wooded habitats of the survey area provide suitable roosting habitat for this species. Therefore, this species has a moderate potential to occur within the survey area.

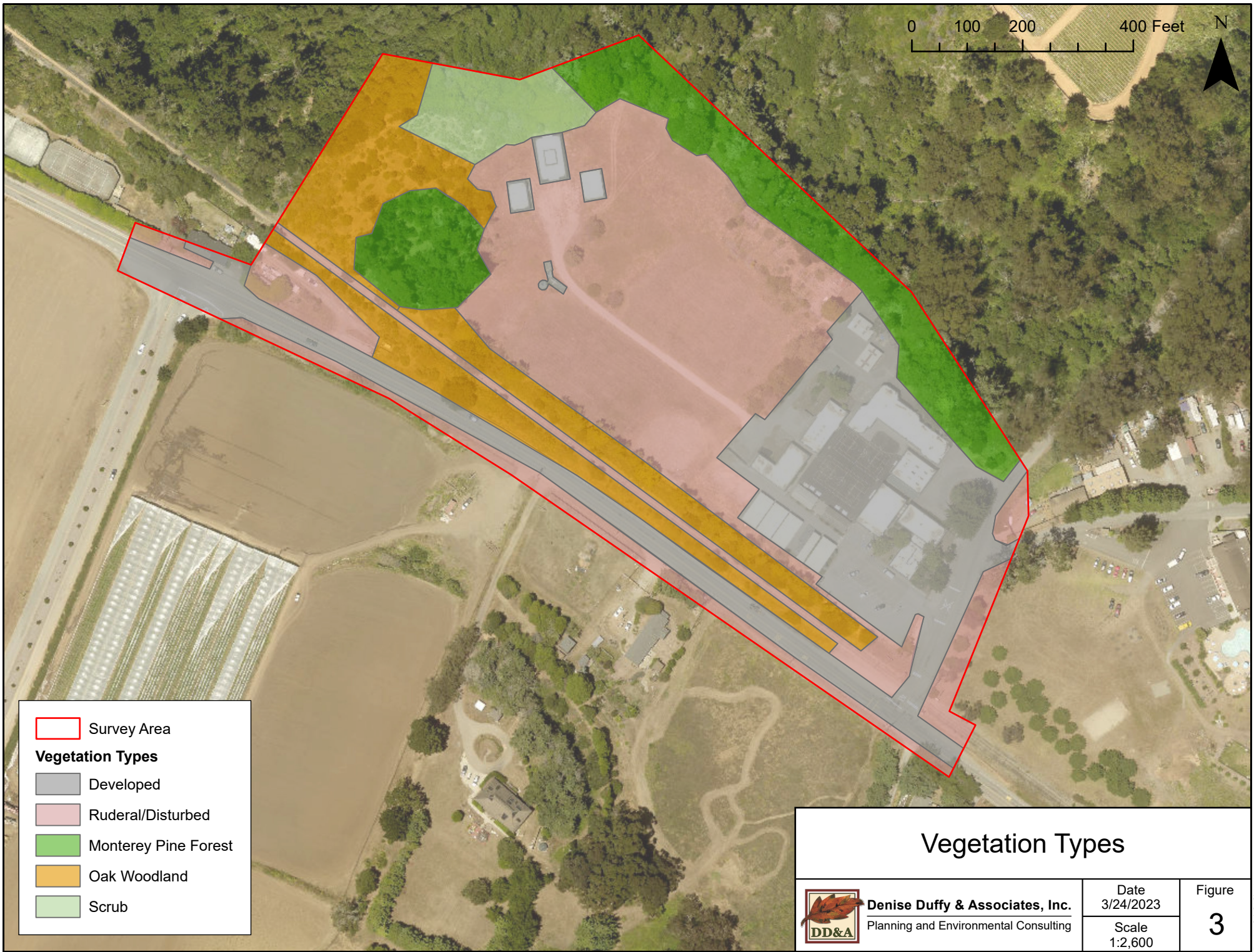
#### *Townsend's big-eared bat*

The Townsend's big-eared bat (*Corynorhinus townsendii townsendii*) is a CDFW species of special concern. The Townsend's big-eared bat is a year-round resident in California occurring from low desert to mid-elevation montane habitats. It is found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Townsend's big-eared bats typically roost during the day in caves and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees. It hibernates in mixed sex aggregations of a few to several hundred individuals. Hibernation is more prolonged in colder areas. This species arouses periodically and moves to alternative roosts and actively forages and drinks throughout the winter. A single young is born per year between May and July. Females form maternity colonies of 35 to 200 individuals, while males roost individually. Townsend's big-eared bats feed primarily on small moths that are gleaned from vegetation.

The CNDDDB reports one historical (1945), non-specific occurrence of Townsend's big-eared bat within the quadrangles reviewed, located approximately eight miles from the survey area. Suitable foraging habitat is present and trees in the wooded habitats of the survey area provide suitable roosting habitat for this species. Therefore, this species has a moderate potential to occur within the survey area.

*Raptors and Other Protected Avian Species*

Raptors and their nests are protected under California Fish and Game Code. While the life histories of these species vary, overlapping nesting and foraging similarities (approximately February through August) allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest vegetation types, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through August, with peak activity May through July. Prey for these species includes small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges. Various common raptor species (such as red-tailed hawk [*Buteo jamaicensis*], red-shouldered hawk [*Buteo lineatus*], and turkey vulture [*Cathartes aura*]) have the potential to nest within the trees present within and adjacent to the survey area.



Survey Area

**Vegetation Types**

Developed

Ruderal/Disturbed

Monterey Pine Forest

Oak Woodland

Scrub

## Vegetation Types



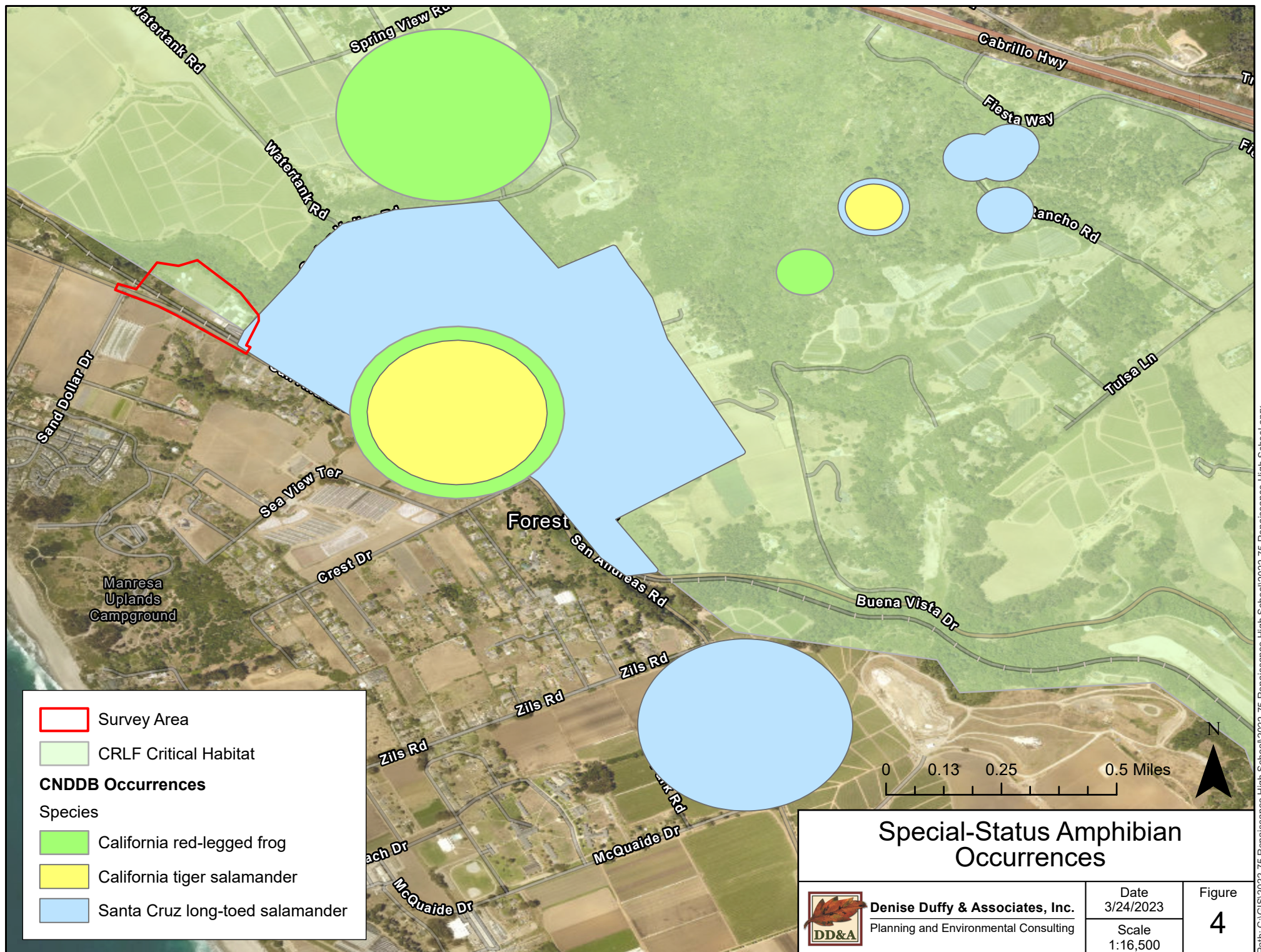
**Denise Duffy & Associates, Inc.**  
Planning and Environmental Consulting

Date  
3/24/2023

Scale  
1:2,600

Figure

**3**



## 4.0 IMPACTS AND MITIGATION

Construction activities associated with the proposed project, including all ground disturbance (trenching, jack and bore) could result in impacts to sensitive habitats and special-status wildlife species. Mitigation measures have been provided below to reduce these potential impacts to a less-than-significant level in accordance with CEQA.

### 4.1 Impact Thresholds

The following section describes potential impacts to sensitive biological resources that may result from the project. In accordance with Appendix G of CEQA Guidelines, an impact is considered to be significant and require mitigation if it would result in any of the following:

- a. 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 CDFW or USFWS;
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means;
- d. 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 nursery sites;
- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Recommendations are included below to avoid or minimize impacts to sensitive biological resources.

### 4.2 Impacts and Recommendations

*Impact BIO-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 CDFW or USFWS.*

California tiger salamander, Santa Cruz long-toed salamander, and California red-legged frog have the potential to occur within all undeveloped portions of the survey area; particularly, ruderal areas as well as Monterey pine forest, oak woodland, and scrub habitat within and adjacent to the survey area. Removal of vegetation as well as conventional trenching and jack and bore for pipeline installation could result in direct and indirect impacts to these species. Direct impacts include mortality of individuals, while indirect impacts

include loss of habitat for these species. Implementation of recommendations BIO-1 through BIO-9 would reduce the potential for impacts.

San Francisco dusky-footed woodrat was observed within the survey area and has the potential to occur within the Monterey pine forest, oak woodland, and scrub habitat within and adjacent to the survey area. Removal of vegetation during construction could result in direct and indirect impacts to SFDW. Direct impacts include mortality of individuals or nests, while indirect impacts include loss of habitat. Implementation of recommendations BIO-1 through BIO-8, and BIO-10, would reduce the potential for impacts.

The survey area provides potential nesting habitat for birds of prey and birds listed by the MBTA. The survey area contains suitable nesting habitat for ground and tree-nesting species, particularly within the Monterey pine, oak woodland, and scrub habitats within the survey area, and trees and shrubs immediately adjacent to the survey area. Nests could become established in the vegetation to be removed before construction begins. Construction-related activities that occur within the general nesting season (February through August) have the potential to result in direct and indirect take of an active nest. Construction activities that could result in direct impacts to nesting birds include vegetation and tree removal. Indirect impacts that could occur during construction include an increase in human activity, construction noise and dust in the immediate vicinity of an active nest that could result in significant harassment and nest abandonment, causing take of the nest. Therefore, there may be a potential for impacts to occur to nesting birds, particularly during the general nesting season of February 1 through August 31. Implementation of recommendations BIO-1 through BIO-8, and BIO-11 would reduce the potential for impacts to nesting birds of prey and birds listed by the MBTA.

The survey area provides suitable habitat for special-status bat species identified above. Suitable foraging and roosting habitat for these species is present within the survey area. Construction activities, including vegetation removal, may result in direct and indirect impacts to these species if these species are using the site for day, night, or maternity roosts. Direct impacts include mortality of individuals or roosts, while indirect impacts include loss of habitat. Implementation of recommendations BIO-1 through BIO-8, and BIO-12 would reduce the potential for impacts to special-status bat species.

- BIO-1      Every individual working on the Project must attend biological awareness training prior to working on the job site. The training shall be delivered by a qualified biologist and shall include at minimum information regarding the following:
- a.    Location and identification of sensitive habitats and all special-status species with potential to occur in the survey area including information specific to identifying the special-status species identified above, the habitat for these species, and the project specific measures being implemented to protect these species.
  - b.    The importance of avoiding impacts to special-status species and their habitat, and the steps necessary if any special-status species is encountered at any time.
  - c.    Identification of the limits of work, and project-specific avoidance measures and permit conditions that must be followed.

- BIO-2 Disturbance of Monterey pine forest, oak woodland, and scrub vegetation and removal of native trees within these habitats shall be avoided to the maximum extent possible.
- BIO-3 Native vegetation that cannot be avoided shall be cut at ground level rather than removed by the roots when possible.
- BIO-4 Prior to commencement of construction, high visibility fencing and/or flagging shall be installed, with the assistance of a qualified biologist, to indicate the limits of work and the boundaries of sensitive habitat areas to be avoided.
- a. The limits of work shall be designated to avoid impacts to the surrounding Monterey pine forest, oak woodland, and scrub habitat, to the maximum extent possible and to maximize native tree and shrub retention.
  - b. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.
- BIO-5 If any special-status species is identified in the project impact area at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm's way on its own or a qualified biologist shall move the animal out of harm's way to a safe relocation site pursuant to all species-specific restrictions and regulations.
- BIO-6 During initial clearing, grubbing, and grading within the Monterey pine forest, oak woodland, and scrub habitat, a qualified biologist shall be present to conduct daily monitoring activities to ensure compliance with measures in place for protection of special status species that may be encountered. After initial clearing, grubbing and grading has been completed, an alternate construction monitor may be trained and designated for execution of daily monitoring activities.
- BIO-7 Daily monitoring by the project biologist or construction monitor shall occur for the duration of project construction within the Monterey pine forest, oak woodland, and scrub habitat. Daily monitoring activities shall include the following at minimum:
- a. Monitoring the work area for the presence of special-status species and verifying that individuals are properly relocated out of harm's way as needed, pursuant to all species-specific restrictions and regulations.
  - b. Monitoring the exclusionary fencing at the project site to verify good working condition and prevent wildlife entrapment.
  - c. Checking under all equipment for wildlife before use.
  - d. Verifying that at the end of each workday, all excavations shall be secured with a cover, or a ramp installed to prevent wildlife entrapment.

- e. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
- BIO-8 During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.
- BIO-9 To avoid/minimize impacts to special-status amphibians, including CTS, SCLTS, and CRLF, the following measures shall be adhered to:
- a. The project applicant will comply with the CESA and California Fish and Game Code Section 5050 and will coordinate with the CDFW to determine whether incidental take authorization for CTS and SCLTS is required and/or authorized prior to issuance of a grading permit. If it is determined that authorization for the incidental take of these species is required and/or authorized from the CDFW, the project applicant will comply with the CESA to obtain a 2081 incidental take permit for CTS and/or comply with California Fish and Game Code to obtain take authorization for SCLTS<sup>5</sup> from CDFW prior to the issuance of a grading permit. Permit requirements typically involve the preparation and implementation of a mitigation plan and mitigating impacted habitat at a 3:1 ratio through preservation and/or restoration. The project applicant would be required to retain a qualified biologist to prepare a mitigation plan, which will include, but is not limited to, identifying avoidance and minimization measures, and identifying a mitigation strategy that includes a take assessment, avoidance and minimization measures, compensatory mitigation lands, success criteria, and funding assurances. The project applicant would be required to implement the approved plan and any additional permit requirements.
  - b. The project will comply with the ESA and conduct consultation with the USFWS to determine whether incidental take authorization for CTS, SCLTS, and CRLF is required prior to issuance of a grading permit. If it is determined that authorization for the incidental take of these species is required from the USFWS, the project will comply with the ESA to obtain ~~Section 7~~ or Section 10 or GCP authorization from USFWS at the project-level prior to the issuance of a grading permit. Take authorization for SCLTS must be initiated through the GCP described in Section 2.5<sup>6</sup>. Permit requirements typically involve the preparation and implementation of a mitigation plan and mitigating impacted habitat at a 3:1 ratio through preservation and/or restoration. The project applicant would be required to retain a qualified biologist to prepare a mitigation plan, which will include, but is not limited to, identifying avoidance and minimization measures, and identifying a

<sup>5</sup> As described in Section 2.5, fully protected species may not be taken or possessed except with authorization from CDFW and only under specific circumstances, including maintenance, repair, or improvement projects to critical regional or local water agency infrastructure. Consultation with CDFW must occur to confirm that take authorization for SCLTS may be authorized under this exception; however, it is assumed that the project falls under the definition of critical local water agency infrastructure.

<sup>6</sup> As described in Section 2.5, the GCP is intended to provide a permitting mechanism to meet statutory and regulatory requirements of the ESA for SCLTS, as well as CTS and CRLF. Consultation with USFWS must occur to confirm that take authorization for SCLTS, CTS, and CRLF may be authorized under the GCP; however, it is assumed that the project qualifies for GCP take authorization because the project is located within the GCP plan area, the project is being proposed by a public agency - the Pajaro Valley Unified School District, and involves the maintenance of existing public infrastructure (i.e., the existing RHS water system).

mitigation strategy that includes a take assessment, avoidance and minimization measures, compensatory mitigation lands, success criteria, and funding assurances. The project applicant would be required to implement the approved plan and any additional permit requirements.

- c. A qualified biologist will survey the proposed work area and immediately adjacent areas 48 hours before and the morning of the onset of work activities for ~~the presence of~~ special-status amphibians. If any life stage of CTS, SCLTS, or CRLF is observed, construction activities will not commence until CDFW/USFWS is consulted and appropriate actions are taken to allow project activities to continue.
- d. During ground disturbing and vegetation removal activities, a qualified biologist shall survey appropriate areas of the construction site daily before the onset of work activities for the presence of special-status amphibians. The qualified biologist shall remain available to come to the site if a special-status amphibian is identified until all ground disturbing activities are completed. If any life stage of CTS, SCLTS, or CRLF is found and these individuals are likely to be killed or injured by work activities, the qualified biologist shall be contacted, and work shall stop in that area until the special-status amphibian has moved on its own out of the work area and the USFWS has been contacted. Construction activities will not resume until the USFWS is consulted and appropriate actions are taken to allow project activities to continue.
- e. After ground disturbing and vegetation removal activities are complete, or earlier if determined appropriate by the qualified biologist, the qualified biologist will designate a construction monitor to oversee on-site compliance with all avoidance and minimization measures. The qualified biologist shall ensure that this construction monitor receives sufficient training in the identification of special-status amphibians. The construction monitor or the qualified biologist is authorized to stop work if the avoidance and/or minimization measures are not being followed. If work is stopped, the USFWS shall be notified. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the proposed project.
- f. Only tightly woven fiber netting or similar material may be used for erosion control at the project site. Coconut coir matting is an acceptable erosion control material. No plastic mono-filament matting will be used for erosion control, as this material may ensnare wildlife, including special-status amphibians.
- g. Because dusk and dawn are often the times when special-status amphibians are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour after sunrise.
- h. To avoid or minimize impacts to special-status amphibians and their habitat, suitable habitat (i.e., ruderal areas, Monterey pine forest, oak woodland, scrub) shall be avoided to the greatest extent feasible. In addition to the high visibility fencing described in BIO -4, amphibian specific wildlife exclusion fencing will be installed around the perimeter of the project work area, where suitable habitat is present, to prevent special-status amphibians from migrating into the project area during

the breeding season. A qualified biologist will supervise the installation of exclusion fencing. The status of the fencing will be monitored in accordance with BIO-4 above.

BIO-10 To protect San Francisco dusky-footed woodrat, a qualified biologist shall implement the following protection measures:

- a. Within two weeks prior to commencement of development activities (including clearing and grubbing) a qualified biologist shall survey the project disturbance area to identify any woodrat nest locations that may be affected by the proposed development. All woodrat nests within the construction impact area and a 25-foot buffer shall be clearly flagged.
- b. If no woodrat nests are found during the survey, no further avoidance and minimization measures for this species are necessary.
- c. If woodrat nests are found, the construction contractor shall avoid the nests to the extent feasible by installing a 25-foot buffer with protective fencing or other material that shall prohibit encroachment. A reduction in the size of this buffer, or encroachment into this buffer, may be allowed if the biologist determines that microhabitat conditions such as shade, cover and adjacent food sources can be retained.
- d. If avoidance of woodrat nests is not possible, a qualified biologist shall develop and implement a Woodrat Relocation Plan to be implemented prior to the commencement of construction. The plan shall include the following:
  - i. Trapping efforts and relocation activities shall not take place during low night temperatures (below 40 degrees Fahrenheit), inclement or extreme weather conditions.
  - ii. If no San Francisco dusky-footed woodrats are captured at a given nest, it shall be dismantled by hand to ground level, and the woody debris spread to reduce rebuilding.
  - iii. For occupied nests, the existing woodrat nest shall be dismantled and the woody debris, including cached food and nesting material, carried to the nearest suitable relocation site outside the project footprint and used to build an artificial shelter.
  - iv. Sites for artificial shelters shall be located as near as possible to the original nest location and no closer than 20 feet from existing woodrat nests and other artificial shelters. Choose the best available microhabitat, ideally in a location with sun and shade and if possible under the same species of tree or shrub as was present at the original nest location. Relocation sites shall contain biologically-suitable habitat features (e.g. stands of poison oak, coast live oaks, and dense native brush).
  - v. When releasing woodrats, the occupied live-trap shall be placed against the entrance to the artificial shelter, opened, and the woodrat allowed to enter, ideally on its own accord. After the individual enters, the entrance shall be loosely but

completely plugged with dirt and leaf duff to encourage it to stay, at least for the short-term.

- vi. If occupied nests were relocated, monitoring shall be conducted for 30 days after relocation is completed and include infrared and motion activated cameras, or other monitoring methods, and an occupancy assessment. A report on San Francisco dusky-footed woodrat nest monitoring shall be provided to County Environmental Planning within 30 days following the end of the monitoring period and shall include the methods and results of trapping and relocation, occupancy determinations, monitoring methods, and discussion of any remedies that may be needed.

BIO-11 To avoid/minimize impacts to nesting birds the following measures shall be adhered:

- a. If removal of trees/vegetation, grading activity, or other use of heavy equipment begins outside of the February 1 to August 31 breeding season, there will be no need to conduct a preconstruction survey for active nests.
- b. If removal of trees/vegetation, grading activity, or other use of heavy equipment is to commence between February 1 and August 31, a survey for active bird nests shall be conducted by a qualified biologist within two weeks prior to the start of such activity. The survey area shall include the survey area, and a survey radius around the survey area of 50 feet for MBTA birds and 250 feet for birds of prey.
- c. If no active nest of a bird of prey or MBTA bird is found, then no further avoidance and minimization measures are necessary.
- d. If active nest(s) of MBTA birds or birds of prey are found in the survey area, the following avoidance buffers shall be adhered to unless otherwise advised by CDFW or USFWS: Avoidance buffer of 50 feet for MBTA birds and 250 feet for birds of prey shall be established around the active nest(s). The biologist shall monitor the nest and advise the applicant when all young have fledged the nest. Removal of vegetation, grading activity, or other use of heavy equipment may begin after fledging is complete.
- e. If the biologist determines that a smaller avoidance buffer will provide adequate protection for nesting birds, a proposal for alternative avoidance/protective measures, potentially including a smaller avoidance buffer and construction monitoring, may be submitted to USFWS and CDFW for review and approval prior to removal of vegetation, grading activity, or other use of heavy equipment.
- f. If removal of vegetation, grading activity, or other use of heavy equipment stops for more than two weeks during the nesting season (February 1 - August 31) a new survey shall be conducted prior to re-commencement of construction.

BIO-12 To avoid/minimize impacts to special-status bats the following measures shall be adhered to:

- a. To the extent practical limbing/tree removal operations should occur between September 15 and November 1 to avoid bat maternity roosts and winter hibernacula. If tree limbing/tree removal operations must occur outside the period of September 15 through November 1 a survey for bats shall be conducted by a qualified biologist.
- b. Prior to commencement of construction related activities including tree trimming and removal, a qualified biologist shall conduct a pre-construction survey for bats as follows:
  - i. The biologist shall determine if bats are utilizing the site for roosting. For any trees/snags/buildings that could provide roosting space for cavity or foliage-roosting bats, potential bat roost features shall be thoroughly evaluated to determine if bats are present. Visual inspection and/or acoustic surveys shall be utilized as initial techniques.
  - ii. If roosting bats are found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations. If feasible, exclusion shall take place during the appropriate windows (September 15 and November 1) to avoid harming bat maternity roosts and/or winter hibernacula. (Authorization from CDFW is required to evict winter hibernacula for bats).
  - iii. If established maternity colonies are found, a buffer shall be established around the colony to protect pre-volant young from construction disturbances until the young are no longer reliant upon the roost for survival.
  - iv. If a tree is determined not to be an active roost site for roosting bats, it may be immediately limbed or removed as follows:
    1. If foliage roosting bats are determined to be present, limbs shall be lowered, inspected for bats by a bat biologist, and chipped immediately or moved to a dump site.
    2. Alternately, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day.

*Impact BIO-2: Have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.*

Construction of the project will result in temporary impacts to CRLF Critical Habitat Mapping Unit SCZ-2, as described above Critical Habitat for any listed species is considered a sensitive natural community. Construction of the project will also result in temporary impacts to coast live oak woodland, as described above coast live oak woodland is considered a sensitive natural community by the County and is considered ESHA under the CCA. As required by SCCC Section 16.32, the project must obtain a biotic approval from the County for development within a sensitive habitat and will comply with all permit requirements.

Potential impacts include any vegetation removal and any ground disturbance including trenching and jack and bore to install the pipeline. Implementation of BIO-1 through BIO-4, BIO-7, and BIO-9, described above, are recommended to reduce, or avoid potential impacts to sensitive habitats. In addition, BIO-13 is included below to restore any sensitive habitats impacted during project construction.

BIO-13 To compensate for disturbance of sensitive habitats, and to comply with the Santa Cruz County General Plan Policy 5.1.12, the area of temporarily disturbed sensitive habitat shall be replaced in-kind at a minimum restoration to impact ratio of 1:1. A site-specific Habitat Restoration Plan shall be developed by a qualified biologist or restoration professional, and shall include the following minimum elements:

- a. Identification of areas on site where temporary disturbance and re-establishment of native habitat shall occur. All areas temporarily disturbed as a result of the project shall be restored to pre-project contours to the maximum extent possible and re-vegetated with native plant species appropriate to the habitat disturbed.
- b. A tree inventory assessment including the species, size, and locations of all trees intended for removal.
- c. All native trees removed shall be replaced in-kind at a minimum 1:1 ratio. Non-native trees removed shall be replaced at a minimum 1:1 ratio by native tree species appropriate to the surrounding habitat.
- d. A site-specific planting plan intended to inform the re-vegetation efforts. Local plant stock shall be used whenever possible. The plant pallet should include native species common to the surrounding native habitats that are being restored.

## REFERENCES

- Baldwin, B. G, et. al. 2012. *The Jepson Manual – Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded*. University of California Press. Berkeley, CA. 1600 pp.
- Bulger, J.B., N.J. Scott Jr., and R.B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frog *Rana aurora draytonii* in coastal forests and grasslands. *Biological Conservation*, Vol. 110. Pp. 85-95.
- CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.
- CDFW. 2023a. Special Animals List. Available online at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406>
- CDFW. 2023b. California Natural Diversity Database (March 2023).
- CDFW. 2023c. California Natural Communities List. Available online at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609>
- California Invasive Plant Council (Cal-IPC). 2023. The Cal-IPC Inventory. Available online at <https://www.cal-ipc.org/>
- California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines.
- CNPS. 2023. Inventory of Rare and Endangered Plants (online inventory, v8-03). California Native Plant Society. Sacramento, CA. Available online at: <http://www.rareplants.cnps.org/>
- Jennings, M.R. and M.P. Hayes. 1986. Decline of ranid frog species in western North America: are bullfrogs (*Rana catesbeiana*) responsible? *Journal of Herpetology* Vol. 20 (4). Pp. 490-509.
- Jennings, M.R. and M.P. Hayes. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana draytonii*) and the foothill yellow-legged frog (*Rana boylei*): implications for management. *Proceedings from Management of Amphibians, Reptiles and Small Mammals in North America Symposium 1988*.
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final report to the California Department of Fish and Game, Inland Fisheries Division. 255 pp.
- Loredo, I., D. Van Vuren, and M. L. Morrison. 1996. Habitat use and migration behavior of the California tiger salamander. *Journal of Herpetology*, Vol. 30(2). Pp. 282-285.
- Matthews, M.A and M. Mitchell. 2015. *The Plants of Monterey County; an Illustrated Field Key (Second Edition)*. California Native Plant Society, Sacramento, California. 446 pp.
- Rathbun, G.B., M.R. Jennings, T.G. Murphey, and N.R. Siepel. 1993. Status and ecology of sensitive aquatic vertebrates in lower San Simeon and Pico Creeks, San Luis Obispo County, California. Unpublished report, National Ecology Research Center, Piedras Blancas Research Station, San Simeon, California. 103 pp.
- Remsen, J.V. Jr. 1978. Bird species of special concern in California. California Dept. of Fish and Game, Nongame Wildlife Investigations, Wildlife Management Branch Administrative Report No. 78-1.

- Ruth, S.B. and K. Tollestrup. 1973. Aspects of the life history and current status of the Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*) at Valencia Lagoon, Santa Cruz County, California. Unpublished Student Report, Museum of Vertebrate Zoology, University of California, Berkeley. 40 pp.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A manual of California vegetation 2<sup>nd</sup> Edition*. California Native Plant Society, Sacramento, CA. 1300 pp.
- Stebbins, R.C. 1972. *California Amphibians and Reptiles*. University of California Press, Berkeley, CA. 152 pp.
- Stebbins, R.C. 1985. *Western reptiles and amphibians*. Houghton Mifflin Company, Boston, MA. 336 pp
- Stebbins, R.C. 2003. *Western reptiles and amphibians, 3<sup>rd</sup> edition*. Houghton Mifflin Company, New York, NY. 533 pp.
- Thelander, C. (ed.). 1994. *Life on the edge: A guide to California's endangered natural resources: wildlife*. BioSystems Books, Santa Cruz, CA.
- U.S. Army Corps of Engineers (ACOE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center. 123 pp.
- U.S. Geological Survey (USGS). 2018. The National Map. Available online at: <https://www.usgs.gov/core-science-systems/national-geospatial-program/national-map>
- U.S. Fish and Wildlife Service (USFWS). 1967. Endangered Species. Federal Register, Vol. 32 (48). Pp. 4001.
- USFWS. 1996. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Red-legged Frog; Final Rule. Federal Register, Vol. 61(101). Pp. 25813-25833.
- USFWS. 1999. Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*) draft revised recovery plan. USFWS. 82 pp.
- USFWS. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.
- USFWS. 2004. Endangered and threatened wildlife and plants; Determination of threatened status for the California Tiger Salamander; and special rule exemption for existing routine ranching activities; Final rule. Federal Register, Vol. 69(149). Pp. 47211-47248.
- USFWS. 2019. 5-Year Review Santa Cruz Long-Toed Salamander (*Ambystoma macrodactylum croceum*). Available online at: <http://ecos.fws.gov/>
- USFWS. 2023a. Information for Planning and Consultation (IPaC) Resource List for the Project. Available online at: <https://ecos.fws.gov/ipac/>
- U.S. Fish and Wildlife Service. 2023b. Ellicott Slough National Wildlife Refuge – About Us. Available online at: <https://www.fws.gov/refuge/ellicott-slough/about-us>
- Wetland Training Institute, Inc. 1995. Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual. Glenwood, NM. WTI 02-1. 143 pp.

- Williams, D. 1986. Mammalian species of special concern in California. California Department of Fish and Game Report 86-1. 112 pp.
- Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White (eds.). 1988. California's wildlife, Volume I: Amphibians and reptiles. California Department of Fish and Game, Sacramento, CA. 272 pp.
- Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White (eds.). 1990. California's Wildlife, Volume II: Birds. California Department of Fish and Game, Sacramento, CA. 731 pp.

---

*This page was left intentionally blank*

**APPENDIX A**

**SPECIAL-STATUS SPECIES TABLE**

## Special-Status Species Table

*Laurel, Loma Prieta, Mt. Madonna, Soquel, Watsonville West, Watsonville East, Moss Landing, and Prunedale Quadrangles*

| Species                                                                        | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Potential Occurrence within Survey Area                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MAMMALS</b>                                                                 |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                   |
| <i>Antrozous pallidus</i><br><b>Pallid bat</b>                                 | -- / CSC / --                 | Occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California. Most common in open, dry habitats with rocky areas for roosting. Day roosts include caves, crevices, mines, and occasionally hollow trees and buildings. Seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Similar structures are used for night roosting and will also use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts. | <b>Moderate</b><br>Suitable foraging and roosting habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately eight miles northwest of the survey area; however, this is a historical occurrence from 1928. |
| <i>Corynorhinus townsendii</i><br><b>Townsend's big-eared bat</b>              | -- / CSC / --                 | Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.                                                                                                                                                                                 | <b>Moderate</b><br>Suitable foraging and roosting habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately eight miles northwest of the survey area; however, this is a historical occurrence from 1945. |
| <i>Neotoma fuscipes annectens</i><br><b>San Francisco dusky-footed woodrat</b> | -- / CSC / --                 | Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Present</b><br>Suitable habitat is present within the wooded habitats in the survey area. Approximately one dozen woodrat nests were observed within the survey area during the March 2023 survey.                                             |
| <i>Taxidea taxus</i><br><b>American badger</b>                                 | -- / CSC / --                 | Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.                                                                                                                                                                                                                                                                                                                                                                                           | <b>Low</b><br>Poor quality habitat is present within the School field in the survey area. The nearest CNDDDB occurrence is located approximately 0.1 mile from the survey area; however, this is a historical non-specific occurrence from 1909.  |
| <i>Sorex ornatus salarius</i><br><b>Monterey shrew</b>                         | -- / CSC / --                 | Mostly moist or riparian woodland habitats, and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Unlikely</b><br>No suitable habitat within the survey area. The CNDDDB only reports one occurrence within the quadrangles reviewed, located approximately 10 miles from the survey area.                                                       |

| Species                                                                          | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Potential Occurrence within Survey Area                                                                                                                                                                                         |
|----------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Vulpes macrotis mutica</i><br>San Joaquin Kit fox                             | FE / ST / --                  | Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance. Live in annual grasslands or grassy open stages dominated by scattered brush, shrubs, and scrub.                                                                                                                                                                                                                                                 | <b>Not Present</b><br>No suitable habitat is present within the survey area and the survey area is outside the accepted range for the species. There are no CNDDDB occurrences of this species within the quadrangles reviewed. |
| <b>BIRDS</b>                                                                     |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                 |
| <i>Agelaius tricolor</i><br>Tricolored blackbird<br>(nesting colony)             | -- / SC&CSC / --              | Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.                                                                                                                                                                                                                                                                                                                                  | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately four miles from the survey area.                                                               |
| <i>Asio flammeus</i><br>Short-eared owl (nesting)                                | -- / CSC / --                 | Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California. | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 11 miles from the survey area.                                                                 |
| <i>Athene cunicularia</i><br>Burrowing owl (burrow sites & some wintering sites) | -- / CSC / --                 | Year-round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.                                             | <b>Unlikely</b><br>Poor quality nesting and wintering habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 10 miles from the survey area.                                          |
| <i>Aquila chrysaetos</i><br>Golden eagle (nesting & wintering)                   | --/ CFP / --                  | Use rolling foothills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees.                                                                                                                                                                                                                                             | <b>Unlikely</b><br>No suitable habitat within the survey area. The nearest CNDDDB occurrence is located approximately 18 miles from the survey area.                                                                            |
| <i>Brachyramphus marmoratus</i><br>Marbled Murrelet                              | FT / SE / --                  | Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.                                                                                                                                                                                                             | <b>Not Present</b><br>No suitable habitat within the survey area. There are no CNDDDB occurrences of this species within the quadrangles reviewed.                                                                              |

| Species                                                                  | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Potential Occurrence within Survey Area                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Coccyzus americanus occidentalis</i><br>Western yellow-billed cuckoo  | FT / SE / --                  | Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation.                                                                                                                                                                                                                                                                        | <b>Unlikely</b><br>No suitable habitat within the survey area. There are no CNDDDB occurrences of this species within the quadrangles reviewed.                                                                                                                        |
| <i>Charadrius alexandrinus nivosus</i><br>Western snowy plover (nesting) | FT / CSC / --                 | Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.                                                                                                                                                                                                                                                                                                                  | <b>Not Present</b><br>No suitable habitat within the survey area. There are no CNDDDB occurrences of this species within the quadrangles reviewed.                                                                                                                     |
| <i>Coturnicops noveboracensis</i><br>Yellow rail                         | -- / CSC / --                 | Wet meadows and coastal tidal marshes. Occurs year round in California, but in two primary seasonal roles: as a very local breeder in the northeastern interior and as a winter visitor (early Oct to mid-Apr) on the coast and in the Suisun Marsh region                                                                                                                                                                                                                                 | <b>Not Present</b><br>No suitable habitat within the survey area. There is one CNDDDB occurrence of this species within the quadrangles reviewed, located approximately nine miles from the survey area.                                                               |
| <i>Elanus leucurus</i><br>White-tailed kite (nesting)                    | -- / CFP / --                 | Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.                                                                                                                                                                                                                                                                                                                                      | <b>Low</b><br>Trees and shrubs within the survey area may provide suitable nesting habitat and ruderal areas may provide marginal foraging habitat. The nearest CNDDDB occurrence is approximately 12 miles from the survey area.                                      |
| <i>Empidonax trailii extimus</i><br>Southwestern willow flycatcher       | FE / SE / --                  | Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows ( <i>Salix sp.</i> ), tamarisk ( <i>Tamarix ramosissima</i> ), or both. | <b>Unlikely</b><br>No suitable habitat within the survey area. The CNDDDB does not report any occurrences of this species within the quadrangles evaluated.                                                                                                            |
| <i>Falco peregrinus anatum</i><br>American peregrine falcon (nesting)    | -- / CFP / --                 | Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Unlikely</b><br>No suitable nesting habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately five miles from the survey area; however, this is a non-specific occurrence consisting of the entire Moss Landing quadrangle. |
| <i>Gymnogyps californianus</i><br>California condor                      | FE / SE / --                  | Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19-mile commute one way). Nest sites in cliffs, crevices, potholes.                                                                                                                                                                                                    | <b>Unlikely</b><br>No suitable nesting habitat is present within the survey area. There are no CNDDDB occurrences of this species within the quadrangles reviewed.                                                                                                     |

| Species                                                                   | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                     | Potential Occurrence within Survey Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Rallus obsoletus obsoletus</i><br>California Ridgeway's rail           | FE / SE&CFP /--               | Salt and brackish marshes.                                                                                                                                                                                                                                                                                                                          | <b>Unlikely</b><br>No suitable habitat is present within the survey area. There is one CNDDDB occurrence of this species within the quadrangles reviewed, located approximately 10 miles from the survey area.                                                                                                                                                                                                                                                                                               |
| <i>Riparia riparia</i><br>Bank swallow (nesting)                          | -- / ST / --                  | Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.                                                                                                                                                                                                                                                               | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately five miles from the survey area.                                                                                                                                                                                                                                                                                                                                            |
| <i>Sterna antillarum browni</i><br>California least tern                  | FE / SE / --                  | Prefers undisturbed nest sites on open, sandy/gravelly shores near shallow-water feeding areas in estuaries. Sea beaches, bays, large rivers, bars.                                                                                                                                                                                                 | <b>Not Present</b><br>No suitable habitat is present within the survey area. There are no CNDDDB occurrences of this species within the quadrangles reviewed.                                                                                                                                                                                                                                                                                                                                                |
| <i>Vireo bellii pusillus</i><br>Least Bell's vireo                        | FE / SE / --                  | Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.                                                        | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The CNDDDB does not report any occurrences of this species within the quadrangles evaluated.                                                                                                                                                                                                                                                                                                                                       |
| <b>REPTILES AND AMPHIBIANS</b>                                            |                               |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <i>Ambystoma californiense</i><br>California tiger salamander             | FT / ST / --                  | Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.                                                                                                                                                          | <b>Moderate</b><br>No suitable breeding habitat is present within the survey area; however, suitable upland habitat is present, and the survey area is within the dispersal range (1.3 miles, 2.2 km) of two known breeding resources. The nearest CNDDDB occurrence is located approximately 0.3 miles (0.5 km) from the survey area in Ellicott Pond, a known CTS breeding resource.                                                                                                                       |
| <i>Ambystoma macrodactylum croceum</i><br>Santa Cruz long-toed salamander | FE / SE&CFP / --              | Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir and wet meadows. Occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation. | <b>Moderate</b><br>No suitable breeding habitat is present within the survey area; however, suitable upland habitat is present in the wooded habitats within and adjacent to the survey area. There is one CNDDDB occurrence which overlaps the eastern corner of the survey area, which contains two known SCLTS breeding resources. The survey area is within the dispersal range (1.0 mile, 1.6 km) of two additional CNDDDB occurrences of this species, one of which is a documented breeding resource. |

| Species                                                       | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                      | Potential Occurrence within Survey Area                                                                                                                                                                                                                                         |
|---------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Aneides niger</i><br>Santa Cruz black salamander           | -- / CSC / --                 | Occurs in the fog belt of the outer Coastal Range in mesic forests. This species occurs in moist streamside microhabitats. This species is often found in shallow standing water or seeps. Small geographical range consisting of woodland habitat within the Santa Cruz Mountains in western Santa Clara, northern Santa Cruz, and southernmost San Mateo Counties. | <b>Low</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately eight miles from the survey area, with development including major roads and highways isolating the survey area from any documented occurrences.    |
| <i>Anniella pulchra</i><br>Northern California legless lizard | -- / CSC / --                 | Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.                                                                                                                                           | <b>Low</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. The nearest CNDDDB occurrence is located approximately 3.5 miles from the survey area.                                                                     |
| <i>Dicamptodon ensatus</i><br>California giant salamander     | -- / CSC / --                 | Occurs within the Coast Range from just north of the southern border of Mendocino County to southern Santa Cruz County. Found in wet coastal forests in or around clear, cold permanent and semi-permanent streams and seepages. Typically, within elevations ranging from sea level to approximately 3000 feet.                                                     | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately six miles from the survey area, with development including major roads and highways isolating the survey area from any documented occurrences. |
| <i>Emys marmorata</i><br>Western pond turtle                  | -- / CSC / --                 | Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.                                                                                                                        | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately five miles from the survey area.                                                                                                               |
| <i>Phrynosoma blainvillii</i><br>Coast horned lizard          | -- / CSC / --                 | Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.                                                                                                                                                                                                                                                                             | <b>Unlikely</b><br>No suitable habitat is present within the survey area. There is one CNDDDB occurrence of this species within the quadrangles reviewed, located approximately 20 miles from the survey area.                                                                  |
| <i>Rana boylei</i><br>Foothill yellow-legged frog             | -- / SC&CSC / --              | Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.                                                                                                                                          | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 2.1 miles from the survey area; however, this is a non-specific occurrence from 1970.                                                          |

| Species                                                                        | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Potential Occurrence within Survey Area                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Rana draytonii</i><br>California red-legged frog                            | FT / CSC / --                 | Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.                                                                                                                                                                                                                         | <b>Moderate</b><br>No suitable breeding habitat is present within the survey area; however, dispersal habitat is present within all undeveloped portions of the survey area. There are three CNDDDB occurrences located within the known dispersal distance of this species (1.0 mile, 1.6 km). The nearest CNDDDB occurrence is located approximately 0.4 miles (0.6 km) from the survey area in Ellicott Pond, a known CRLF breeding resource. |
| <i>Thamnophis sirtalis tetrataenia</i><br>San Francisco garter snake           | FE / SE&CFP / --              | An extremely scarce subspecies which only occurs in the vicinity of ponds and reservoirs in San Mateo County. Observed most often in the vicinity of standing water (mainly ponds, lakes, marshes, and sloughs); however, temporary ponds and other seasonal water bodies are also used. Emergent and bankside vegetation (such as cattails, bulrush, and spike rushes) are preferred for cover. Use open spaces between stream/pond habitats and grasslands for basking.              | <b>Unlikely</b><br>No suitable habitat is present within the survey area. There are no CNDDDB occurrences of this species within the quadrangles reviewed.                                                                                                                                                                                                                                                                                       |
| <b>FISH</b>                                                                    |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <i>Eucyclogobius newberryi</i><br>Tidewater goby                               | FE / CSC / --                 | Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County. | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                                                                                                                            |
| <i>Hesperoleucus venustus subditus</i><br>Southern coastal roach               | -- / CSC / --                 | Restricted to the drainages of Tomales Bay/northern SF Bay in the north and Monterey Bay in the south.                                                                                                                                                                                                                                                                                                                                                                                 | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                                                                                                                            |
| <i>Lavinia exilicauda harengus</i><br>Monterey hitch<br>(Pajaro/Salinas hitch) | -- / CSC / --                 | Found only within the Pajaro and Salinas River systems. Can occupy a wide variety of habitats, however, they are most abundant in lowland areas with large pools or small reservoirs that mimic such conditions. May be found in brackish water conditions within the Salinas River lagoon during the early summer months when the sandbar forms at the mouth of the river.                                                                                                            | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                                                                                                                            |

| Species                                                                                 | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Potential Occurrence within Survey Area                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Oncorhynchus kisutch</i><br>Coho salmon<br>(central California coast ESU)            | FE / SE / --                  | All naturally spawned populations from Punta Gorda south to and including the San Lorenzo River; populations in tributaries to San Francisco Bay, excluding the Sacramento–San Joaquin River system; and four artificial propagation programs.                                                                                                                                                                                                                                                                                                                   | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                            |
| <i>Oncorhynchus mykiss irideus</i><br>Steelhead<br>(central California coast DPS)       | FT / -- / --                  | Coastal perennial and near perennial streams, with suitable spawning and rearing habitat and no major barriers.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                            |
| <i>Oncorhynchus mykiss irideus</i><br>Steelhead<br>(south-central California coast DPS) | FT / -- / --                  | Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                            |
| <i>Spirinchus thaleichthys</i><br>Longfin smelt                                         | FC / ST / --                  | Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 PPT, but can be found in completely freshwater to almost pure seawater.                                                                                                                                                                                                                                                                                                                                            | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                            |
| <i>Thaleichthys pacificus</i><br>Eulachon                                               | FT / -- / --                  | Small, anadromous fish from the eastern Pacific Ocean, commonly called smelt, candlefish, or hooligan. Typically spend 3 to 5 years in saltwater before returning to freshwater to spawn from late-winter through mid-spring. Occur in nearshore ocean waters and to 1,000 feet (300 m) in depth, except for the brief spawning runs into their natal (birth) streams. Spawning grounds are typically in the lower reaches of larger snowmelt-fed rivers with water temperatures ranging from 39 to 50°F. Spawning occurs over sand or coarse gravel substrates. | <b>Not Present</b><br>No suitable obligate habitat is present within the survey area.                                                                                                                                                                                                                                                            |
| <b>INVERTEBRATES</b>                                                                    |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                  |
| <i>Bombus crotchii</i><br>Crotch bumble bee                                             | -- / SC / --                  | Occurs in open grassland and scrub at relatively warm and dry sites. Requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late October. Generally nests underground, often in abandoned mammal burrows. Within California this species is known to occur in the Mediterranean, Pacific Coast, Western Desert, as well as Great Valley and adjacent foothill regions.                                                                                                            | <b>Low</b><br>Suitable habitat is present in the scrub habitat within and adjacent to the survey area; however, the limited understory vegetation may not provide adequate nectar for this species. The nearest CNDDDB occurrence is located approximately 3.5 miles from the survey area; however, this is a non-specific occurrence from 1994. |

| Species                                                            | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                                                                                                                                 | Potential Occurrence within Survey Area                                                                                                                                                       |
|--------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Bombus occidentalis</i><br>Western bumble bee                   | -- / SC / --                  | Occurs in open grassy areas, urban parks, urban gardens, chaparral, and meadows. This species generally nest underground. Western bumble bee populations are currently largely restricted to high elevation sites in the Sierra Nevada.                                                                                                                                         | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, the survey area is outside of the accepted range for this species.                                            |
| <i>Cicindela ohlone</i><br>Ohlone tiger beetle                     | FE / -- / --                  | Coastal terraces with remnant stands of open native grassland with clay or sandy soils. Hunt, breed, and dig small vertical burrows along sunny single-track trails and dirt roads (maintained by cattle, hikers, etc.) in coast terrace meadows that still support native grasses. Current range from the City of Scotts Valley to the eastern edge of the City of Santa Cruz. | <b>Not Present</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 11 miles from the survey area.                            |
| <i>Danaus plexippus</i><br>Monarch butterfly                       | FC / -- / --                  | Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.                                                                                                                              | <b>Low</b><br>Overwintering habitat may be present in Monterey pine forest habitat within the survey area; however, no overwintering populations have been documented within the survey area. |
| <i>Euphilotes enoptes smithi</i><br>Smith's blue butterfly         | FE / -- / --                  | Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are <i>Eriogonum latifolium</i> and <i>E. parvifolium</i> .                                                                                                                                                                               | <b>Not Present</b><br>No suitable habitat is present within the survey area. The host plant species were not identified during the March 2023 survey.                                         |
| <i>Euphydryas editha bayensis</i><br>Bay checkerspot butterfly     | FT / -- / --                  | Restricted to native grasslands on outcrops of serpentine soil in the vicinity of the San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Castilleja densiflorus</i> and <i>Castilleja exserta</i> are secondary host plants.                                                                                                                               | <b>Not Present</b><br>No suitable habitat is present within the survey area. The host plant species were not identified during the March 2023 survey.                                         |
| <i>Trimerotropis infantilis</i><br>Zayante band-winged grasshopper | FE / -- / --                  | Open sandy areas with sparse, low annual and perennial herbs on high ridges with sparse ponderosa pine. Often occurs with Ben Lomond wallflower. Restricted to sand parkland habitat found on ridges and hills within the Zayante sandhills habitat in Santa Cruz County. Flight season extends from late May through August.                                                   | <b>Not Present</b><br>No suitable habitat is present within the survey area. The survey area is outside of the accepted range for this species.                                               |
| <b>PLANTS</b>                                                      |                               |                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                               |
| <i>Amsinckia lunaris</i><br>Bent-flowered fiddleneck               | -- / -- / 1B                  | Coastal bluff scrub, cismontane woodland, and valley and foothill grassland at elevations of 3-500 meters. Annual herb in the Boraginaceae family; blooms March-June.                                                                                                                                                                                                           | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, this species was not identified during the March 2023 survey.                                              |

| Species                                                                          | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                               | Potential Occurrence within Survey Area                                                                                                                                                                             |
|----------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Arctostaphylos andersonii</i><br>Anderson's manzanita                         | -- / -- / 1B                  | Openings and edges of broadleaved upland forest, chaparral, and north coast coniferous forest at elevations of 60-760 meters. Evergreen shrub in the Ericaceae family; blooms November-May.                                                                   | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, this species was not identified during the March 2023 survey.                                                                    |
| <i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i><br>Hooker's manzanita          | -- / -- / 1B                  | Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.                                                                 | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. This species was not identified during the March 2023 survey.                          |
| <i>Arctostaphylos pajaroensis</i><br>Pajaro manzanita                            | -- / -- / 1B                  | Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March.                                                                                                                                      | <b>Not Present</b><br>No suitable habitat is present within the survey area and this species was not identified during the March 2023 survey.                                                                       |
| <i>Arctostaphylos silvicola</i><br>Bonny Doon manzanita                          | -- / -- / 1B                  | Chaparral, closed-cone coniferous forest, and lower montane coniferous forest on inland marine sands at elevations of 120-600 meters. Evergreen shrub in the Ericaceae family; blooms February-March.                                                         | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, the survey area is outside the elevational range for this species. This species was not identified during the March 2023 survey. |
| <i>Arenaria paludicola</i><br>Marsh sandwort                                     | FE / SE / 1B                  | Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August. | <b>Not Present</b><br>No suitable habitat is present within the survey area. The project site is outside of the accepted range of this species.                                                                     |
| <i>Calyptridium parryi</i> var. <i>hesseae</i><br>Santa Cruz Mountains pussypaws | -- / -- / 1B                  | Sandy or gravelly openings of chaparral and cismontane woodlands at elevations of 305-1530 meters. Annual herb in the Montiaceae family; blooms May-August.                                                                                                   | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, the survey area is outside of the elevational range for this species.                                                               |
| <i>Carex comosa</i><br>Bristly sedge                                             | -- / -- / 2B                  | Coastal prairie, marshes and swamps on lake margins, and valley and foothill grassland at elevations of 0-625 meters. Perennial rhizomatous herb in the Cyperaceae family; blooms May-September.                                                              | <b>Unlikely</b><br>No suitable habitat is present within the survey area.                                                                                                                                           |
| <i>Ceanothus ferrisiae</i><br>Coyote ceanothus                                   | FE / -- / 1B                  | Chaparral, coastal scrub, and valley and foothill grassland on serpentinite soils, at elevations of 120-460 meters. Perennial evergreen shrub in the Rhamnaceae family; blooms January-May.                                                                   | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, the survey area is outside the elevational range for this species. This species was not identified during the March 2023 survey. |
| <i>Centromadia parryi</i> ssp. <i>congdonii</i><br>Congdon's tarplant            | -- / -- / 1B                  | Valley and foothill grassland on heavy clay, saline, or alkaline soils at elevations of 0-230 meters. Annual herb in the Asteraceae family; blooms May-November.                                                                                              | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present.                                                                                           |

| Species                                                                          | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                                   | Potential Occurrence within Survey Area                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Chorizanthe pungens</i> var. <i>hartwegiana</i><br>Ben Lomond spineflower     | FE / -- / 1B                  | Lower montane coniferous forest (maritime ponderosa pine sandhills) at elevations of 90-610 meters. Annual herb in the Polygonaceae family; blooms April-July.                                                                                                    | <b>Not Present</b><br>No suitable habitat within the survey area. The survey area is outside of the accepted range for this species.                                                                                                                     |
| <i>Chorizanthe pungens</i> var. <i>pungens</i><br>Monterey spineflower           | FT / -- / 1B                  | Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-July.                                                 | <b>Low</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 1.1 mile from the survey area.                                                                                               |
| <i>Chorizanthe robusta</i> var. <i>hartwegii</i><br>Scott's Valley spineflower   | FE / -- / 1B                  | Meadows and seeps on sandy soils and valley and foothill grassland on mudstone and Purisima outcrops at elevations of 230-245 meters. Annual herb in the Polygonaceae family; blooms April-July.                                                                  | <b>Unlikely</b><br>No suitable habitat within the survey area. The survey area is outside the elevational range for this species.                                                                                                                        |
| <i>Chorizanthe robusta</i> var. <i>robusta</i><br>Robust spineflower             | FE / -- / 1B                  | Openings in cismontane woodland, coastal dunes, maritime chaparral, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September.                                                   | <b>Low</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 0.1 mile from the survey area; however, this occurrence is mapped generally as the Ellicott Slough National Wildlife Refuge. |
| <i>Cirsium fontinale</i> var. <i>campylon</i><br>Mount Hamilton fountain thistle | -- / -- / 1B                  | Chaparral, cismontane woodland, and valley and foothill grassland on serpentinite seeps, at elevations of 100-890 meters. Perennial herb in the Asteraceae family; blooms February-October.                                                                       | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. This species was not identified during the March 2023 survey.                                                               |
| <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i><br>Seaside bird's-beak        | -- / SE / 1B                  | Closed-cone coniferous forests, maritime chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Annual hemi-parasitic herb in the Orobanchaceae family; blooms April-October. | <b>Low</b><br>Suitable habitat is present within the survey area; however, only marginal soil conditions are present. The nearest CNDDDB occurrence is located approximately eight miles from the survey area.                                           |
| <i>Dudleya abramsii</i> ssp. <i>setchellii</i><br>Santa Clara Valley dudleya     | -- / -- / 1B                  | Cismontane woodland and valley and foothill grasslands on rocky serpentinite soils, at elevations of 60-455 meters. Perennial herb in the Crassulaceae family; blooms April-October.                                                                              | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present.                                                                                                                                |
| <i>Ericameria fasciculata</i><br>Eastwood's goldenbush                           | -- / -- / 1B                  | Openings in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October.                                                     | <b>Low</b><br>Suitable habitat is present within the survey area; however, only marginal soil conditions are present. The nearest CNDDDB occurrence is located approximately ten miles from the survey area.                                             |

| Species                                                                   | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                         | Potential Occurrence within Survey Area                                                                                                                                                                                                    |
|---------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Eriogonum nudum</i> var. <i>decurrens</i><br>Ben Lomond buckwheat      | -- / -- / 1B                  | Chaparral, cismontane woodland, and lower montane coniferous forest (maritime ponderosa pine sandhills) on sandy soils, at elevations of 50-800 meters. Perennial herb in the Polygonaceae family; blooms June-October. | <b>Not Present</b><br>No suitable habitat within the survey area. The survey area is outside of the accepted range for this species.                                                                                                       |
| <i>Eryngium aristulatum</i> var. <i>hooveri</i><br>Hoover's button-celery | -- / -- / 1B                  | Vernal pools at elevations of 3-45 meters. Annual/perennial herb in the Apiaceae family; blooms June-August.                                                                                                            | <b>Unlikely</b><br>No suitable habitat within the survey area.                                                                                                                                                                             |
| <i>Erysimum ammophilum</i><br>Sand-loving wallflower                      | -- / -- / 1B                  | Openings in maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.                                          | <b>Not Present</b><br>No suitable habitat is present within the survey area and this species was not identified during the March 2023 survey.                                                                                              |
| <i>Erysimum teretifolium</i><br>Santa Cruz wallflower                     | FE / SE / 1B                  | Chaparral and lower montane coniferous forest on inland marine sands, at elevations of 120-610 meters. Perennial herb in the Brassicaceae family; blooms March-July.                                                    | <b>Not Present</b><br>No suitable habitat within the survey area and the survey area is outside of the accepted range for this species.                                                                                                    |
| <i>Fissidens pauperculus</i><br>Minute pocket moss                        | -- / -- / 1B                  | North coast coniferous forest on gravely dried stream beds and damp coastal soil at elevations of 10-1024 meters. Moss in the Fissidentaceae family.                                                                    | <b>Low</b><br>Suitable habitat is present in the Monterey pine forest habitat within the survey area; however, there is only one CNDDDB occurrence within the quadrangles evaluated, located approximately ten miles from the survey area. |
| <i>Fritillaria liliacea</i><br>Fragrant fritillary                        | -- / -- / 1B                  | Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.   | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. This species was not identified during the March 2023 survey.                                                 |
| <i>Gilia tenuiflora</i> ssp. <i>arenaria</i><br>Monterey gilia            | FE / ST / 1B                  | Openings in maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.                          | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, only marginal soil conditions are present. The nearest CNDDDB occurrence is located approximately 12 miles from the survey area.                           |
| <i>Hoita strobilina</i><br>Loma Prieta hoita                              | -- / -- / 1B                  | Mesic areas of chaparral, cismontane woodland, and riparian woodland, usually on serpentinite soils, at elevations of 30-860 meters. Perennial herb in the Fabaceae family; blooms May-October.                         | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. The nearest CNDDDB occurrence is located approximately 13 miles from the survey area.                            |
| <i>Holocarpha macradenia</i><br>Santa Cruz tarplant                       | FT / SE / 1B                  | Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October.                                                  | <b>Unlikely</b><br>No suitable habitat is present within the survey area.                                                                                                                                                                  |

| Species                                                                              | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                                                             | Potential Occurrence within Survey Area                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Horkelia cuneata</i> var. <i>sericea</i><br>Kellogg's horkelia                    | -- / -- / 1B                  | Openings of closed-cone coniferous forests, maritime chaparral, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September.                                  | <b>Low</b><br>No suitable habitat is present within the survey area. The nearest CNDDDB occurrence is located approximately 1.1 mile from the survey area.                                                                          |
| <i>Lasthenia californica</i> ssp. <i>macrantha</i><br>Perennial goldfields           | -- / -- / 1B                  | Coastal bluff scrub, coastal dunes, and coastal scrub at an elevation of 5-520 meters. Perennial herb in the Asteraceae family. Blooms January-November.                                                                                                    | <b>Unlikely</b><br>No suitable habitat is present within the survey area and this species was not identified during the March 2023 survey.                                                                                          |
| <i>Lessingia micradenia</i> var. <i>glabrata</i><br>Smooth lessingia                 | -- / -- / 1B                  | Chaparral and cismontane woodlands on serpentinite soils, often on roadsides, at elevations of 120-420 meters. Annual herb in the Asteraceae family; blooms July-November.                                                                                  | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. The survey area is outside the elevational range for this species.                                        |
| <i>Malacothamnus arcuatus</i><br>Arcuate bush-mallow                                 | -- / -- / 1B                  | Chaparral and cismontane woodland at elevations of 15-355 meters. Perennial evergreen shrub in the Malvaceae family; blooms April-September.                                                                                                                | <b>Low</b><br>Suitable habitat is present in the wooded habitats within the survey area; however, the nearest CNDDDB occurrence is located approximately 15 miles from the survey area.                                             |
| <i>Monardella sinuata</i> ssp. <i>nigrescens</i><br>Northern curly-leaved monardella | -- / -- / 1B                  | Chaparral, coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-300 meters. Annual herb in the Lamiaceae family; blooms April-September.                                          | <b>Unlikely</b><br>No suitable habitat within the survey area.                                                                                                                                                                      |
| <i>Monolopia gracilens</i><br>Woodland woollythreads                                 | -- / -- / 1B                  | Openings of broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland on serpentinite soils at elevations of 100-1200 meters. Annual herb in the Asteraceae family; blooms February-July. | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. This species was not identified during the March 2023 survey.                                          |
| <i>Pedicularis dudleyi</i><br>Dudley's lousewort                                     | -- / SR / 1B                  | Maritime chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland at elevations of 60-900 meters. Perennial herb in the Orbanhaceae family; blooms April-June.                                                      | <b>Low</b><br>Suitable habitat is present within the survey area; however, there is only one CNDDDB occurrence within the quadrangles reviewed. This occurrence is a historical occurrence from 1884 listed as possibly extirpated. |
| <i>Penstemon rattanii</i> var. <i>kleei</i><br>Santa Cruz Mountains beardtongue      | -- / -- / 1B                  | Chaparral and lower montane and North Coast coniferous forests at elevations of 400-1100 meters. Perennial herb in the Plantaginaceae family; blooms May-June.                                                                                              | <b>Unlikely</b><br>No suitable habitat is present within the survey area. The survey area is outside the elevational range for this species.                                                                                        |

| Species                                                                            | Status<br>(Service/CDFW/CNPS) | General Habitat                                                                                                                                                                                                        | Potential Occurrence within Survey Area                                                                                                                                                                              |
|------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Pentachaeta bellidiflora</i><br>White-rayed pentachaeta                         | FE / SE / 1B                  | Cismontane woodland and valley and foothill grasslands, often on serpentinite soils, at elevations of 35-620 meters. Annual herb in the Asteraceae family; blooms March-May.                                           | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. This species was not identified during the March 2023 survey.                           |
| <i>Piperia yadonii</i><br>Yadon's rein orchid                                      | FE / -- / 1B                  | Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms February-August.                               | <b>Not Present</b><br>Suitable habitat is present within the survey area; however, only marginal soil conditions are present. This species was not identified during the March 2023 survey.                          |
| <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i><br>Choris' popcorn-flower | -- / -- / 1B                  | Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June.                                                                | <b>Not Present</b><br>No suitable habitat is present within the survey area and this species was not identified during the March 2023 survey.                                                                        |
| <i>Plagiobothrys diffusus</i><br>San Francisco popcorn-flower                      | -- / SE / 1B                  | Coastal prairie and valley and foothill grassland at elevations of 60-360 meters. Annual herb in the Boraginaceae family; blooms March-June.                                                                           | <b>Not Present</b><br>No suitable habitat is present within the survey area and this species was not identified during the March 2023 survey.                                                                        |
| <i>Polygonum hickmanii</i><br>Scotts Valley polygonum                              | FE / SE / 1B                  | Valley and foothill grassland on mudstone and sandstone at elevations of 210-250 meters. Annual herb in the Polygonaceae family; blooms: May-August.                                                                   | <b>Unlikely</b><br>No suitable habitat within the survey area. The survey area is outside the elevational range for this species.                                                                                    |
| <i>Rosa pinetorum</i><br>Pine rose                                                 | -- / -- / 1B                  | Closed-cone coniferous forest at elevations of 2-300 meters. Perennial shrub in the Rosaceae family; blooms May-July. Possible hybrid of <i>R. spithamea</i> , <i>R. gymnocarpa</i> , or others; further study needed. | <b>Low</b><br>Suitable habitat is present within the survey area; however, there is only one CNDDDB occurrence of this species within the quadrangles reviewed, located approximately 16 miles from the survey area. |
| <i>Trifolium buckwestiorum</i><br>Santa Cruz clover                                | -- / -- / 1B                  | Gravelly margins of broadleaved upland forest, cismontane woodland, and coastal prairie at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October.                                     | <b>Unlikely</b><br>Suitable habitat is present within the survey area; however, suitable soil conditions are not present. The survey area is outside the elevational range for this species.                         |
| <i>Trifolium hydrophilum</i><br>Saline clover                                      | -- / -- / 1B                  | Marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June.                                           | <b>Unlikely</b><br>No suitable habitat within the survey area.                                                                                                                                                       |
| <i>Trifolium polyodon</i><br>Pacific Grove clover                                  | -- / SR / 1B                  | Mesic areas of closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-July.              | <b>Low</b><br>Suitable habitat is present within the survey area; however, there is only one CNDDDB occurrence of this species within the quadrangles reviewed, located approximately 16 miles from the survey area. |

## STATUS DEFINITIONS

### Federal

- FE = listed as Endangered under the federal Endangered Species Act
- FT = listed as Threatened under the federal Endangered Species Act
- FC = Candidate for listing under the federal Endangered Species Act
- UR = Species that have been petitioned for listing under the ESA and for which a 90 day and/or 12 Month finding has not been published in the Federal Register, as well as species being reviewed through the candidate process but the CNOR has not yet been signed
- = no listing

### State

- SE = listed as Endangered under the California Endangered Species Act
- ST = listed as Threatened under the California Endangered Species Act
- SC = Candidate for listing under California Endangered Species Act
- SR = listed as Rare under the California Endangered Species Act
- CFP = California Fully Protected Species
- CSC = CDFW Species of Concern
- = no listing

### California Native Plant Society

- 1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
- 2B = California Rare Plant Rank 2B species; plants rare, threatened, or endangered in California, but more common elsewhere
- = no listing

## POTENTIAL TO OCCUR

- Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
- High = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of suitable habitat conditions
- Moderate = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of marginal habitat conditions within the site
- Low = species known to occur in the vicinity from the CNDDDB or other documentation; lack of suitable habitat or poor quality
- Unlikely = species not known to occur in the vicinity from the CNDDDB or other documentation, no suitable habitat is present within the site
- Not Present = species was not observed during surveys

*This page was left intentionally blank*

## **APPENDIX B**

### **CALIFORNIA NATURAL DIVERSITY DATABASE REPORT**



## Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



**Query Criteria:** Quad (Laurel (3712118) OR Loma Prieta (3712117) OR Mt. Madonna (3712116) OR Soquel (3612188) OR Watsonville East (3612186) OR Watsonville West (3612187) OR Moss Landing (3612177) OR Prunedale (3612176)) AND Taxonomic Group (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

| Species                                                                                              | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|------------------------------------------------------------------------------------------------------|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <b><i>Accipiter cooperii</i></b><br>Cooper's hawk                                                    | ABNKC12040   | None           | None         | G5          | S4         | WL                             |
| <b><i>Adela oplerella</i></b><br>Opler's longhorn moth                                               | IILEE0G040   | None           | None         | G2          | S2         |                                |
| <b><i>Agelaius tricolor</i></b><br>tricolored blackbird                                              | ABPBXB0020   | None           | Threatened   | G1G2        | S1S2       | SSC                            |
| <b><i>Ambystoma californiense pop. 1</i></b><br>California tiger salamander - central California DPS | AAAAA01181   | Threatened     | Threatened   | G2G3T3      | S3         | WL                             |
| <b><i>Ambystoma macrodactylum croceum</i></b><br>Santa Cruz long-toed salamander                     | AAAAA01082   | Endangered     | Endangered   | G5T1T2      | S1S2       | FP                             |
| <b><i>Amsinckia lunaris</i></b><br>bent-flowered fiddleneck                                          | PDBOR01070   | None           | None         | G3          | S3         | 1B.2                           |
| <b><i>Aneides niger</i></b><br>Santa Cruz black salamander                                           | AAAAD01070   | None           | None         | G3          | S3         | SSC                            |
| <b><i>Anniella pulchra</i></b><br>Northern California legless lizard                                 | ARACC01020   | None           | None         | G3          | S2S3       | SSC                            |
| <b><i>Antrozous pallidus</i></b><br>pallid bat                                                       | AMACC10010   | None           | None         | G4          | S3         | SSC                            |
| <b><i>Aquila chrysaetos</i></b><br>golden eagle                                                      | ABNKC22010   | None           | None         | G5          | S3         | FP                             |
| <b><i>Arctostaphylos andersonii</i></b><br>Anderson's manzanita                                      | PDERI04030   | None           | None         | G2          | S2         | 1B.2                           |
| <b><i>Arctostaphylos hookeri ssp. hookeri</i></b><br>Hooker's manzanita                              | PDERI040J1   | None           | None         | G3T2        | S2         | 1B.2                           |
| <b><i>Arctostaphylos pajaroenis</i></b><br>Pajaro manzanita                                          | PDERI04100   | None           | None         | G1          | S1         | 1B.1                           |
| <b><i>Arctostaphylos silvicola</i></b><br>Bonny Doon manzanita                                       | PDERI041F0   | None           | None         | G1          | S1         | 1B.2                           |
| <b><i>Asio flammeus</i></b><br>short-eared owl                                                       | ABNSB13040   | None           | None         | G5          | S3         | SSC                            |
| <b><i>Athene cunicularia</i></b><br>burrowing owl                                                    | ABNSB10010   | None           | None         | G4          | S3         | SSC                            |
| <b><i>Bombus caliginosus</i></b><br>obscure bumble bee                                               | IIHYM24380   | None           | None         | G2G3        | S1S2       |                                |



## Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



| Species                                                                                          | Element Code | Federal Status | State Status         | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|--------------------------------------------------------------------------------------------------|--------------|----------------|----------------------|-------------|------------|--------------------------------|
| <b><i>Bombus crotchii</i></b><br>Crotch bumble bee                                               | IIHYM24480   | None           | Candidate Endangered | G2          | S2         |                                |
| <b><i>Bombus occidentalis</i></b><br>western bumble bee                                          | IIHYM24252   | None           | Candidate Endangered | G3          | S1         |                                |
| <b><i>Calyptridium parryi</i> var. <i>hesseae</i></b><br>Santa Cruz Mountains pussypaws          | PDPOR09052   | None           | None                 | G3G4T2      | S2         | 1B.1                           |
| <b><i>Carex comosa</i></b><br>bristly sedge                                                      | PMCYP032Y0   | None           | None                 | G5          | S2         | 2B.1                           |
| <b><i>Ceanothus ferrisiae</i></b><br>Coyote ceanothus                                            | PDRHA041N0   | Endangered     | None                 | G1          | S1         | 1B.1                           |
| <b><i>Centromadia parryi</i> ssp. <i>congdonii</i></b><br>Congdon's tarplant                     | PDAST4R0P1   | None           | None                 | G3T2        | S2         | 1B.1                           |
| <b><i>Charadrius nivosus nivosus</i></b><br>western snowy plover                                 | ABNNB03031   | Threatened     | None                 | G3T3        | S3         | SSC                            |
| <b><i>Chorizanthe pungens</i> var. <i>hartwegiana</i></b><br>Ben Lomond spineflower              | PDPGN040M1   | Endangered     | None                 | G2T1        | S1         | 1B.1                           |
| <b><i>Chorizanthe pungens</i> var. <i>pungens</i></b><br>Monterey spineflower                    | PDPGN040M2   | Threatened     | None                 | G2T2        | S2         | 1B.2                           |
| <b><i>Chorizanthe robusta</i> var. <i>hartwegii</i></b><br>Scotts Valley spineflower             | PDPGN040Q1   | Endangered     | None                 | G2T1        | S1         | 1B.1                           |
| <b><i>Chorizanthe robusta</i> var. <i>robusta</i></b><br>robust spineflower                      | PDPGN040Q2   | Endangered     | None                 | G2T1        | S1         | 1B.1                           |
| <b><i>Cicindela ohlone</i></b><br>Ohlone tiger beetle                                            | IICOL026L0   | Endangered     | None                 | G1          | S1         |                                |
| <b><i>Cirsium fontinale</i> var. <i>campylon</i></b><br>Mt. Hamilton thistle                     | PDAST2E163   | None           | None                 | G2T2        | S2         | 1B.2                           |
| <b><i>Clarkia concinna</i> ssp. <i>automixa</i></b><br>Santa Clara red ribbons                   | PDONA050A1   | None           | None                 | G5?T3       | S3         | 4.3                            |
| <b><i>Coelus globosus</i></b><br>globose dune beetle                                             | IICOL4A010   | None           | None                 | G1G2        | S1S2       |                                |
| <b><i>Cordylanthus rigidus</i> ssp. <i>littoralis</i></b><br>seaside bird's-beak                 | PDSCR0J0P2   | None           | Endangered           | G5T2        | S2         | 1B.1                           |
| <b><i>Corynorhinus townsendii</i></b><br>Townsend's big-eared bat                                | AMACC08010   | None           | None                 | G4          | S2         | SSC                            |
| <b><i>Coturnicops noveboracensis</i></b><br>yellow rail                                          | ABNME01010   | None           | None                 | G4          | S1S2       | SSC                            |
| <b><i>Danaus plexippus plexippus</i> pop. 1</b><br>monarch - California overwintering population | IILEPP2012   | Candidate      | None                 | G4T1T2Q     | S2         |                                |
| <b><i>Dicamptodon ensatus</i></b><br>California giant salamander                                 | AAAAH01020   | None           | None                 | G2G3        | S2S3       | SSC                            |
| <b><i>Dipodomys venustus venustus</i></b><br>Santa Cruz kangaroo rat                             | AMAFD03042   | None           | None                 | G4T1        | S1         |                                |



## Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



| Species                                                                      | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|------------------------------------------------------------------------------|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <b><i>Dudleya abramsii ssp. setchellii</i></b><br>Santa Clara Valley dudleya | PDCRA040Z0   | Endangered     | None         | G4T2        | S2         | 1B.1                           |
| <b><i>Elanus leucurus</i></b><br>white-tailed kite                           | ABNKC06010   | None           | None         | G5          | S3S4       | FP                             |
| <b><i>Emys marmorata</i></b><br>western pond turtle                          | ARAAD02030   | None           | None         | G3G4        | S3         | SSC                            |
| <b><i>Ericameria fasciculata</i></b><br>Eastwood's goldenbush                | PDAST3L080   | None           | None         | G2          | S2         | 1B.1                           |
| <b><i>Eriogonum nudum var. decurrens</i></b><br>Ben Lomond buckwheat         | PDPGN08492   | None           | None         | G5T1        | S1         | 1B.1                           |
| <b><i>Eryngium aristulatum var. hooveri</i></b><br>Hoover's button-celery    | PDAP10Z043   | None           | None         | G5T1        | S1         | 1B.1                           |
| <b><i>Erysimum ammodophilum</i></b><br>sand-loving wallflower                | PDBRA16010   | None           | None         | G2          | S2         | 1B.2                           |
| <b><i>Erysimum teretifolium</i></b><br>Santa Cruz wallflower                 | PDBRA160N0   | Endangered     | Endangered   | G1          | S1         | 1B.1                           |
| <b><i>Eucyclogobius newberryi</i></b><br>tidewater goby                      | AFCQN04010   | Endangered     | None         | G3          | S3         |                                |
| <b><i>Euphilotes enoptes smithi</i></b><br>Smith's blue butterfly            | IILEPG2026   | Endangered     | None         | G5T1T2      | S2         |                                |
| <b><i>Euphydryas editha bayensis</i></b><br>Bay checkerspot butterfly        | IILEPK4055   | Threatened     | None         | G5T1        | S3         |                                |
| <b><i>Falco peregrinus anatum</i></b><br>American peregrine falcon           | ABNKD06071   | Delisted       | Delisted     | G4T4        | S3S4       | FP                             |
| <b><i>Fissidens pauperculus</i></b><br>minute pocket moss                    | NBMUS2W0U0   | None           | None         | G3?         | S2         | 1B.2                           |
| <b><i>Fritillaria liliacea</i></b><br>fragrant fritillary                    | PML1L0V0C0   | None           | None         | G2          | S2         | 1B.2                           |
| <b><i>Gilia tenuiflora ssp. arenaria</i></b><br>Monterey gilia               | PDPLM041P2   | Endangered     | Threatened   | G3G4T2      | S2         | 1B.2                           |
| <b><i>Gonidea angulata</i></b><br>western ridged mussel                      | IMBIV19010   | None           | None         | G3          | S2         |                                |
| <b><i>Hesperoleucus venustus subditus</i></b><br>southern coastal roach      | AFCJB19032   | None           | None         | GNRT2       | S2         | SSC                            |
| <b><i>Hoita strobilina</i></b><br>Loma Prieta hoita                          | PDFAB5Z030   | None           | None         | G2?         | S2?        | 1B.1                           |
| <b><i>Holocarpha macradenia</i></b><br>Santa Cruz tarplant                   | PDAST4X020   | Threatened     | Endangered   | G1          | S1         | 1B.1                           |
| <b><i>Horkelia cuneata var. sericea</i></b><br>Kellogg's horkelia            | PDROS0W043   | None           | None         | G4T1?       | S1?        | 1B.1                           |
| <b><i>Lasthenia californica ssp. macrantha</i></b><br>perennial goldfields   | PDAST5L0C5   | None           | None         | G3T2        | S2         | 1B.2                           |



## Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



| Species                                                                                            | Element Code | Federal Status      | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|----------------------------------------------------------------------------------------------------|--------------|---------------------|--------------|-------------|------------|--------------------------------|
| <b><i>Lavinia exilicauda harengus</i></b><br>Monterey hitch                                        | AFCJB19013   | None                | None         | G4T3        | S3         | SSC                            |
| <b><i>Lessingia micradenia</i> var. <i>glabrata</i></b><br>smooth lessingia                        | PDAST5S062   | None                | None         | G2T2        | S2         | 1B.2                           |
| <b><i>Linderiella occidentalis</i></b><br>California linderiella                                   | ICBRA06010   | None                | None         | G2G3        | S2S3       |                                |
| <b><i>Malacothamnus arcuatus</i></b><br>arcuate bush-mallow                                        | PDMAL0Q0E0   | None                | None         | G2Q         | S2         | 1B.2                           |
| <b><i>Monardella sinuata</i> ssp. <i>nigrescens</i></b><br>northern curly-leaved monardella        | PDLAM18162   | None                | None         | G3T2        | S2         | 1B.2                           |
| <b><i>Monolopia gracilens</i></b><br>woodland woollythreads                                        | PDAST6G010   | None                | None         | G3          | S3         | 1B.2                           |
| <b><i>Neotoma fuscipes annectens</i></b><br>San Francisco dusky-footed woodrat                     | AMAFF08082   | None                | None         | G5T2T3      | S2S3       | SSC                            |
| <b><i>Oncorhynchus kisutch</i> pop. 4</b><br>coho salmon - central California coast ESU            | AFCHA02034   | Endangered          | Endangered   | G5T2Q       | S2         |                                |
| <b><i>Oncorhynchus mykiss irideus</i> pop. 8</b><br>steelhead - central California coast DPS       | AFCHA0209G   | Threatened          | None         | G5T2T3Q     | S3         |                                |
| <b><i>Oncorhynchus mykiss irideus</i> pop. 9</b><br>steelhead - south-central California coast DPS | AFCHA0209H   | Threatened          | None         | G5T2Q       | S2         |                                |
| <b><i>Pandion haliaetus</i></b><br>osprey                                                          | ABNKC01010   | None                | None         | G5          | S4         | WL                             |
| <b><i>Pedicularis dudleyi</i></b><br>Dudley's lousewort                                            | PDSCR1K180   | None                | Rare         | G2          | S2         | 1B.2                           |
| <b><i>Penstemon rattanii</i> var. <i>kleei</i></b><br>Santa Cruz Mountains beardtongue             | PDSCR1L5B1   | None                | None         | G4T2        | S2         | 1B.2                           |
| <b><i>Pentachaeta bellidiflora</i></b><br>white-rayed pentachaeta                                  | PDAST6X030   | Endangered          | Endangered   | G1          | S1         | 1B.1                           |
| <b><i>Phrynosoma blainvillii</i></b><br>coast horned lizard                                        | ARACF12100   | None                | None         | G3          | S4         | SSC                            |
| <b><i>Piperia yadonii</i></b><br>Yadon's rein orchid                                               | PMORC1X070   | Endangered          | None         | G1          | S1         | 1B.1                           |
| <b><i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i></b><br>Choris' popcornflower           | PDBOR0V061   | None                | None         | G3T1Q       | S1         | 1B.2                           |
| <b><i>Plagiobothrys diffusus</i></b><br>San Francisco popcornflower                                | PDBOR0V080   | None                | Endangered   | G1Q         | S1         | 1B.1                           |
| <b><i>Polygonum hickmanii</i></b><br>Scotts Valley polygonum                                       | PDPGN0L310   | Endangered          | Endangered   | G1          | S1         | 1B.1                           |
| <b><i>Rallus obsoletus obsoletus</i></b><br>California Ridgway's rail                              | ABNME05011   | Endangered          | Endangered   | G3T1        | S1         | FP                             |
| <b><i>Rana boylei</i> pop. 4</b><br>foothill yellow-legged frog - central coast DPS                | AAABH01054   | Proposed Threatened | Endangered   | G3T2        | S2         |                                |



# Selected Elements by Scientific Name

## California Department of Fish and Wildlife

### California Natural Diversity Database



| Species                                                                           | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|-----------------------------------------------------------------------------------|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <b><i>Rana draytonii</i></b><br>California red-legged frog                        | AAABH01022   | Threatened     | None         | G2G3        | S2S3       | SSC                            |
| <b><i>Reithrodontomys megalotis distichlis</i></b><br>Salinas harvest mouse       | AMAFF02032   | None           | None         | G5T1        | S2         |                                |
| <b><i>Riparia riparia</i></b><br>bank swallow                                     | ABPAU08010   | None           | Threatened   | G5          | S2         |                                |
| <b><i>Rosa pinetorum</i></b><br>pine rose                                         | PDR0S1J0W0   | None           | None         | G2          | S2         | 1B.2                           |
| <b><i>Scaphinotus behrensi</i></b><br>Behrens' snail-eating beetle                | IICOL4L070   | None           | None         | G2G4        | S2S4       |                                |
| <b><i>Sorex ornatus salarius</i></b><br>Monterey shrew                            | AMABA01105   | None           | None         | G5T1T2      | S1S2       | SSC                            |
| <b><i>Spirinchus thaleichthys</i></b><br>longfin smelt                            | AFCHB03010   | Candidate      | Threatened   | G5          | S1         |                                |
| <b><i>Streptanthus albidus ssp. peramoenus</i></b><br>most beautiful jewelflower  | PDBRA2G012   | None           | None         | G2T2        | S2         | 1B.2                           |
| <b><i>Taxidea taxus</i></b><br>American badger                                    | AMAJF04010   | None           | None         | G5          | S3         | SSC                            |
| <b><i>Thaleichthys pacificus</i></b><br>eulachon                                  | AFCHB04010   | Threatened     | None         | G5          | S1         |                                |
| <b><i>Trifolium buckwestiorum</i></b><br>Santa Cruz clover                        | PDFAB402W0   | None           | None         | G2          | S2         | 1B.1                           |
| <b><i>Trifolium hydrophilum</i></b><br>saline clover                              | PDFAB400R5   | None           | None         | G2          | S2         | 1B.2                           |
| <b><i>Trifolium polyodon</i></b><br>Pacific Grove clover                          | PDFAB402H0   | None           | Rare         | G1          | S1         | 1B.1                           |
| <b><i>Trimerotropis infantilis</i></b><br>Zayante band-winged grasshopper         | IIORT36030   | Endangered     | None         | G1          | S1         |                                |
| <b><i>Tryonia imitator</i></b><br>mimic tryonia (=California brackishwater snail) | IMGASJ7040   | None           | None         | G2          | S2         |                                |

Record Count: 95

*This page was left intentionally blank*

## **APPENDIX C**

### **INFORMATION FOR PLANNING AND CONSULTING (IPaC) RESOURCE LIST**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Santa Cruz County, California



## Local office

Ventura Fish And Wildlife Office

☎ (805) 644-1766

📠 (805) 644-3958

✉ [FW8VenturaSection7@FWS.Gov](mailto:FW8VenturaSection7@FWS.Gov)

2402 Portola Road Suite B

<https://ipac.ecosphere.fws.gov/location/L5ENE3J2ZJDTHE4CE562WDKBE/resources>

2475 Fortola Road, Suite D  
Ventura, CA 93003-7726

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

| NAME                                                                                                                                                                                                                                             | STATUS     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <p>San Joaquin Kit Fox <i>Vulpes macrotis mutica</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/2873">https://ecos.fws.gov/ecp/species/2873</a></p> | Endangered |

## Birds

| NAME                                                                                                                                                                                                                                                                                                                | STATUS     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <p>California Condor <i>Gymnogyps californianus</i></p> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a></p>                                       | Endangered |
| <p>California Least Tern <i>Sterna antillarum browni</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a></p>                                                                | Endangered |
| <p>Least Bell's Vireo <i>Vireo bellii pusillus</i></p> <p>Wherever found</p> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a></p>                  | Endangered |
| <p>Marbled Murrelet <i>Brachyramphus marmoratus</i></p> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a></p>                                       | Threatened |
| <p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i></p> <p>Wherever found</p> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a></p> | Endangered |

**Western Snowy Plover** *Charadrius nivosus nivosus* **Threatened**  
 There is **final** critical habitat for this species. Your location does not overlap the critical habitat.  
<https://ecos.fws.gov/ecp/species/8035>

**Yellow-billed Cuckoo** *Coccyzus americanus* **Threatened**  
 There is **final** critical habitat for this species. Your location does not overlap the critical habitat.  
<https://ecos.fws.gov/ecp/species/3911>

## Reptiles

| NAME                                                                                                                                                                                                                                                 | STATUS            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>San Francisco Garter Snake</b> <i>Thamnophis sirtalis tetrataenia</i><br>Wherever found<br>No critical habitat has been designated for this species.<br><a href="https://ecos.fws.gov/ecp/species/5956">https://ecos.fws.gov/ecp/species/5956</a> | <b>Endangered</b> |

## Amphibians

| NAME                                                                                                                                                                                                                                                                            | STATUS                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <b>California Red-legged Frog</b> <i>Rana draytonii</i><br>Wherever found<br>There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> | <b>Threatened</b>          |
| <b>California Tiger Salamander</b> <i>Ambystoma californiense</i><br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a> | <b>Threatened</b>          |
| <b>Foothill Yellow-legged Frog</b> <i>Rana boylei</i><br>No critical habitat has been designated for this species.                                                                                                                                                              | <b>Proposed Threatened</b> |
| <b>Santa Cruz Long-toed Salamander</b> <i>Ambystoma macrodactylum croceum</i><br>Wherever found<br>There is <b>proposed</b> critical habitat for this species.<br><a href="https://ecos.fws.gov/ecp/species/7405">https://ecos.fws.gov/ecp/species/7405</a>                     | <b>Endangered</b>          |

## Fishes

| NAME                                                                                                                                                                                                                                                                             | STATUS     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>Tidewater Goby</b> <i>Eucyclogobius newberryi</i><br>Wherever found<br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a> | Endangered |

## Insects

| NAME                                                                                                                                                                                                                         | STATUS    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Monarch Butterfly</b> <i>Danaus plexippus</i><br>Wherever found<br>No critical habitat has been designated for this species.<br><a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a> | Candidate |

## Flowering Plants

| NAME                                                                                                                                                                                                                                                                                                     | STATUS     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>Marsh Sandwort</b> <i>Arenaria paludicola</i><br>Wherever found<br>No critical habitat has been designated for this species.<br><a href="https://ecos.fws.gov/ecp/species/2229">https://ecos.fws.gov/ecp/species/2229</a>                                                                             | Endangered |
| <b>Monterey Gilia</b> <i>Gilia tenuiflora</i> ssp. <i>arenaria</i><br>Wherever found<br>No critical habitat has been designated for this species.<br><a href="https://ecos.fws.gov/ecp/species/856">https://ecos.fws.gov/ecp/species/856</a>                                                             | Endangered |
| <b>Monterey Spineflower</b> <i>Chorizanthe pungens</i> var. <i>pungens</i><br>Wherever found<br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/396">https://ecos.fws.gov/ecp/species/396</a> | Threatened |
| <b>Santa Cruz Tarplant</b> <i>Holocarpha macradenia</i><br>Wherever found<br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/6832">https://ecos.fws.gov/ecp/species/6832</a>                  | Threatened |

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

| NAME                                                                                                                                                          | TYPE  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| California Red-legged Frog <i>Rana draytonii</i><br><a href="https://ecos.fws.gov/ecp/species/2891#crithab">https://ecos.fws.gov/ecp/species/2891#crithab</a> | Final |

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your

list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME                                                                                                                                                                                                                                                                                          | BREEDING SEASON         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Allen's Hummingbird</b> <i>Selasphorus sasin</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9637">https://ecos.fws.gov/ecp/species/9637</a>                                      | Breeds Feb 1 to Jul 15  |
| <b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i><br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.                      | Breeds Jan 1 to Aug 31  |
| <b>Belding's Savannah Sparrow</b> <i>Passerculus sandwichensis beldingi</i><br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br><a href="https://ecos.fws.gov/ecp/species/8">https://ecos.fws.gov/ecp/species/8</a> | Breeds Apr 1 to Aug 15  |
| <b>Black Skimmer</b> <i>Rynchops niger</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/5234">https://ecos.fws.gov/ecp/species/5234</a>                                               | Breeds May 20 to Sep 15 |
| <b>Black Swift</b> <i>Cypseloides niger</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/8878">https://ecos.fws.gov/ecp/species/8878</a>                                              | Breeds Jun 15 to Sep 10 |
| <b>Black Tern</b> <i>Chlidonias niger</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/3093">https://ecos.fws.gov/ecp/species/3093</a>                                                | Breeds May 15 to Aug 20 |

**Black Turnstone** *Arenaria melanocephala*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

**Bullock's Oriole** *Icterus bullockii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Mar 21 to Jul 25

**California Gull** *Larus californicus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 1 to Jul 31

**California Thrasher** *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

**Clark's Grebe** *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jun 1 to Aug 31

**Common Yellowthroat** *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

**Golden Eagle** *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

**Lawrence's Goldfinch** *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

**Marbled Godwit** *Limosa fedoa*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Breeds elsewhere

**Nuttall's Woodpecker** *Picoides nuttallii*

Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

**Oak Titmouse** *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

**Olive-sided Flycatcher** *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

**Short-billed Dowitcher** *Limnodromus griseus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

**Tricolored Blackbird** *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

**Western Grebe** *Aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

**Willet** *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and

understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

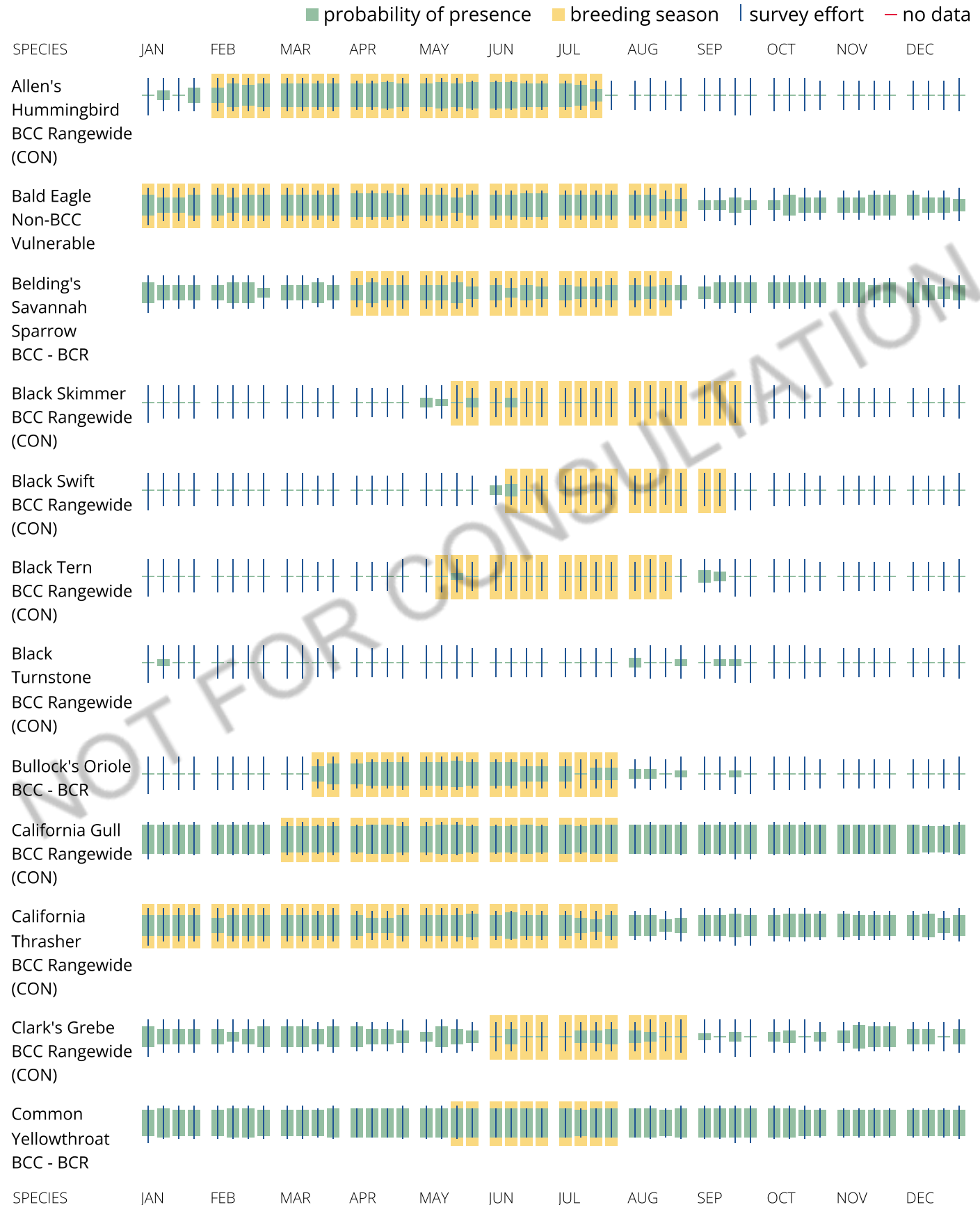
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

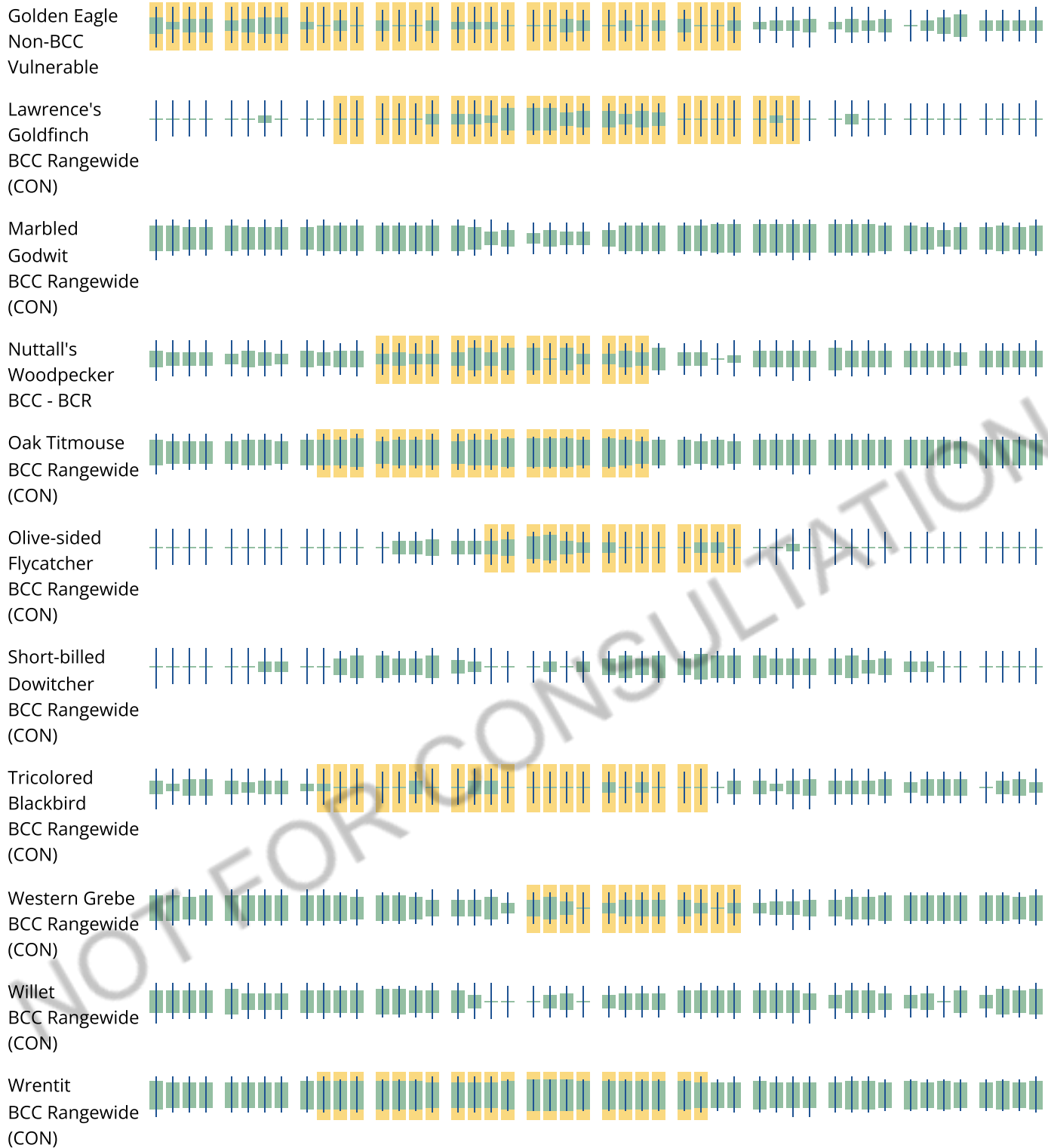
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure.

To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### **What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in

offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

*This page was left intentionally blank*