**COUNTY OF SAN MATEO**
**PLANNING AND BUILDING DEPARTMENT**

**DATE:** August 23, 2023

**TO:** Planning Commission

**FROM:** Planning Staff

**SUBJECT:** EXECUTIVE SUMMARY: Consideration of a Coastal Development Permit (CDP), Planned Agricultural District Permit, and Architectural Review Permit, and adoption of a Mitigated Negative Declaration, for the drilling of a test domestic well on an undeveloped 6.53-acre property located on the west side of Cabrillo Highway in the unincorporated Pescadero area of San Mateo County. The CDP is appealable to the California Coastal Commission. The property is located in the Cabrillo Highway State Scenic Corridor.

County File Number: PLN 2022-00211 (Burke)

## PROPOSAL

The project parcel is located adjacent to and west of Cabrillo Highway (State Route 1), within the Cabrillo Highway State Scenic Corridor. The site is undeveloped and there is no evidence that any agricultural activities have been conducted on the subject property.

The applicant is seeking a Coastal Development Permit (CDP), Planned Agricultural District Permit, and Architectural Review Permit for the drilling of a test domestic well to determine if adequate water is present to serve potential future residential development. Three well locations are identified as potential well sites but only one well will be constructed and certified. Three Assessor's Parcel Numbers (APN's), 086-250-140, 086-250-150, and 086-250-160, make up the legal project parcel of approximately 6.53 acres and the site of each well location will be approximately 4 square feet. The test well locations are located in the central portion of APN 086-250-150 and the central and eastern portion of APN 086-250-160. No tree removal is required, and minimal grading is necessary for the project.

## RECOMMENDATION

That the Planning Commission adopt the Mitigated Negative Declaration and approve the Coastal Development Permit, Planned Agricultural District Permit, and Architectural Review Permit, County File Number PLN 2022-00211, by adopting the required findings and conditions of approval in Attachment A.

## SUMMARY

The project conforms to all applicable General Plan, Local Coastal Program, and Planned Agricultural District Development Review Criteria with regard to fish and wildlife resources, visual quality, agriculture, sensitive habitats, visual resources, shoreline access, and agricultural conversion. The project will not introduce noxious odors, chemical agents, or long-term increased noise levels. The project will determine if there is adequate water to support future residential development on the property. The project does not involve the removal of large areas of vegetation and will utilize existing road infrastructure, thereby reducing grading necessary to access the site and accommodate the project. All development will be located outside a 100-foot buffer from riparian and marshland and 50 feet from the bluff and special-status plant species and will implement all mitigation measures proposed by a qualified biologist, thereby avoiding impacts to sensitive habitat.

The project, as designed and conditioned, retains the rural nature of the parcel and preserves all of the mature trees and dominant vegetation. While the project is located within a scenic corridor, its design at ground level, size of approximately 4 sq. ft., along with existing topography and vegetation ensures that there will not be any visual impacts to scenic resources.

The project was considered by the Agricultural Advisory Committee (AAC) on June 12, 2023. No concerns or recommendations were raised at the hearing. The AAC voted unanimously to recommend approval of the test well project.

## ENVIRONMENTAL EVALUTATION

An Initial Study and Mitigated Negative Declaration (IS/MND) was prepared for this project and circulated from April 26, 2023, to May 16, 2023. No comments were received during the 20-day public comment period. Staff has determined that the project, with the recommended mitigation measures, will not have a significant impact on the environment.

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**COUNTY OF SAN MATEO**
**PLANNING AND BUILDING DEPARTMENT**

**DATE:** August 23, 2023

**TO:** Planning Commission

**FROM:** Planning Staff

**SUBJECT:** Consideration of a Coastal Development Permit (CDP), Planned Agricultural District Permit, and Architectural Review Permit, pursuant to Sections 6328.4 and 6353 of the San Mateo County Zoning Regulations, and Section 261 of the California Streets and Highways Code, respectively, and adoption of a Mitigated Negative Declaration, pursuant to the California Environmental Quality Act, for the drilling of a test domestic well on an undeveloped 6.53-acre property located on the west side of Cabrillo Highway in the unincorporated Pescadero area of San Mateo County. The CDP is appealable to the California Coastal Commission. The property is located in the Cabrillo Highway State Scenic Corridor.

County File Number: PLN 2022-00211 (Burke)

## PROPOSAL

The project parcel is located adjacent to and west of Cabrillo Highway (State Route 1), within the Cabrillo Highway State Scenic Corridor. The site is undeveloped and there is no evidence that any agricultural activities have been conducted on the subject property.

The applicant is seeking a Coastal Development Permit (CDP), Planned Agricultural District Permit, and Architectural Review Permit for the drilling of a test domestic well to determine if adequate water is present to serve potential future residential development. Three well locations are identified as potential well sites but only one well will be constructed and certified. Three Assessor's Parcel Numbers (APN's), 086-250-140, 086-250-150, and 086-250-160, make up the legal project parcel of approximately 6.53 acres and the site of each well location will be approximately 4 square feet. The test well locations are located in the central portion of APN 086-250-150 and the central and eastern portion of APN 086-250-160. No tree removal is required, and only minimal grading is necessary for the project.

## RECOMMENDATION

That the Planning Commission adopt the Mitigated Negative Declaration and approve the Coastal Development Permit, Planned Agricultural District Permit, and Architectural Review Permit, County File Number PLN 2022-00211, by adopting the required findings and conditions of approval in Attachment A.

## BACKGROUND

Report Prepared By: Kanoa Kelley, Project Planner, kkelley@smcgov.org

Applicant: Kerry Burke

Owner: Joshua Skolnick

Public Notification: Ten (10) day advanced notification for the hearing was mailed to property owners within 300 feet of the project parcel and a notice for the hearing posted in a newspaper (San Mateo Times and Half Moon Bay Review) of general public circulation on July 29, 2023, and August 2, 2023, respectively.

Location: West of Cabrillo Highway in the community of Pescadero

APN: 086-250-140, 086-250-150, 086-250-160

Parcel Size: 6.53 acres

Parcel Legality: The 6.53-acre parcel is legal pursuant to a parcel map recorded on July 21, 1966

Existing Zoning: Planned Agricultural District/Coastal Development (PAD/CD)

General Plan Designation: Agriculture

Local Coastal Plan Designation: Agriculture

Sphere-of-Influence: N/A

Williamson Act: Not contracted.

Existing Land Use: Vacant

Water Supply: There is no municipal water service available in this area. The approval of the subject CDP will allow the drilling of up to 3 exploratory test wells to determine if there is suitable water on site to sustain a future residential development.

Sewage Disposal: There is no municipal sewer service available in this area; no sewage disposal system is proposed.

Flood Zone: Flood Zone X (area of minimal flood hazard), FEMA FIRM Panel 06081C0434F, effective August 2, 2017.

Environmental Evaluation: An Initial Study and Mitigated Negative Declaration (IS/MND) has been prepared pursuant to the California Environmental Quality Act (CEQA) Guidelines. The IS/MND was published for a 20-day public review period; no comments were received.

Setting: The parcel is located approximately 0.8 miles south of Bean Hollow Road and on the west side of Cabrillo Highway (Highway 1). The parcel is relatively flat and is bounded on the north side by residential development on 5+ acres and vacant land to the south. The rural lot is undeveloped and covered with natural vegetation consisting of coastal scrub and coastal bluff scrub, and cypress trees concentrated on the northern most portion of the property.

Chronology:

| Date | | Action |
|---|---|---|
| July 8, 2022 | - | Application submitted. |
| January 11, 2023 | - | Application deemed complete. |
| April 26 to May 16, 2023 | - | Circulation of Initial Study and Mitigated Negative Declaration. |
| June 12, 2023 | - | Agricultural Advisory Committee meeting. |
| August 9, 2023 | - | Planning Commission hearing. |

## DISCUSSION

A. KEY ISSUES

Planning staff has reviewed this proposal and has concluded the following:

1. Conformance with the General Plan

Staff has reviewed the project and found it to be in conformance with the applicable General Plan policies as follows:

a. Vegetative, Water, Fish, and Wildlife Resources

Policies 1.28 (*Regulate Development to Protect Sensitive Habitats*) and 1.29 (*Establish Buffer Zones*) seek to regulate development activities within or adjacent to sensitive habitats to protect endangered plants and animals and establish necessary buffer zones to protect these areas from encroachment by development.

Pursuant to the Sensitive Habitats Component of the County's Local Coastal Program, a minimum buffer zone of 50 feet from riparian habitat and 100 feet from wetlands that are located on the property must be maintained for this project. All special-status plants identified on site will be preserved and protected throughout the development of the test water wells. See staff's discussion on Local Coastal Program (LCP) Policy 7.11 and 7.18 below.

b. Visual Quality

Policy 4.15 (*Appearance of New Development*) and Policy 4.22 (*Scenic Corridors*) seek to regulate development to promote good design, site relationships, and to protect and enhance the visual quality of development within designated scenic corridors.

General Plan Table 4.6 designates Cabrillo Highway (State Route 1) from the southern limits of the City of Half Moon Bay to the Santa Cruz County line as a State Scenic Corridor. Adjacent to Cabrillo Highway, the project parcels and project site fall within the Cabrillo Highway State Scenic Corridor.

The parcel is located west of Cabrillo Highway and the closest test well site will be located approximately 160 feet west of Cabrillo Highway. Due to existing coyote brush and other tall vegetation and the low profile of the water well no development will be seen from Cabrillo Highway. The project does not propose the removal of any existing vegetation or trees adjacent to Cabrillo Highway; therefore, existing vegetation that provides screening will be maintained.

c. Rural Land Use

Policy 9.23 (*Land Use Compatibility in Rural Lands*) and Policy 9.30 (*Development Standards to Minimize Land Use Conflicts with Agriculture*) encourage compatibility of land uses in order to promote the health, safety, and economy of rural lands, seek to maintain the scenic and harmonious nature of rural lands, and seek to: (1) promote land use compatibility by encouraging the location of new residential development immediately adjacent to existing developed areas, and (2) cluster development so that large parcels can be retained for the protection and use of vegetative, visual, agricultural, and other resources.

No development other than the domestic well is proposed. As discussed in this staff report, the small footprint of the well will not displace or remove any coastal resources.

2. Conformance with Local Coastal Program (LCP) Policies

Staff has determined that the proposed development conforms to all applicable LCP Policies, specifically:

a. Locating and Planning New Development

Policy 1.8 *(Land Uses and Development Densities in Rural Areas)* states that new development in rural areas shall not: (1) have significant adverse impacts, either individually or cumulatively on coastal resources, or (2) diminish the ability to keep all prime agricultural land and other lands suitable for agriculture in agricultural production.

As discussed previously, the proposed domestic well will remove approximately 4 sq. ft. of prime soils and will not diminish the ability to farm in the future. Through the preparation of an Initial Study and Mitigated Negative Declaration, staff has concluded the proposed project will not have an adverse impact on coastal resources.

b. Agriculture

Policy 5.1 (*Definition of Prime Agricultural Lands*) defines prime agricultural lands as all lands which contain soils rated Class I, Class II, as well as Class III soils rated capable of growing artichokes or Brussel sprouts as defined by the U.S Department of Agriculture Soil Conservation Service Land Use Compatibility Classification. Policy 5.5 (*Permitted Uses on Prime Agricultural Lands Designated as*

*Agriculture*) conditionally permits residential use on prime agricultural lands.

Per the Productive Soil Resources with Agricultural Capability General Plan Map, most of the project parcel contains Class II prime soils. Additionally, the PAD Regulations allow conversion of prime agricultural lands subject to a PAD Permit, which the applicant is seeking.

c. Sensitive Habitats Component

Policy 7.1 (*Definition of Sensitive Habitats*) defines sensitive habitats as "habitats containing or supporting rare and endangered species as defined by the State Fish and Game Commission". This habitat includes riparian corridors and wetlands. Policy 7.11 (*Establishment of Buffer Zones*) requires a 50-foot buffer zone from the limit of riparian vegetation. Similarly, Policy 7.18 (*Establishment of Buffer Zones*) establishes a buffer zone of 100 feet landward from the outermost line of wetland vegetation.

A Biological Resources Technical Report was prepared by WRA Environmental Consultants on July 22, 2022. The report shows that the project site contains sensitive habitat including both seasonal wetland and scrub shrub wetland. Two (2) special-status plant species, Choris Popcorn Flower and Harlequins Lotus were found on site.

Due to the potential for special-status plants and animals on the site, the avoidance and mitigation measures as recommended by the consulting biologist and incorporated into the Mitigated Negative Declaration would reduce project impacts on local flora and fauna to less than significant levels. A 50-foot buffer from special-status plants and a 100-foot buffer from wetlands has been established as part of the project where no development will occur. A 50-foot buffer from sea cliffs has also been established where nesting activities may exist.

d. Visual Resources

Policy 8.5 (*Location of Development*) requires that new development on rural lands be located where it is least visible from scenic roads, is least likely to impact views from public viewpoints and is consistent with all other LCP requirements. Policy 8.6 (*Streams, Wetlands and Estuaries*) seeks to retain wetlands intact except for public accessways designed to respect the visual and ecological fragility of the area and adjacent land, in accordance with the Sensitive Habitats Component policies.

The location of the closest test well will be approximately 160 feet from Cabrillo Highway. Due to existing vegetation, the low profile of the well, if proven viable, will not be visible from the public roadway. See Section 1.b for additional details.

All wetlands identified on site will be preserved and a buffer will be established where no development can take place in order to avoid sensitive habitat. See Section 2.c of the staff report for details on compliance with LCP policies for biological resources.

e. Shoreline Access

Policy 10.1 (*Permit Conditions for Shoreline Access*), Policy 10.12 (*Residential Areas*), and Policy 10.30 (*Requirement of Minimum Access as a Condition of Granting Development Permits*) requires the establishment and improvement of vertical shoreline access as a condition for obtaining a development permit, with requirements for access to be based on the size and type of development proposed and impact of the development, among other factors.

The subject site is located between the ocean and Cabrillo Highway, the first through road from the sea, and is therefore subject to this policy. The domestic test well is considered development under Policy 10.2 (*Definition of Development*). However, the project is limited to a test well to determine water potential on site that could support future residential development therefore the project, as proposed and conditioned, will have minimal impacts to the area. Any future development would be subject to a separate coastal development permit, which is required to comply with all applicable LCP Policies, including shoreline access, as stated in condition of approval number 6. Due to the limited scope of the proposed project, staff finds that the project complies with the applicable provisions for shoreline access at this time.

3. Conformance with Planned Agricultural District (PAD) Regulations:

a. Conformance with the Criteria for the Issuance of a PAD Permit

In order to approve and issue a PAD permit, the project must comply with the substantive criteria for the issuance of a PAD permit, as outlined in Section 6355 of the Zoning Regulations. As proposed, the project complies with the following applicable policies.

(1) General Criteria

(i) *The encroachment of all development upon land which is suitable for agriculture shall be minimized.*

Based on a 1961 Natural Resource Conservation Service (NRCS) soils report and Productive Soil Resources with Agricultural Capability General Plan Map, a majority of the parcel contains Class II prime soils. Pursuant to the County's General Plan and Planned Agricultural District, prime soils are defined as all land which qualifies for rating as Class I or Class II in the U.S. Department of Agriculture Soil Conservation Service Land Use Compatibility Classification, as well as all Class III lands capable of growing artichokes or Brussels sprouts.

The site contains Class II prime soils. Construction of the well will convert approximately 4 sq. ft. of potential prime soils and will be located outside of any active agricultural field. Given the small footprint of the proposed domestic test well, the encroachment of development on land suitable for agriculture is minimal.

(ii) *All development permitted on a site shall be clustered.*

The test wells will determine if there is adequate water to serve potential future development. If a test well is viable, the well will be the only development on site. All future development will require a separate Coastal Development Permit and Planned Agricultural District permit, as applicable.

(iii) *Every project shall conform to the Development Review Criteria contained in Chapter 20A.2 of the San Mateo County Ordinance Code.*

The project has been reviewed under and found to comply with the Development Review Criteria in Chapter 20A.2 of the County Zoning Regulations. Specifically, the project complies with the Environmental Quality, Site Design, Scenic, and Utilities Criteria by not introducing noxious odors, chemical agents, or long-term noise levels, and retaining the rural nature of the parcel. Furthermore, the project does not involve the removal of large areas of vegetation and will utilize existing road infrastructure, thereby reducing grading necessary to access the site.

(2) Water Supply Criteria

(i) *The existing availability of an adequate and potable well water source shall be demonstrated for all non-agricultural uses. Each existing parcel developed with non-agricultural uses shall demonstrate a safe and adequate well water source located on that parcel.*

The purpose of the test wells is to identify a source of potable well water. No other development is proposed at this time.

This proposal has been reviewed and conditionally approved by Environmental Health Services. Environmental Health Services will review for the quality and quantity of the water provided by the test well to determine adequacy as a potable well water source.

(ii) *Adequate and sufficient water supplies needed for agricultural production and sensitive habitat protection in the watershed are not diminished.*

The parcel has not been developed and there is no evidence of past farming operations. The proposed test well is for potential future domestic use only, however the proposed well could be used to serve future agricultural activity if desired. Since there is no existing water supply on site and no current agricultural operation, the installation of a well will not impact agricultural water supply or sensitive habitat protection.

(3) Criteria for the Conversion of Prime Agricultural Lands

The project site is located on Prime Agricultural Lands as defined by the PAD Regulations. Prime agricultural land within a parcel shall not be converted to uses permitted by a PAD Permit unless all of the following criteria per Section 6355.D of the PAD Regulations are met:

(i) No alternative site exists on the parcel for the use,

(ii) Clearly defined buffer areas are provided between agricultural and nonagricultural uses,

(iii) The productivity of any adjacent agricultural lands is not diminished, and

(iv) Public service and facility expansions and permitted uses will not impair agricultural viability, either by increased assessment costs or degraded air and water quality.

The project will result in the conversion of approximate 4 sq. ft. of prime farmland to provide a potable water source on site. Due to the small footprint, the well itself will not impair agricultural viability and will serve to determine the level of water available for future development or agricultural operations.

B. AGRICULTURAL ADVISORY COMMITTEE

The project was considered by the Agricultural Advisory Committee (AAC) on June 12, 2023. No concerns or recommendations were raised at the hearing. The AAC voted unanimously to recommend approval of the test well project.

C. ENVIRONMENTAL REVIEW

An Initial Study and Mitigated Negative Declaration (IS/MND) was prepared for this project and circulated from April 26, 2023, to May 16, 2023. No comments were received during the 20-day public comment period. Staff has determined that the project, with implementation of the recommended mitigation measures, will not have a significant impact on the environment. All mitigation measures can be viewed in the Initial Study/Mitigated Negative Declaration in Attachment E and are included as conditions of approval in Attachment A.

**ATTACHMENTS**

A. Recommended Findings and Conditions of Approval
B. Location Map
C. Project Plans
D. Biological Report
E. Initial Study/Mitigated Negative Declaration

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Attachment A

County of San Mateo
Planning and Building Department

## RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2022-00211 Hearing Date: August 23, 2023

Prepared By: Kanoa Kelley, Project Planner For Adoption By: Planning Commission

## RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the Initial Study and Mitigated Negative Declaration reflect the independent judgment of San Mateo County.

2. That the Initial Study and Mitigated Negative Declaration are complete, correct, and adequate, and prepared in accordance with the California Environmental Quality Act (CEQA) and applicable State and County Guidelines. An Initial Study and Mitigated Negative Declaration were prepared and issued with a public review period from April 26, 2023, to May 16, 2023.

3. That, on the basis of the Initial Study, comments received, and testimony presented and considered at the public hearing, there is no substantial evidence that the project will have a significant effect on the environment. The mitigation measures contained in the Mitigated Negative Declaration have been imposed as conditions of approval in this attachment. As proposed and mitigated, the project will not result in any significant environmental impacts.

4. That the mitigation measures in the Mitigated Negative Declaration have been agreed to by the owner and imposed as conditions of project approval.

Regarding the Planned Agricultural District (PAD) Permit, Find:

5. That the project conforms to the Development Review Criteria contained in Chapter 20A.2 of the San Mateo County Zoning Regulations. The project complies with Section 6324.1 (Environmental Quality Criteria) and Section 6324.3 (Utilities Criteria), which respectively address environmental quality and water supply, as the project will not introduce noxious odors, chemical agents, or long-term increased noise levels. The project will determine if there is adequate water to support future residential development on the property. The project does not involve the removal of large areas of vegetation and will utilize existing

road infrastructure, thereby reducing grading necessary to access the site and accommodate the project. All development will be located outside a 100-foot buffer from riparian and marshland and 50 feet from the bluff and special-status plant species, thereby avoiding impacts to sensitive habitat.

The project conforms with Section 6355, the substantive criteria for issuance of a PAD permit, specifically General Criteria, Water Supply, and Criteria for the Conversion of prime lands. The project will minimize the conversion of prime soils to 4 sq. ft. and will ensure adequate water supply for future development.

The project also complies with Sections 6324.2 (Site Design Criteria) and 6325.1 (Primary Scenic Resources Areas Criteria), which address site design criteria and primary scenic resource areas. The project, as designed and conditioned, retains the rural nature of the parcel and preserves all of the mature trees and dominant vegetation. While the project is located within a scenic corridor, its design at ground level, existing topography and vegetation ensures that there will not be any visual impacts to scenic resources.

Regarding the Coastal Development Permit, Find:

6. That the project, as described in the application and accompanying materials required by Section 6328.7, and as conditioned in accordance with Section 6328.14, conforms to the plans, policies, requirements and standards of the San Mateo County LCP, specifically with regard to Locating and Planning New Development, Agriculture, Sensitive Habitats, and Visual Resources Components of the LCP as described in Section 2 of the project staff report dated August 9, 2023.

7. That the project is subject to the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code) since the project is located between the nearest public road and the sea. The proposed project complies with the provisions for shoreline access as stipulated in the Shoreline Access component of the LCP as the project is limited in size and impacts and any future development would be subject to compliance with all applicable LCP Policies, including those for shoreline access at that time.

8. That the project conforms to specific findings required by policies of the San Mateo County LCP with regard to Locating and Planning New Development, Agriculture, Sensitive Habitats, and Visual Resources Components of the LCP as discussed in Section 2 of the project staff report dated August 9, 2023.

For the Architectural Review, Find:

9. That the project is consistent with the General Plan Policies for Architectural Design Standards for Rural Scenic Corridors and Standards for Architectural and Site Control within the Cabrillo Highway State Scenic Corridor along with Scenic Corridor policies of the Local Coastal Program. Due to the small scope of the project, which is approximately 4 sq. ft., the project will not be visible from the scenic corridor as it will be shielded by natural topography and existing vegetation allowing the well to blend in with the natural environment.

## RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission on August 23, 2023. Any changes or revisions to the approved plans shall be submitted to the Community Development Director for review and approval prior to implementation. The Community Development Director may approve minor revisions or modifications to the project if they are found to be consistent with the intent of and in substantial conformance with this approval.

2. The permits shall be valid for one (1) year from the date of final approval by the Planning Commission, in which time a well permit shall be issued by Environmental Health Services. Any extension of these permits shall require submittal of an application for permit extension and payment of applicable extension fees sixty (60) days prior to the expiration date.

3. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo County Ordinance Code Section 4.88.360).

4. During the installation of the test wells, erosion and sediment control measures shall be installed and maintained according to a plan prepared and signed by the engineer of record and approved by the Planning and Building Department. Revisions to the approved erosion and sediment control plan shall be prepared and signed by the engineer and must be reviewed and approved by the Planning and Building Department.

5. It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading and construction activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.

6. Any future development on this property will be subject to compliance with the zoning regulations, all applicable policies of the County's LCP, including those for Shoreline Access, and the California Environmental Quality Act.

*Mitigation Measures from the Mitigated Negative Declaration*

7. **Mitigation Measure 1:** The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

    a. Water all active construction areas at least twice daily.

    b. Apply water two times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.

    c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

    d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

    e. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

    f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

8. **Mitigation Measure 2:** All ground disturbance activities shall be restricted to the dry season (May 1 through September 30) when all habitats have dried to reduce potential for California Red Legged Frog (CRLF) and San Francisco Garter Snake (SFGS) to disperse through the Study Area.

9. **Mitigation Measure 3:** A qualified biologist shall survey the work site immediately before the onset of vegetation clearing or ground disturbance activities to verify if species are present and if all habitats are dry. If CRLF are found and do not move out of the work area on their own, the U.S. Fish and Wildlife Services (USFWS) shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move the species from the work site before work activities begin. Any SFGS shall be allowed to leave the work area on their own and shall be monitored by the biologist to ensure they do not reenter the work area.

10. **Mitigation Measure 4:** Prior to the start of groundbreaking activities, all construction personnel will receive training on listed species and their habitats by a qualified biologist. The importance of these species and their habitat will be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the project. An educational brochure containing color photographs of all listed species in the work area will be distributed to all employees working within the Study Area. The original list of employees who attend the training sessions will be maintained by the contractor and be made available for review by the USFWS and the California Department of Fish and Wildlife upon request.

11. **Mitigation Measure 5:** The contractor shall designate a person or employee to monitor on-site compliance with all minimization measures. The on-site monitor(s) will be on-site daily for the duration of the Project, including vegetation removal, grading and clean-up activities.

12. **Mitigation Measure 6:** All vehicles and equipment associated with work-activities will be parked or staged only within designated staging areas at the end of each workday or when not in use to minimize habitat disturbance and water quality degradation.

13. **Mitigation Measure 7:** No work shall occur within 48 hours of a rain event (over 0.25 inches in a 24-hour period). Following a rain event, a qualified biologist shall survey the work site immediately before reinitiating ground disturbance activities to verify if species are present. If CRLF or SFGS are observed, then the steps previously described for the initial pre-construction survey shall be followed.

14. **Mitigation Measure 8:** Any erosion control materials used shall be made of tightly woven fiber netting or similar material to ensure that CRLF and SFGS do not get trapped. This limitation shall be communicated to the contractor. Plastic mono-filament netting (erosion control matting) rolled erosion control products or similar material shall not be used at the Study Area because CRLF, SFGS, and other species may become entangled or trapped in it.

15. **Mitigation Measure 9:** No trash shall be deposited on the site during construction activities. All trash shall be placed in trash receptacles with secure lids stored in vehicles and removed nightly from the Study Area.

16. **Mitigation Measure 10:** Any fueling, and maintenance of equipment shall be conducted off-site and at least 50 feet from any wetland or designated Environmentally Sensitive Habitat Areas (ESHA).

17. **Mitigation Measure 11:** California Red-Legged Frog (CRLF) and San Francisco Garter Snake (SFGS) may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped. Therefore, all construction pipes, culverts, or similar structures that are stored at the site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the on-site monitor and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. It is also recommended these structures, if stored, are kept off the ground by being placed on pallets within the staging areas either in developed areas or within wildlife exclusion fencing. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move them from the work site before work activities begin. If SFGS is found, it shall be allowed to passively leave the work area on its own, as determined by the on-site monitor, unless in circumstances where the animal is determined to be trapped as discussed in Mitigation Measure 12.

18. **Mitigation Measure 12:** To prevent inadvertent entrapment of CRLF or SFGS during construction, the on-site monitor and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one-foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-site biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-site biologist and/or construction foreman/manager.

19. **Mitigation Measure 13:** If at any time a trapped CRLF or SFGS is discovered by the on-site biologist or anyone else, the animal shall be allowed to passively leave the work area on its own, as determined by the onsite biologist. If a CRLF or SFGS is trapped, only a USFWS-approved biologist shall move the individual under the direction of USFWS and CDFW. The biologist shall also report these findings, as required, to the appropriate agencies.

20. **Mitigation Measure 14:** Pre-construction surveys for avian species are required for Project activities that must occur during the nesting bird season (March 1 through July 31). If active nests (containing eggs, chicks or young) are discovered during pre-construction surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Project activities may be postponed until the conclusion of the nesting season, or the biologist may perform follow-up checks to determine whether the nest is still active. Based on the findings from the survey the biologist will determine if a nesting bird management plan is required to establish a programmatic approach to nest surveys, buffer size, duration, and may include other abatement or attenuation recommendations that might allow for size reductions in the exclusion buffers, or other such measures satisfactory to the lead agency to reduce the impacts to a less than significant level.

21. **Mitigation Measure 15:** Any development shall avoid the Choris' popcorn flower population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, Choris' popcorn flower seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

22. **Mitigation Measure 16:** Any development shall avoid the harlequin lotus population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, harlequin lotus seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

23. **Mitigation Measure 17:** Sea cliffs shall be avoided as part of the project. The applicant shall submit to the County for review and approval engineered drawings demonstrating that the project avoids Coastal Commission and Local Coastal Program regulated sensitive habitat areas. Based on local geology and erosion rates, a setback of at least 50 feet from the bluff edge shall be provided to protect public land and to ensure loss of sea cliffs due to Project activities to reduce impacts to a *less than significant* level.

24. **Mitigation Measure 18:** Wildlife exclusion fencing shall be placed around the perimeter of the project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities.

25. **Mitigation Measure 19:** In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and are satisfactorily implemented.

26. **Mitigation Measure 20:** Should any human remains be discovered during construction, all ground disturbing work shall cease, and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

27. **Mitigation Measure 21:** Pursuant to San Mateo County Ordinance Code 4.68.050 *Mitigation of Disturbance at Well Site*, disturbance at a well site for the purposes of construction shall be limited to the minimum amount of disturbance necessary to gain access to drill the well. Drilling fluids and other drilling materials produced or used in connection with well construction shall not be allowed to discharge onto or into streets, waterways, sensitive habitats, or storm drains. Drilling fluids shall be properly managed and disposed of in accordance with applicable local, regional, and state requirements. Upon completion of the construction, the site shall be restored as near as possible to its original condition, and appropriate erosion control measures shall be implemented. Wells constructed during a period where winterization requirements are in effect, between October 1 and May 1, shall comply with County stormwater pollution prevention measures.

28. **Mitigation Measure 22:** During project construction, the applicant shall, pursuant to Chapter 4.100 of the San Mateo County Ordinance Code, minimize the transport and discharge of stormwater runoff from the construction site:

    a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30. Stabilizing shall include both proactive measures, such as the placement of coir netting, and passive measures, such as revegetating disturbed areas with plants propagated from seed collected in the immediate area.

b. Storing, handling, and disposing of construction materials and wastes properly, so as to prevent their contact with stormwater.

c. Controlling and preventing the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges, to storm drains and watercourses.

d. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

e. Delineating with field markers clearing limits, easements, setbacks, sensitive or critical areas,buffer zones, trees, and drainage courses.

f. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

g. Performing clearing and earth-moving activities only during dry weather.

h. Limiting and timing application of pesticides and fertilizers to prevent polluted runoff.

i. Limiting construction access routes and stabilizing designated access points.

j. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.

k. The contractor shall train and provide instruction to all employees and subcontractors regarding the construction Best Management Practices.

29. **Mitigation Measure 23:** In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

30. **Mitigation Measure 24:** In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Environmental Health Services

31. The applicant shall submit an application, appropriate fees, plans, and the approved Coastal Development Permit for the project directly to Environmental Health Services to obtain a well drilling permit.

Building Inspection Section

32. A building permit is required for the proposed project.

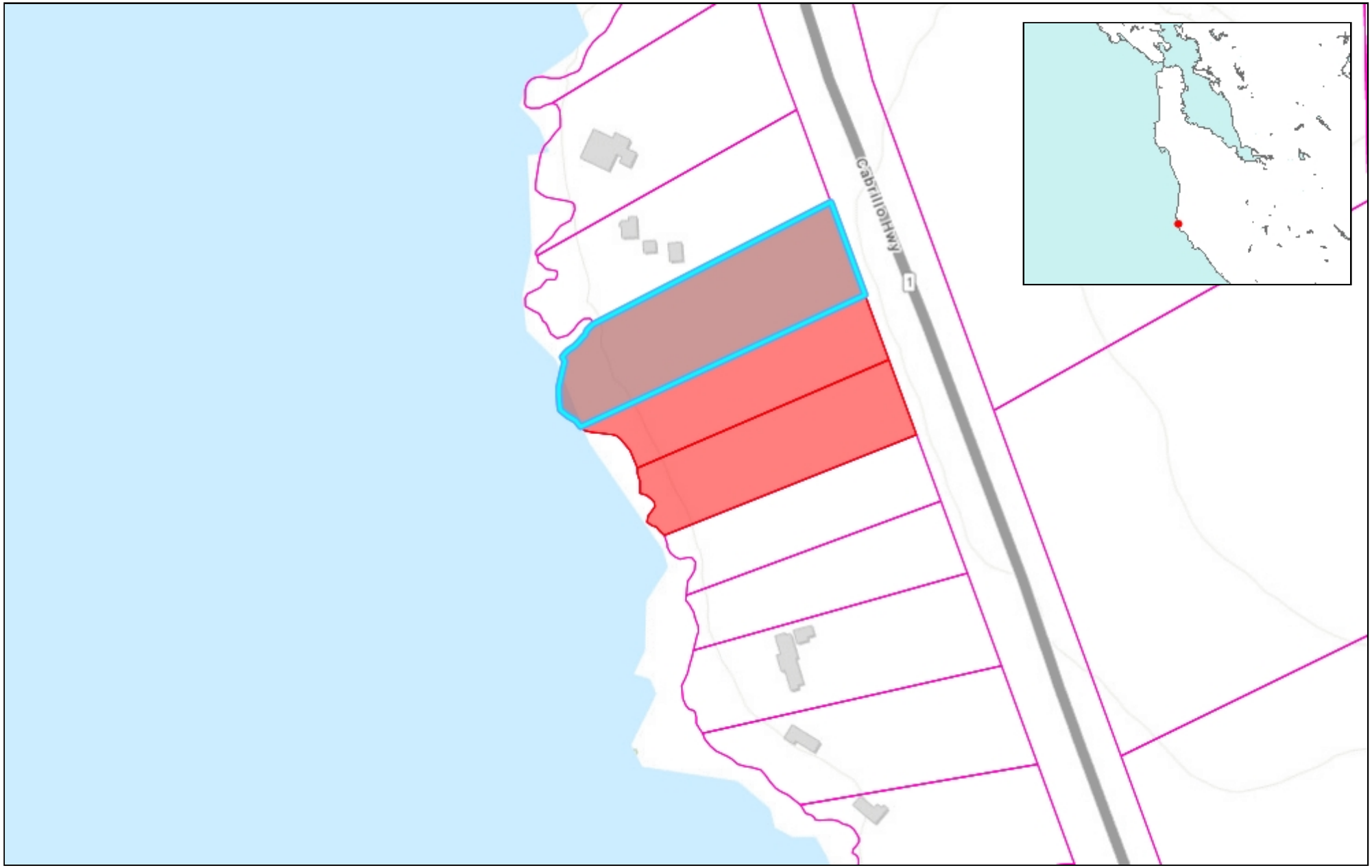
KAK:cmc – KAKHH0238_WCU.DOCX

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

# ATTACHMENT B

# San Mateo County

County San Mateo, CA




0.14 0 0.07 0.14 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere



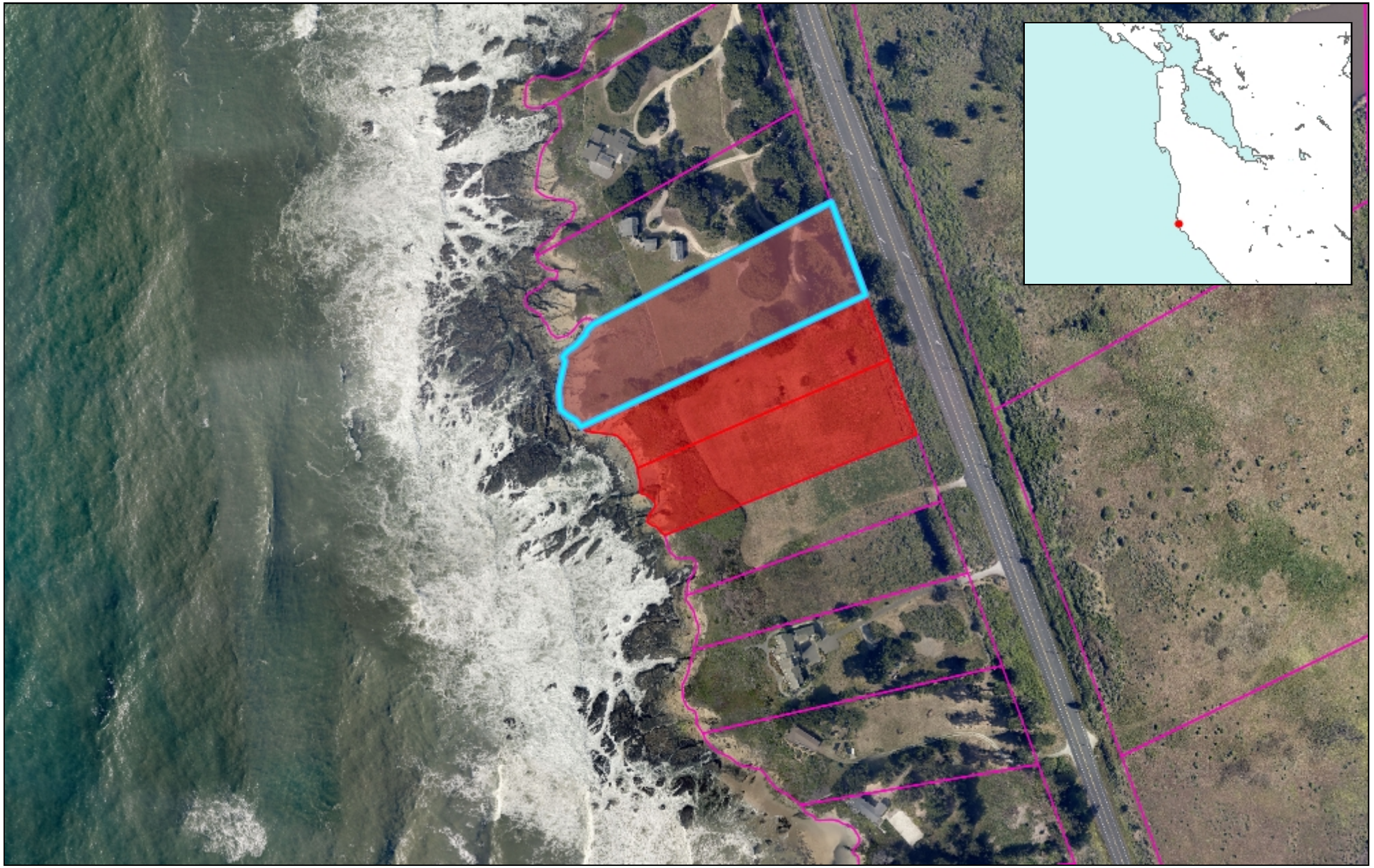
1: 4,514

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

# San Mateo County

County San Mateo, CA



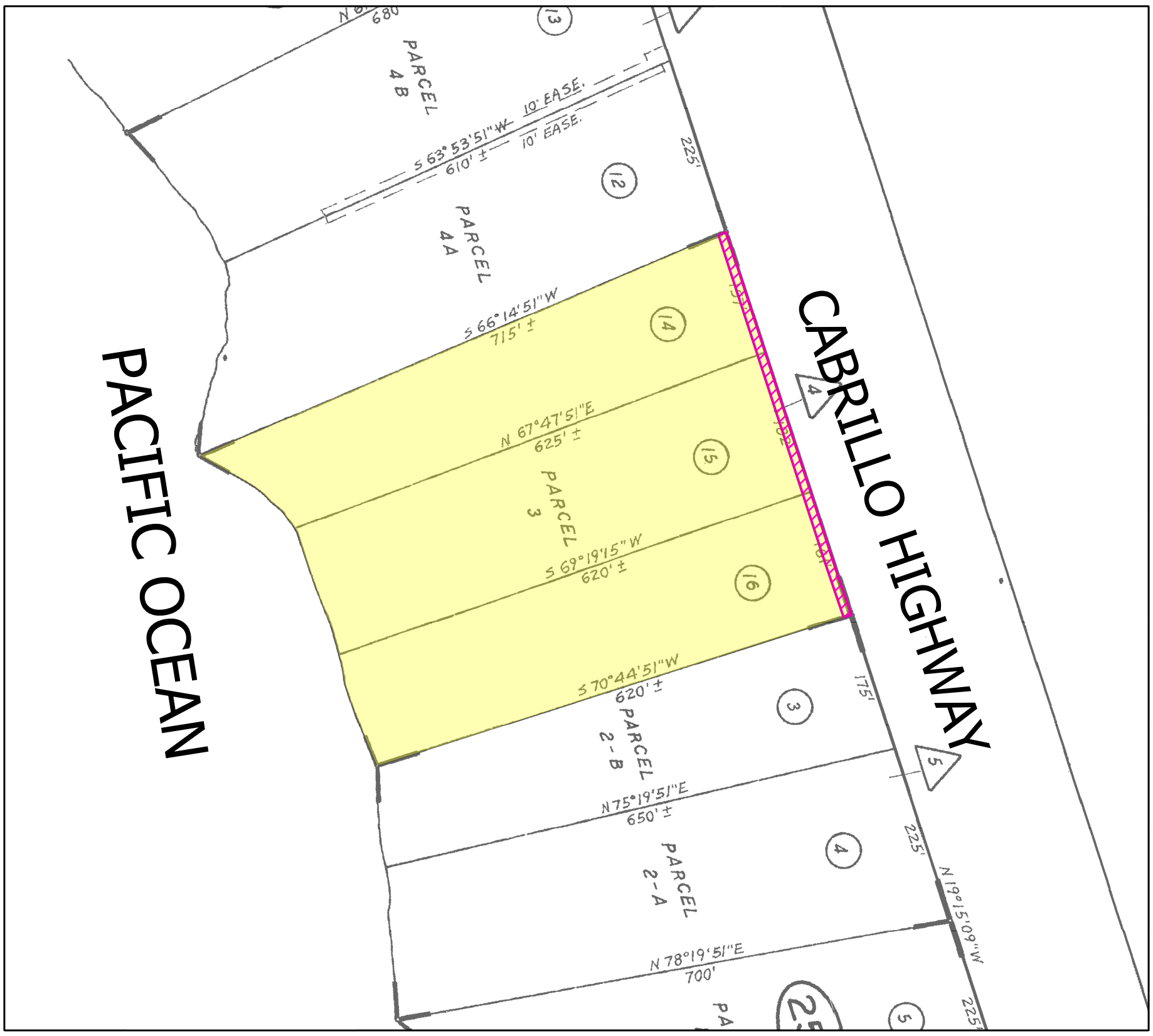
0.14 0 0.07 0.14 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere



1: 4,514

Scale 1 inch = 41 Feet




Legend

Property In Question – Fee

Item No. 10 - Easement for Water Pipe Line
In 03/24/1966 #49981Z Bk5132 Pg433 of Official Records
Affects said portion as described in the document



**Lawyers Title Company**
675 N. First Street, 4th Floor
San Jose, CA 95112

| | | |
|---|---|---|
| | Title Order No. : FLNP-0052200079-A , Preliminary Report Dated January 19, 2022 | Drawing Date : 02/18/2022 - FNFI |
| | Reference : | Assessor's Parcel No. : 086-250-140,150,160 |
| | Property : Vacant land APN 086-250-140, 086-250-150 & 086-250-160, Pescadero, CA | Data : |

This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Plat Showing : PARCEL 3, AS SHOWN ON THAT CERTAIN MAP ENTITLED "PARCEL MAP OF LANDS OF PAYNE AS RECORDED IN OFFICIAL RECORDS VOL. 5132, PG. 473 & LANDS OF SKOLNICK RECORDED IN OFFICIAL RECORDS VOL. 5132, PG. 433 & LANDS OF TITLE INSURANCE & TRUST CO. RECORDED IN OFFICIAL RECORDS VOL. 5128, PG. 672, SAN MATEO COUNTY, CALIFORNIA", WHICH MAP WAS FILED IN THE OFFICE OF THE RECORER OF THE COUNTY OF SAN MATEO, STATE OF CALIFORNIA, ON JULY 21, 1996 IN BOOK 1 OF PARCEL MAPS, PAGE 42.

Sheet 1 of 1

Archive #

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

# ATTACHMENT C

LANDS OF MAPACHE GROUP LLC

4' WOOD/WIRE FENCE

LANDS OF SKOLNICK
6259 OR 640*
APN 086-250-140
90,165± SQ.FT.
2.07± ACRES

LANDS OF SKOLNICK
DOC. 2015-022805*
APN
086-250-150
103,364 SQ.FT.
2.37± ACRES

LANDS OF SKOLNICK
DOC. 2015-046770*
APN
086-250-160
91,164± SQ.FT.
2.09± ACRES

LANDS OF STEMBEL

ROCKY CLIFF

ROCK

SAND

HEAVILY WOODED INACCESSIBLE AREA, CONTOURS SHOWN AS APPROXIMATE IN THIS AREA

BUSH

APPROXIMATE HIGH TIDE LINE

PROPOSED DOMESTIC WELL 'A'

PROPOSED DOMESTIC WELL 'B'

PROPOSED DOMESTIC WELL 'C'

EXISTING WELL

N67°47'51"E 581.83'± TO HIGH TIDE LINE

S69°19'15"W 607.92' ± TO HIGH TIDE LINE

N70°44'51"E 620.00'± TO HIGH TIDE LINE

10' WATERLINE EASEMENT (5132 OR 435)

FOUND 3/4" IRON PIPE OPEN

HIGH COYOTE BRUSH AND POISON OAK IN AREA, CONTOURS SHOWN AS APPROXIMATE IN THIS AREA

CABRILLO HIGHWAY

EDGE OF PAVEMENT

ASPHALT BERM

ENTRANCE

PAINT STRIPE, TYP

POST

4' WOOD FENCE

SITE

LOCATION MAP (Not to Scale)

60 0 60 120

1 INCH = 60 FEET

## SURVEY NOTES

## GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF: MARK YOUNGER, PROPERTY OWNER.
2. SURVEY BY LEA AND BRAZE MARCH, 2022
   ELEVATION DATUM: NAVD88

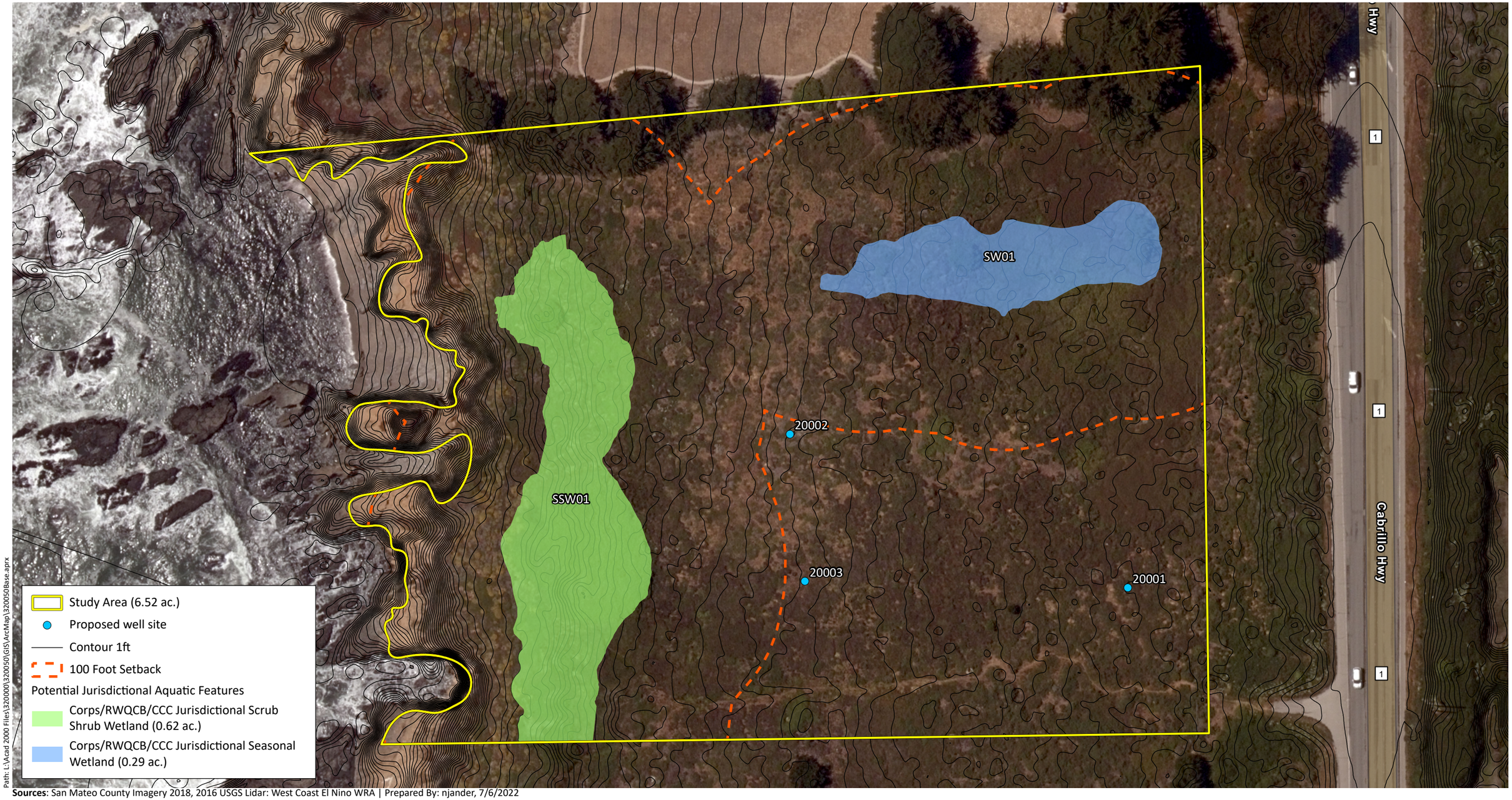
Sigma Prime Geosciences, Inc.

| | |
|---|---|
| Figure | 1 |
| Date: | 10/26/22 |
| Job No.: | 22-183 |

**Proposed Domestic Well Site Map**

CABRILLO HIGHWAY PESCADERO, CALIFORNIA

APNS: 086-250-140, -150, -160




**Sources**: San Mateo County Imagery 2018, 2016 USGS Lidar: West Coast El Nino WRA | Prepared By: njander, 7/6/2022

## Figure X. Map of Proposed Well Sites

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50 Feet

N

wra ENVIRONMENTAL CONSULTANTS

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

# ATTACHMENT D

# MEMORANDUM

| | | | |
|---|---|---|---|
| **TO:** | Mark Younger | **FROM:** | Amy Parravano, Senior Biologist |
| **CC:** | Kerry Burke | | |
| **DATE:** | February 22, 2023 | | |
| **SUBJECT:** | Biological Resource Impact Avoidance Recommendations for Proposed Well Drilling Project, San Mateo County | | |

**Background**

On February 8 and April 26, 2022, WRA, Inc. (WRA) conducted a suite of biological studies on a property located on APNs 086-250-140, 086-250-150 and 086-250-160 in the unincorporated community of Pescadero, San Mateo County, California (Attachment 1; "Study Area"). A biological resources assessment was initially conducted to map vegetation communities and evaluate habitat suitability for special-status plant and wildlife species. Subsequently, wetland delineation and focused special-status plant surveys were conducted. Results of these studies were synthesized into the following technical reports:

- Biological Resources Technical Report - Younger Property, Pescadero, San Mateo County, CA (WRA, July 2022)
- Delineation of Potential Jurisdictional Waters of The U.S. And Waters of The State of California Report -Younger Property, Pescadero, San Mateo County, CA (WRA, July 2022)
- Rare Plant Survey Report - Younger Property, Pescadero, San Mateo County, CA (WRA, July 2022)

While no formal project has been proposed at this time, these reports were submitted to San Mateo County with an application for a Coastal Development Permit for domestic well construction to determine if the property contains sufficient water to supply a single-family residence. For the purposes of this memorandum, WRA has reviewed the site plan and taken into consideration any areas that may meet the definition of an Environmentally Sensitive Habitat Area (ESHA) defined the San Mateo County LCP (San Mateo County 2013). The LCP identifies ESHAs to include, but is not limited to, "riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species."

**Methods and Results**

Wetland Delineation (including ESHAs)

The wetland delineation followed the Routine Method to evaluate the Study Area for the presence or absence of indicators of the three wetland parameters described in the Corps Manual (Environmental Laboratory 1987) and Arid West Supplement (Corps 2008). In addition, this delineation determined the location and extent of features potentially meeting the definition of a California Coastal Commission (CCC) jurisdictional wetlands and ESHAs pursuant to the

California Coastal Act (Coastal Act) and San Mateo County Local Coastal Program (LCP). Three wetlands and/or ESHAs were mapped likely subject to CCC/LCP jurisdiction:

- Scrub-shrub wetland (0.62 acre)
- Seasonal wetland (0.29 acre)
- Sea cliffs (0.47 acre)

A 100-foot minimum buffer zone is typically required surrounding wetlands by the County LCP code. This setback may be reduced to no less than 50 feet only where: (1) no alternative development site or design is possible; and (2) adequacy of the alternative setback to protect wetland resources is conclusively demonstrated by a professional biologist to the satisfaction of the County.

Rare Plant Survey

A protocol-level special-status plant species survey was conducted in accordance with resource agency guidelines (CDFW 2018, CNPS 2001, and USFWS 1996). Two special-status species were identified and mapped during the survey:

- Harlequin lotus (*Hosackia gracilis*, CRPR 4.2)
- Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*, CRPR 1B).

The LCP's development standards discourage development within 50 feet of any special-status plant population. However, LCP Policy 7.42 (Development Standards) states that when no feasible alternative exists, the County will allow development if: (1) the site or a significant portion thereof is returned to a natural state to allow for the reestablishment of the plant, or (2) a new site is made available for the plant to inhabit.

Biological Resources Assessment (Wildlife Habitat)

The biological resources assessment concluded that the Study Area provides suitable habitat for nesting birds, including one special-status species, San Francisco (saltmarsh) common yellowthroat, as well as other non-status species that are protected while nesting. The Study Area is outside of USFWS-designated critical habitat for San Francisco garter snake (*Thamnophis sirtalis tetrataenia*; federal Endangered, State Endangered, CDFW Fully Protected Species) and California red-legged frog (*Rana draytonii*; federal Threatened, CDFW Species of Special Concern). There are documented occurrences of CRLF within Spring Breach Gulch east of Highway 1. However, the Study Area does not contain suitable habitat for CRLF or SFGS. There is no aquatic habitat (e.g., ponds) or upland refugia habitat adjacent to aquatic habitat. The Study Area contains sparse, low-growing vegetation and does not provide burrows or cracks that could provide refugia for these species.

**Impact Avoidance and Minimization Measures**

Wetlands, ESHAs, and Rare Plants

WRA coordinated with Sigma Prime Geosciences, Inc. engineers to identify locations of proposed well sites and a temporary equipment access route that avoid impacts to wetlands/ESHAs and rare plants. This was accomplished by overlaying the site plans onto wetlands/ESHAs plus a surrounding 100-foot buffer, and rare plants plus a surrounding 50-foot buffer (refer to Attachment 2). Well sites, surrounding work areas, and the temporary access route were sited

outside of the resource protection buffers. Therefore, the proposed well drilling work will avoid impacts to wetlands/ESHAs and rare plants in accordance with LCP requirements.

Special-Status Wildlife Species and Other Nesting Bird Species

WRA recommends implementation of the following avoidance and minimization measure (AMM) to avoid impacts to San Francisco (saltmarsh) common yellowthroat and other nesting birds.

*AMM BIO-1: Nesting Bird Avoidance*

- Conduct well construction work outside of the nesting season (August 1-February 28).
- If construction work is conducted during the nesting bird season (March 1 through July 31). a qualified biologist will a conduct pre-construction nesting bird survey. If active nests containing eggs, chicks or young are discovered during the pre-construction survey, a qualified biologist would establish a species-specific no-work buffer around the active nest. Project activities may be postponed until the conclusion of the nesting season, or the biologist may perform follow-up checks to determine whether the nest is still active.

California Red-legged Frog and San Francisco Garter Snake

No suitable breeding or upland habitat is present within the Study Area for CRLF or SFGS. However, in the unlikely event that these species disperse through the Study Area, implementation of the following AMM is recommended.

*AMM BIO-2: California Red-legged Frog and San Francisco Garter Snake Avoidance*

- All ground disturbance activities will be restricted to the dry season (April 15 through October 15) when all habitats have dried to reduce potential for CRLF and SFGS to disperse through the Study Area.
- A qualified biologist will survey the work site immediately before the onset of ground disturbing activities to determine if species are present and verify that all habitats are dry. Any SFGS shall be allowed to leave the work area on their own and shall be monitored by the biologist to ensure they do not reenter the work area. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move the species from the work site before work activities begin.
- No work shall occur within 48 hours of a rain event (over 0.25 inch in a 24-hour period). Following a rain event, a qualified biologist shall survey the work site immediately before reinitiating ground disturbance activities to verify if species are present. If CRLF or SFGS are observed, then the steps previously described for the initial pre-construction survey will be followed.

With adherence to the proposed work area and access route depicted on Attachment 2 and implementation of Measures AMMs BIO-1 and BIO-2 proposed well construction will be conducted in compliance with LCP requirements and no additional mitigation measures are recommended.


Path: L:\Acad 2000 Files\320000\320050\GIS\ArcMap\320050Base.aprx

**Sources**: ESRI Topo, WRA | Prepared By: njander, 5/31/2022

# Attachment 1. Study Area Regional Location Map

Younger Property Assessment
(APNs 086-250-140, 086-250-150, and 086-250-160)

0 0.25 0.5 Miles

N

wra
ENVIRONMENTAL CONSULTANTS

# Attachment 2. Site Plan and ESHAs


LOCATION MAP (Not to Scale)

LANDS OF MAPACHE GROUP LLC

LANDS OF SKOLNICK
6259 OR 640*
APN 086-250-140
90,165± SQ.FT.
2.07± ACRES

LANDS OF SKOLNICK
DOC. 2015-022805*
APN 086-250-150
103,364 SQ.FT.
2.37± ACRES

LANDS OF SKOLNICK
DOC. 2015-046770*
APN 086-250-160
91,164± SQ.FT.
2.09± ACRES

LANDS OF STEMBEL

CABRILLO HIGHWAY (WIDTH VARIES)

ROCKY CLIFF
ROCK
SAND
HEAVILY WOODED INACCESSIBLE AREA, CONTOURS SHOWN AS APPROXIMATE IN THIS AREA
4' WOOD FENCE
APPROXIMATE HIGH TIDE LINE
PROPOSED DOMESTIC WELL 'A'
PROPOSED DOMESTIC WELL 'B'
PROPOSED DOMESTIC WELL 'C'
EXISTING WELL
ACCESS ROUTE
10' WATERLINE EASEMENT (5132 OR 435)
BUSH
HIGH COYOTE BRUSH AND POISON OAK IN AREA, CONTOURS SHOWN AS APPROXIMATE IN THIS AREA
FOUND 3/4" IRON PIPE OPEN
POST
ASPHALT BERM
ENTRANCE
PAINT STRIPE, TYP
EDGE OF PAVEMENT
PAVEMENT

N65°14'51"E 715.00' ± TO HIGH TIDE
N67°47'51"E 581.83'± TO HIGH TIDE LINE
S69°19'15"W 607.92' ± TO HIGH TIDE LINE
N70°44'51"E 620.00'± TO HIGH TIDE LINE

1 INCH = 60 FEET

## GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF: MARK YOUNGER, PROPERTY OWNER.
2. SURVEY BY LEA AND BRAZE MARCH, 2022
   ELEVATION DATUM: NAVD88

RARE PLANT SPECIES AND WETLAND AREAS TO AVOID (As Defined in WRA's Biological Report)

Chorls Popcorn Flower | Harlequin Lotus | Wetland | 100 Foot Buffer From Wetland

Sigma Prime Geosciences, Inc.

| | |
|---|---|
| Figure | 1 |
| Date: | 2/22/23 |
| Job No.: | 22-183 |

**Proposed Domestic Well Site Map**
CABRILLO HIGHWAY PESCADERO, CALIFORNIA
APNS: 086-250-140, -150, -160

# RARE PLANT SURVEY REPORT

## Younger Property
## PESCADERO, SAN MATEO COUNTY, CALIFORNIA


**Prepared for:**

Mark Younger

benchmerk@gmail.com

Attn: Kerry Burke

(650) 726-1738

burkelanduse@gmail.com

**WRA Contact:**

Amy Parravano

amy.parravano@wra-ca.com


**Date:**

July 2022

WRA Project No. 320050


2169-G East Francisco Blvd., San Rafael, CA 94702 (415) 454-8868 tel info@wra-ca.com www.wra-ca.com

## EXECUTIVE SUMMARY

WRA, Inc. (WRA) conducted a floristic, protocol-level rare plant survey of the Younger Property within the approximately 6.5-acre Study Area for the Younger Property in the unincorporated community of Pescadero, in San Mateo County, California. The surveys were conducted in conjunction with an aquatic resource delineation and biological reconnaissance survey to support a biological resources technical report prepared by WRA in July 2022.

Prior to the most recent field survey effort, WRA reviewed the California Native Plant Society (CNPS) Rare Plant Inventory (Inventory), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) data, and the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) to determine which species have been documented in the vicinity of the Study Area. Based on a review of occurrence records and a comparison of species habitat requirements with Study Area conditions, it was initially determined that seven special status plant species had the potential to occur within the Study Area.

Special-status plant surveys were conducted by trained botanists familiar with California flora. The surveys were conducted by walking parallel transects along the entirety of the Study Area. The survey was conducted on April 26, 2022, during the period of time when species with moderate or high potential to occur would have been evident or identifiable. Overall rainfall for the 3-month period preceding the April survey was drier than normal, and the conditions were considered to be extreme drought (Deters 2022).

The protocol-level rare plant survey conducted on April 26, 2022, documented two rare plants: harlequin lotus (*Hosackia gracilis*, CRPR 4.2) and Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*, CRPR 1B). Approximately 32 individuals of harlequin lotus and approximately 1,100 individuals of Choris' popcornflower were observed within the Study Area. No other rare plant species were identified in the Study Area. Both populations of plants have been mapped and impacts to the species will be less than significant with the combination of avoidance and mitigation measures.

**TABLE OF CONTENTS**



**LIST OF APPENDICES**



**LIST OF PREPARERS**

| | | | |
|---|---|---|---|
| Leslie Lazarotti; | Principal-in-Charge | Amy Parravano; | Project Manager |
| Katie Tyree; | Plant Biologist | Scott Batiuk; | Plant Biologist |
| Neal Jander; | GIS Specialist | | |

# 1.0 INTRODUCTION

The Study Area is a privately-owned property encompassing approximately 6.5 acres bordering the Pacific Ocean (Appendix A, Figure 1). WRA prepared a biological resources technical report in accordance with the San Mateo County (County) Midcoast Local Coastal Program (LCP) for a Coastal Development Permit for domestic well construction on this property. A protocol-level rare plant survey was conducted on April 26, 2022. No additional surveys are suggested or required.

## 1.1 Study Area Description

The Study Area is located in San Mateo County, California (Appendix A, Figure 1). The Study Area can be reached from Highway 1, south of the unincorporated community of Pescadero. The Study Area is bounded to the north and south by rural residential properties, to the west by the Pacific Ocean, and to the east by Highway 1. Bordering land use includes rural private residences, open space, and State-owned and operated public beach access. Habitat conditions within the Study Area are generally disturbed from regular mowing that has occurred since at least 2006 (Google Earth 2022).

### *1.1.1 Biological Communities*

A total of six biological communities occur in the Study Area; three of these communities are potentially jurisdictional under state and federal regulations and are therefore considered sensitive. Biological communities are described in detail below and are shown in Appendix A, Figure 2.

Non-Sensitive Biological Communities

**Monterey Cypress Stand.** Monterey cypress (*Hesperocyparis macrocarpa*) stands are found in headlands and sheltered areas near the coast in granitic-derived soils (CNPS 2022a). A stand of planted Monterey cypress is located on the northern boundary of the Study Area and separates the Study Area from the neighboring parcel. This stand is dominated by a canopy of Monterey cypress with a sparse understory. CNPS has protections for natural communities of Monterey cypress, however there are only two known native occurrences of Monterey cypress and they are located in Monterey County.

**Northern Coastal Scrub**. Coastal scrub communities are located extensively along the entire length of the California coastline. These communities are dominated by native shrubs tolerant of frequent and often high winds, salt spray, and extended cloud cover in summer months (Holland 1986). One vegetation alliance was documented within the northern coastal scrub in the Study Area: coyote brush (*Baccharis pilularis*) scrub (CNPS 2022a). Coyote brush scrub is a mixed community dominated by coyote brush and a mixture of native and nonnative forbs. Within the Study Area, coyote brush is the dominant species with both poison oak (*Toxicodendron diversilobum*) and California blackberry (*Rubus ursinus*) in the overstory. Other species in this community include soap plant (*Chlorogalum pomeridianum*), yarrow (*Achillea millefolium*), four seeded vetch (*Vicia tetrasperma*), and brome fescue (*Festuca bromoides*). The Study Area had been recently mowed at the time of the site visit, resulting in disturbed habitat conditions as evidenced by an abundance of Bermuda buttercup (*Oxalis pes-caprae*) cover and overall reduction in cover of native plant species. Rush species including *Juncus patens* and *J. hesperius* were abundant, but their cover is representative of the mowed, unnatural conditions of the site and not indicative of wetland conditions. It is presumed if the site were left un-mowed, coyote brush would dominate and shade out the grasses, herbs, and forbs currently found within the area. A narrow, un-mowed strip on the south edge of the site, included in this biological community, is characterized by coyote brush and Pacific

blackberry with some coastal bush lupine (*Lupinus arboreus*) individuals in the shrub layer, and common velvet grass (*Holcus lanatus*) in the understory.

**Coastal Bluff Scrub.** Coastal bluff scrub is located in the interface between the sea cliffs and the mowed northern coastal scrub. Although it is part of the same vegetation alliance as northern coastal scrub, the composition of the community is different. This community is un-mowed and characterized by a narrow band of generally short, dense vegetation. The dominant shrub is coyote brush mixed with an overstory of coastal bush lupine and poison oak, with an understory of herbs including soap plant and Douglas iris (*Iris douglasiana*).

Sensitive Biological Communities

**Sea Cliffs.** Sea cliffs occur along the western boundary of the Study Area. The California Coastal Commission (CCC) defines sea cliff as a cliff whose toe is or may be subject to marine erosion. In addition, a sea cliff is a scarp or steep face of rock, weathered rock, sediment, or soil resulting from erosion, faulting, folding, or excavation of the land mass. The cliff or bluff may contain a simple, planar, or curved surface; or it may be step-like in section. Sea cliffs occur within the Study Area along the entirety of the western boundary and are potentially regulated by the CCC.

**Scrub-Shrub Wetland.** A scrub-shrub wetland is located near the western border of the site and was vegetated with a dense shrub layer of arroyo willow (*Salix lasiolepis*) and surrounded by a few individuals of California wax myrtle (*Morella californica*). The wetland was located on the gently sloping edge of the coastal terrace, bordered to the east by the adjacent upland terrace and to the west by upland coastal bluff scrub. Scrub-shrub wetland may be regulated by the Corps, RWQCB, and CCC.

**Seasonal Wetland.** A seasonal wetland is located in the northern portion of the site in a subtle depression. Four widely separated California wax myrtle were present in the wetland. The herbaceous layer was dominated by silver weed cinquefoil (*Potentilla anserina*), common rush, brown-headed rush (*J. phaeocephalus*), coast rush, dense sedge (*Carex densa*), and scattered four-seeded vetch and brome fescue. Except for the California wax myrtle, the area had been mowed, but herbaceous species were still readily identifiable. Seasonal wetland may be regulated by the Corps, RWQCB, and CCC.

### *1.1.2 Soils*

The Soil Survey of San Mateo Area (USDA 1961) and SoilWeb (CSRL 2022) list three soil mapping units within the Study Area: Elkhorn sandy loam, moderately steep, eroded (EhD2); Elkhorn sandy loam, thick surface, gently sloping (EtB); and terrace escarpments (Ta). Descriptions of the soil series that comprise the soil mapping units are provided below. The distribution of these soil mapping units within the Study Area is depicted in Appendix A, Figure 3.

**Elkhorn series.** This series consists of deep, well drained soils that formed in material weathered from alluvium from mixed rock sources. Elkhorn soils are on coastal terraces and have slopes of 2 to 50 percent. A typical soil profile consists of dark brown, neutral to slightly acid, fine sandy loam from 0 to 17 inches. From 17 to 26 inches, the profile consists of moderately acid, dark brown, heavy fine sandy loam. From 26 to 46 inches, the profile consists of mixed dark brown and reddish brown, moderately acid, sandy clay loam. This is underlain from 46 to 63 inches by mixed strong brown and dark brown, slighty acid, fine sandy loam (CSRL 2022). Elkhorn sandy loam, moderately steep, eroded and Elkhorn sandy loam, thick surface, gently sloping are considered hydric (USDA 2022).

**Terrace escarpments.** Terrace escarpments is a miscellaneous land type that includes the cliffs and slides adjacent to the ocean. They are scattered along the coastline and primarily consist of the marine sediments that make up the coastal terraces (USDA 1961). Terrace escarpments is not considered hydric (USDA 2022).

## 1.2 Survey Information

Protocol-level rare plant surveys should be conducted in a manner that will locate any rare plants species that may be present. The California Native Plant Society's (CNPS) guidelines (2001) state that surveys should be conducted "at the proper time of year when rare, threatened, or endangered species are both evident and identifiable." Usually, this is when the plants are in bloom; however, there are species that are identifiable outside of the blooming period because non-floral structures (e.g., leaves, roots) are sufficient to make a species determination and/or floral structures (e.g., fruits, buds) are necessary to be in a state of maturity beyond or prior to the documented blooming period. When rare plants are known to occur in the type(s) of habitat present in the Study Area, nearby accessible occurrences of the plant (reference sites) should be observed to determine that the plants are identifiable at the time of the survey. The following section provides details related to precipitation and other conditions that may affect the survey results and includes information about the results of previous surveys conducted in the Study Area.

The timing of the rare plant surveys corresponded to peak blooming periods for observing and accurately identifying all but one rare plant species determined to have moderate or high potential to occur within the Study Area vicinity. However, second survey was not conducted because habitat for the remaining rare plant species is within a 50-foot setback where no development will occur (see Section 2.2.1 for details). The field surveys were conducted by botanists with experience with the rare plant species that could occur in San Mateo County. The surveys followed the floristic survey protocol that complies with recommended resource agency guidelines (CNPS, CDFG, USFWS). All plants encountered were identified to the taxonomic level necessary to determine whether or not they are rare.

### *1.2.1 Precipitation*

A hydrologic analysis using the Antecedent Precipitation Tool (Deters 2022) was conducted to determine whether precipitation levels during the 3 months prior to the site visit were above, below, or within the 30-year average for the region as well as to determine if the region was experiencing long-term drought conditions. Drought condition data were obtained from monthly Palmer Drought Severity Index dataset published by the National Ocean and Atmospheric Administration. During the 3-month period prior to the site visit, precipitation was below normal, and at the time of the site visit, the region was experiencing a severe drought.

### *1.2.3 Conditions Affecting Results*

The CDFW plant survey guidelines (CDFW 2018) state that "adverse conditions may prevent investigators from determining the presence of, or accurately identifying, some species in potential habitat of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any given year." WRA did not observe any signs of disease, predation, or herbivory that would preclude the presence or identification of target species during the April 2022 survey. However, severe drought conditions were observed at the time of the survey (Deters 2022). Drought conditions can affect the growth pattern of annual flowers and may affect the distribution and abundance of flowering plant individuals in a given year.

The CDFW plant survey guidelines (CDFW 2018) also state that "the failure to locate a known rare plant occurrence during one field season does not constitute evidence that this plant occurrence no longer exists at this location, particularly if adverse conditions are present. For example, surveys over a number of years may be necessary if the species is an annual plant having a persistent, long-lived seed bank and is known not to germinate every year. To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may ensure that the timing of the survey was appropriate." Reference sites were not visited for five of the seven species with potential to occur within the Study Area because of vague location information and/or lack of access. A reference site near Pomponio State Beach was visited for coastal marsh milkvetch (*Astragalus pycnostachyus* var. *pycnostachyus*) prior to the site visit. Coastal marsh milkvetch was observed and was in a vegetative state. Although it was not blooming, this taxon is distinct and readily identifiable vegetatively in the coastal San Mateo County region. The remaining two species with moderate or high potential to occur in the Study Area were observed on-site (see Section 3.0 for further details), and a reference site visit was therefore not needed.

#### *1.2.4 Surveyor Qualifications*

Individuals who conducted the surveys have formal training in botany and extensive experience working in California. The surveys were conducted under the direction of the team leader, whose qualifications are summarized below.

Scott Batiuk, BS, Associate Plant Biologist. California Certified Botanist #0026. Scott received a Bachelor of Science degree in Forest Resources from the University of Washington, where his studies focused on forest ecology. He is a Certified California Botanist (#0026) and holds a CDFW 2018 Plant Voucher Collecting Permit (#21-005-V). Has led or helped to conduct numerous rare plant surveys in much of California, and he is experienced with common and rare flora of San Mateo County. In addition, he has taken numerous technical botanical workshops through the Jepson Herbarium and Chico State University Herbarium.

# 2.0 METHODS

## 2.1 Background Data

Rare plants are defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Ranks 1 through 4 of the CNPS Inventory of Rare, Threated, and Endangered Plants of California (Inventory; CNPS 2022b), and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act (CEQA), section 15380.

A background information search was conducted to identify potential rare plant species that may occur in the Study Area vicinity. Database searches were conducted for known occurrences of rare species in the Pigeon Point, San Gregorio, Franklin Point, La Honda, and Año Nuevo USGS 7.5-minute Quadrangle map (USGS 2022). Sources included:

- California Natural Diversity Database (CDFW 2022)
- CNPS Inventory (CNPS 2022b)
- IPac (USFWS 2022)
- Consortium of California Herbaria (CCH 2022)

All rare plant species documented within the vicinity of the Study Area were then assessed based on associated vegetation communities, soil affinity, associated species, topographic position, shade tolerance, disturbance tolerance, elevation, and population distribution to determine the potential for these species to occur in the Study Area. A table of these species and their sensitivity statuses, habitat requirements, and likelihood to occur in the Study Area is provided in Appendix B.

### 2.2 Field Survey

#### *2.2.1 Rare Plant Surveys*

WRA conducted rare plant surveys within the Study Area on April 26, 2022, following regulatory agency and CNPS survey protocols (CNPS 2001, CDFW 2018, USFWS 1996). Surveys were conducted along appropriately spaced transects (approximately 25 feet apart), and the survey date corresponded with the period of time when most of the species with moderate or high potential to occur would have been evident or identifiable. With one exception (see Section 3.2 below), all plants were identified using the Jepson eFlora (Jepson Flora Project 2022) to the taxonomic level necessary to determine rarity. Plant surveys were floristic in nature with all observed species recorded and included on a species list provided in Appendix B. The location and extent of rare plant populations were recorded using a handheld GPS unit with mapping grade accuracy.

#### *2.2.2 Population Estimate Methods*

Each Harlequin lotus individual was counted during the protocol-level survey. The individuals were spaced sparsely over the Study Area, and each plant was documented with a handheld GPS device. Choris' popcornflower population sizes were estimated by counting the number of individuals in a representative area to determine the density of that area and extrapolating that density throughout similar portions of the areas occupied by Choris' popcornflower.

## 3.0 RESULTS

### 3.1 Background Data Search Results

Based upon a review of the CNDDB (CDFW 2022), CNPS Electronic Inventory (CNPS 2022b), IPaC (USFWS 2022), and CCH (2022) databases, 45 rare plant species have been documented in the vicinity of the Study Area. Seven species were determined to have moderate or high potential to occur in the Study Area and are described in detail below. A table of the 45 rare plant species, including each species' habitat requirements, blooming period, elevation range, and status, is provided in Appendix A. Descriptions of each species are included in the below.

*High Potential*

**Blasdale's bent grass (*Agrostis blasdalei*) CNPS Rank 1B.2.** Blasdale's bentgrass is a perennial graminoid in the grass family (Poaceae) that typically occurs in bare or sparsely vegetated areas in coastal dune, coastal bluff scrub, and coastal prairie habitat at elevations ranging from 0 to 150 meters. This species blooms from May to July and is known from Mendocino, Monterey, Marin, San Mateo, Santa Cruz, and Sonoma counties (CDFW 2022, CNPS 2022b). Soil survey data at known locations suggest that this species is typically located on moderately strongly acid (pH 5.0) to slightly acid sandy (pH 6.5) loams and sands derived from sedimentary rock (CDFW 2022, CSRL 2022). The nearest documented occurrence is located

approximately 1 mile north of the Study Area at Bean Hollow State Beach, from 2013. Blasdale's bent grass has high potential to occur in the Study Area due to the presence of potentially suitable bluff edge habitat. A small number of individuals of an unknown species of grass that vegetatively resembles this species was observed in coastal bluff scrub in the Study Area. The identity of this species could not be confirmed because the plants were not flowering at the time of the April 26, 2022, site visit; however, these individuals were found on sea cliffs, a CCC/LCP regulated sensitive habitat area that will be avoided by any future development on this property. The project proponent will submit engineered drawings demonstrating that the project is setback at least 50 feet to protect the public land, based on local geology and erosion rates.

**Johnny-nip (*Castilleja ambigua* var. *ambigua*), CNPS Rank 4.2.** Johnny-nip is an annual hemi-parasitic forb in broomrape family (Orobanchaceae) that blooms from March through August. It typically occurs in coastal bluff scrub, coastal scrub, coastal prairie, marshes and swamps, valley and foothill grassland, and vernal pool habitats. Johnny-nip has been recorded at elevations ranging from 0 to 435 meters in Alameda, Contra Costa, Del Norte, Humboldt, Mendocino, Marin, Napa, Santa Cruz, San Francisco, San Luis Obispo, San Mateo and Sonoma counties (CNPS 2022b). It blooms between March and August. The nearest record, from 2007, is approximately 1.5 miles north of the Study Area at Bean Hollow State Beach. Johnny-nip has high potential to occur in the Study Area due to the presence of potentially suitable coastal bluff scrub habitat and the close proximity of a nearby occurrence. Johnny-nip was not observed in the Study Area during the April 2022 protocol-level rare plant survey, which occurred during a period of time when this perennial species would have been evident and identifiable. Johnny-nip is assumed to be absent from the Study Area.

**Harlequin lotus (*Hosackia gracilis*), CNPS Rank 4.2.** Harlequin lotus is a perennial herb in the pea family (Fabaceae) . It occurs in many habitat types including: broadleafed upland forest, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, north coast coniferous forest, valley and foothill grassland. It is recorded from 0 to 700 meters in elevation in Del Norte, Humboldt, Marin, Mendocino, Monterey, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Sonoma counties. It blooms between March and July. Harlequin lotus was observed during the protocol-level rare plant survey within the Study Area on April 26, 2022. See Section 3.2 for details.

**Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*), CNPS Rank 1B.2.** Choris' popcornflower is an annual herbaceous species in the borage family (Boraginaceae). This species blooms between March and June. Typical habitat for this species includes chaparral, coastal prairie, and coastal scrub. Choris' popcornflower has been recorded in Alameda, San Francisco, San Mateo, and Santa Cruz counties at elevations ranging from 15 to 160 meters and blooms from March through June. Choris' popcornflower was observed during the protocol-level rare plant survey within the Study Area on April 26, 2022. See Section 3.2 for details.

*Moderate Potential (Not Observed)*

**Ocean bluff milk-vetch (*Astragalus nuttallii* var. *nuttallii*), CNPS Rank 4.2.** Ocean bluff milkvetch is a perennial herb in the pea family (Fabaceae) that occurs in coastal bluff scrub and coastal dunes at elevations ranging from 3 to 120 meters. This species blooms from January to November and is known in Alameda, Monterey, Marin, Santa Barbara, San Francisco, San Luis Obispo, and San Mateo counties. The nearest documented occurrence, from 1935, is located approximately 5 miles north of the Study Area. Given that the Study Area contains potentially suitable coastal bluff scrub and sea cliff habitats, this

species was determined to have a moderate potential to be present. Ocean bluff milk-vetch was not observed in the Study Area during the April 2022 protocol-level rare plant survey, which occurred during a period of time when this perennial species would have been evident and identifiable. Ocean bluff milk-vetch is assumed to be absent from the Study Area.

**Coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*), CNPS Rank 1B.2.** Coastal marsh milk-vetch is a perennial herb in pea family (Fabaceae) that occurs in the coastal dunes (mesic), coastal scrub, coastal salt and streamside marshes and swamps. This species typically occurs at elevations ranging from 0 to 30 meters in Humboldt, Marin, and San Mateo counties. Coastal marsh milk-vetch blooms between April and October. The nearest documented occurrence, from 2004, is located 1 mile north of the Study Area at Bean Hollow Beach. This sighting is presumed extirpated, but there are multiple sightings within 5 miles of the Study Area that are presumed extant. This species has a moderate potential to occur in the Study Area due to the presence of potentially suitable mesic coastal scrub habitat. Coastal marsh milk-vetch was not observed in the Study Area during the April 2022 protocol-level rare plant survey, which occurred during a period of time when this species would have been evident and identifiable. Coastal marsh milk-vetch is assumed to be absent from the Study Area.

**Perennial goldfields (*Lasthenia californica* ssp. *macrantha*), CNPS Rank 1B.2.** Perennial goldfields is a perennial herb in the sunflower family (Asteraceae). This species typically occurs in coastal bluff scrub, coastal dunes, and coastal scrub communities at elevations ranging between 5 and 520 meters. It blooms between January and November. Perennial goldfields have been recorded in Mendocino, Marin, San Luis Obispo, San Mateo, and Sonoma counties. The nearest documented occurrence, from 2016, is located approximately 1 mile north of the Study Area in Bean Hollow State Beach. Within the Study Area, this species has moderate potential to occur within coastal bluff scrub habitat. Perennial goldfields was not observed in the Study Area during the April 2022 protocol-level rare plant survey, a period of time when this species would have been evident and identifiable. Perennial goldfields is assumed to be absent from the Study Area.

## 3.2 Field Survey Results

### *3.2.1 Rare Plant Species*

During the April 2022 survey conducted by WRA, a total of 99 plant species were observed by WRA in the Study Area during the survey, including populations of two rare species: an estimated 1,100 individuals of Choris' popcornflower, and 32 individuals of harlequin lotus. These species are discussed below. Photographs of these species taken during the survey are included in Appendix C.

**Choris' popcornflower (Rank 1B.2).** An estimated 1,100 individuals of Choris' popcornflower were observed in the south-central portion of the Study Area, on a flat to very gently sloping terrace in mowed northern coastal scrub in non-wetland locations. Associated species include brome fescue, Italian rye grass (*Festuca perennis*), four seeded vetch, coyote brush, soap plant, coast rush (*Juncus hesperius*), sow thistle (*Sonchus oleraceus*), harlequin lotus, and slim oat (*Avena barbata*).

**Harlequin lotus (Rank 4.2).** Thirty-two individuals of harlequin lotus were observed in the central and western portions of the Study Area. It occurred in the northern coastal scrub biological community on a flat, gently sloping, mowed terrace as well as in coastal bluff scrub and on sea cliffs. Associated species include brome fescue, Italian rye grass, four seeded vetch, coyote brush, soap plant, coast rush (*Juncus*

*hesperius*), common rush (*J. patens*), California blackberry, Choris' popcornflower, and common velvetgrass.

# 4.0 CONCLUSION

Based on a review of literature and site assessments, the Study Area was initially determined to provide potentially suitable habitat for seven rare plant species. Protocol-level surveys were conducted in April 2022, during the period of time when all but one of the species with moderate or high potential to occur would have been evident or identifiable. A follow-up survey for the remaining species was not conducted because habitat for that species is located within a 50-foot no-development setback. Two rare plant species were observed in the Study Area, including Choris' popcornflower and harlequin lotus. The remaining four rare species are considered absent from the Study Area. In addition, three sensitive natural communities were observed: seasonal wetland, scrub-shrub wetland, and sea cliffs.

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# APPENDIX A.

# FIGURES

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**Sources**: ESRI Topo, WRA | Prepared By: njander, 5/31/2022

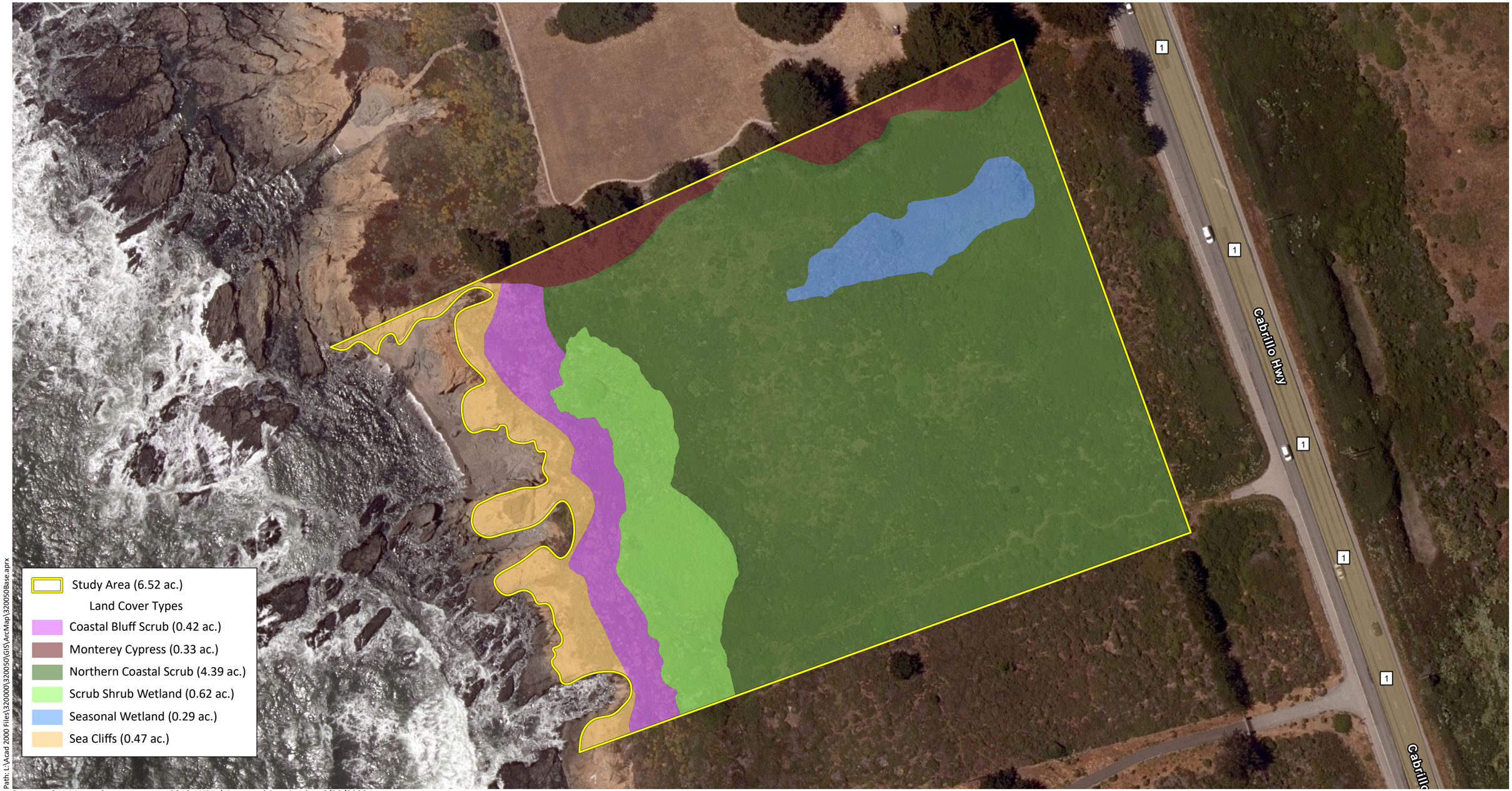
## Figure 1. Study Area Regional Location Map

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 0.25 0.5 Miles

N

wra ENVIRONMENTAL CONSULTANTS




**Sources**: San Mateo County Imagery 2018, WRA | Prepared By: njander, 6/30/2022

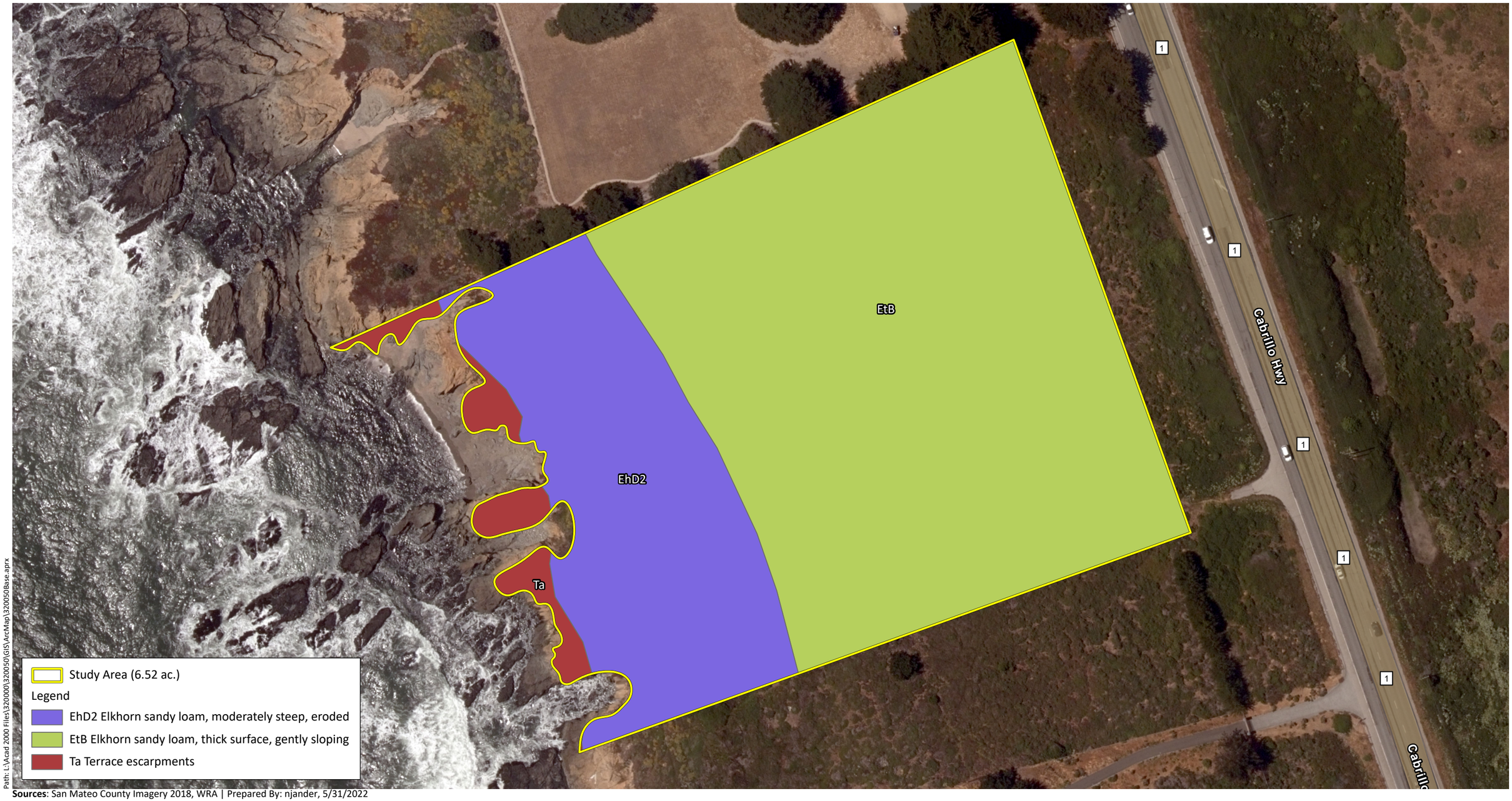
## Figure 2. Biological Communities in the Study Area

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50
Feet

N

wra
ENVIRONMENTAL CONSULTANTS




**Sources**: San Mateo County Imagery 2018, WRA | Prepared By: njander, 5/31/2022

## Figure 3. Soils in the Study Area

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50 Feet

N

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ENVIRONMENTAL CONSULTANTS


**Sources**: San Mateo County Imagery 2018, WRA | Prepared By: njander, 6/30/2022

## Figure 4. Rare Plant Survey Results

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50 Feet

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**APPENDIX B.**

**POTENTIAL FOR RARE PLANT SPECIES TO OCCUR IN THE STUDY AREA**

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**Appendix B.** Potential for Rare Plant Species to Occur in the Study Area. List compiled from database searches for the Pigeon Point, San Gregorio, Franklin Point, La Honda, and Año Nuevo U.S. Geological Survey 7.5-minute Quadrangles in the California Natural Diversity Database (CDFW 2022) and the California Native Plant Society Inventory of Rare and Endangered Plants of California (CNPS 2022b).

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| **Plants** | | | | |
| Blasdale's bent grass<br>*Agrostis blasdalei* | Rank 1B.2 | Coastal bluff scrub, coastal dunes, coastal prairie. Elevation ranges from 0 to 490 feet (0 to 150 meters). Blooms May-Jul. | **High Potential.** The Study Area contains potentially suitable coastal bluff scrub habitat. A small number of individuals of an unknown species of grass that vegetatively resembles this species was observed in coastal bluff scrub in the Study Area; however, the identity of this species could not be confirmed because the plants were not flowering at the time of the April 26, 2022, site visit. | Although the identity of the plants in question was not confirmed, the plants occur adjacent to sea cliff habitat, within a 50-foot setback where no development will occur. As such, no further actions are recommended for this species. |
| bent-flowered fiddleneck<br>*Amsinckia lunaris* | Rank 1B.2 | Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevation ranges from 10 to 1640 feet (3 to 500 meters). Blooms Mar-Jun. | **Unlikely.** Cismontane woodland and grassland habitats are absent from the Study Area. Coastal bluff scrub is present, but the nearest occurrence is 12 miles south of the Study Area. Additionally, this species was not observed during the April 26, 2022, survey, which occurred during the blooming period of this species. As such, this species is assumed to absent from the Study Area | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Anderson's manzanita<br>*Arctostaphylos andersonii* | Rank 1B.2 | Broadleaved upland forest, chaparral, north coast coniferous forest. Elevation ranges from 195 to 2495 feet (60 to 760 meters). Blooms Nov-May. | **No Potential.** Broadleaved upland forest, chaparral, and North Coast coniferous forest are absent from the Study Area. | No further actions are recommended for this species. |
| Schrieber's manzanita<br>*Arctostaphylos glutinosa* | Rank 1B.2 | Closed-cone coniferous forest and chaparral habitats on diatomaceous shale substrate. Elevation ranges from 560 to 2245 feet (170 to 685 meters). Blooms Mar-Apr (Nov). | **No Potential.** Diatomaceous shale substrate is absent from the Study Area | No further actions are recommended for this species. |
| Kings Mountain manzanita<br>*Arctostaphylos regismontana* | Rank 1B.2 | Broadleaved upland forest, chaparral, north coast coniferous forest. Elevation ranges from 1000 to 2395 feet (305 to 730 meters). Blooms Dec-Apr. | **No Potential.** This species occurs on granitic or sandstone outcrops, which are absent from the Study Area. | No further actions are recommended for this species. |
| ocean bluff milk-vetch<br>*Astragalus nuttallii var. nuttallii* | Rank 4.2 | Coastal bluff scrub, coastal dunes. Elevation ranges from 10 to 395 feet (3 to 120 meters). Blooms Jan-Nov. | **Moderate Potential.** Potentially suitable coastal bluff scrub habitat is present in the Study Area. However, this perennial species is conspicuous year-round, and none were observed during the April 26, 2022, survey. As such, this species is assumed to be absent from the Study Area. | **Not Observed.** No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| coastal marsh milk-vetch<br>*Astragalus pycnostachyus var. pycnostachyus* | Rank 1B.2 | Coastal dunes, coastal scrub, marshes and swamps. Elevation ranges from 0 to 100 feet (0 to 30 meters). Blooms (Apr)Jun-Oct. | **Moderate Potential.** Potentially suitable mesic coastal scrub habitat is present in the Study Area. However, a reference site was visited on April 26, 2022, prior to the site visit, and this species was observed. It was not blooming, but it is distinct and readily identifiable vegetatively. This species was not observed in the Study Area and is assumed to absent from the Study Area. | **Not Observed.** No further actions are recommended for this species. |
| johnny-nip<br>*Castilleja ambigua var. ambigua* | Rank 4.2 | Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug. | **High Potential.** Potentially suitable coastal bluff scrub habitat is present, and the nearest occurrence is approximately 1.5 miles north-northwest of the Study Area. However, this perennial species was not observed during the April 26, 2022, survey, and is assumed to be absent from the Study Area. | **Not Observed.** No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Monterey Coast paintbrush<br>*Castilleja latifolia* | Rank 4.3 | Cismontane woodland, closed-cone coniferous forest, coastal dunes, coastal scrub. Elevation ranges from 0 to 605 feet (0 to 185 meters). Blooms Feb-Sep. | **No Potential.** This species is known from loose, sandy substrate, which is absent from the Study Area | No further actions are recommended for this species. |
| Franciscan thistle<br>*Cirsium andrewsii* | Rank 1B.2 | Broadleaved upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Elevation ranges from 0 to 490 feet (0 to 150 meters). Blooms Mar-Jul. | **Unlikely.** The Study Area contains potentially suitable mesic areas in coastal scrub and coastal bluff scrub, but the closest occurrence is 7 miles south of the Study Area, and it is historical and has not been verified. The nearest verifiable occurrence is in San Francisco. | No further actions are recommended for this species. |
| San Francisco collinsia<br>*Collinsia multicolor* | Rank 1B.2 | Closed-cone coniferous forest, coastal scrub. Elevation ranges from 100 to 900 feet (30 to 275 meters). Blooms (Feb)Mar-May. | **Unlikely.** Closed-cone coniferous forest habitat is absent. Coastal scrub habitat is disturbed by periodic mowing, which reduces habitat quality. The nearest occurrence of this species is approximately 10 miles southeast of the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| mountain lady's-slipper<br>*Cypripedium montanum* | Rank 4.2 | Broadleaved upland forest, cismontane woodland, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 605 to 7300 feet (185 to 2225 meters). Blooms Mar-Aug. | **No Potential.** Broadleaved upland forest, cismontane woodland, and coniferous forest habitats are absent from the Study Area. This species is known from dry, undisturbed slopes, and such habitat is absent from the Study Area. | No further actions are recommended for this species. |
| western leatherwood<br>*Dirca occidentalis* | Rank 1B.2 | Broadleaved upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1395 feet (25 to 425 meters). Blooms Jan-Mar (Apr). | **No Potential.** Broadleaved upland forest, chaparral, cismontane woodland, coniferous forest, riparian forest, and riparian woodland habitats. The nearest occurrence of this species is 10 miles northeast of the Study Area. | No further actions are recommended for this species. |
| California bottle-brush grass<br>*Elymus californicus* | Rank 4.3 | Broadleaved upland forest, cismontane woodland, north coast coniferous forest, riparian woodland. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms May-Aug (Nov). | **Unlikely.** The Study Area is characterized primarily by open, sunny habitats, which are unsuitable for this species. The scrub-shrub wetland is too wet and densely vegetated to support this species. The Monterey cypresses are planted and not true forested habitat and are therefore unlikely to support this species. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| San Mateo woolly sunflower *Eriophyllum latilobum* | FE, SE, Rank 1B.1 | Cismontane woodland, coastal scrub, lower montane coniferous forest. Elevation ranges from 150 to 1085 feet (45 to 330 meters). Blooms May-Jun. | **Unlikely.** Woodland and coniferous forest habitats are absent from the Study Area. Most of the coastal scrub is disturbed by periodic mowing, which reduces habitat quality. The nearest reported occurrence is approximately 7 miles northeast of the Study Area, on the other side of the Santa Cruz Mountains ridgeline, and the identity of this occurrence is in question. | No further actions are recommended for this species. |
| Jepson's coyote-thistle *Eryngium jepsonii* | Rank 1B.2 | Valley and foothill grassland, vernal pools. Elevation ranges from 10 to 985 feet (3 to 300 meters). Blooms Apr-Aug. | **No Potential.** Clay soils and vernal pool habitats are absent from the Study Area. | No further actions are recommended for this species. |
| sand-loving wallflower *Erysimum ammophilum* | Rank 1B.2 | Chaparral, coastal dunes, coastal scrub. Elevation ranges from 0 to 195 feet (0 to 60 meters). Blooms Feb-Jun(Jul-Aug). | **No Potential.** This species is known from dune habitat, which is absent from the Study Area | No further actions are recommended for this species. |
| San Francisco wallflower *Erysimum franciscanum* | Rank 4.2 | Chaparral, coastal dunes, coastal scrub, valley, and foothill grassland. Elevation ranges from 0 to 1805 feet (0 to 550 meters). Blooms Mar-Jun. | **Unlikely.** This species is known from sandy, serpentine, rocky, and/or granitic substrates, all of which are absent from the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| minute pocket moss<br>*Fissidens pauperculus* | Rank 1B.2 | North coast coniferous forest. Elevation ranges from 35 to 3360 feet (10 to 1024 meters). | **No Potential.** North Coast coniferous forest is absent from the Study Area. | No further actions are recommended for this species. |
| stinkbells<br>*Fritillaria agrestis* | Rank 4.2 | Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 35 to 5100 feet (10 to 1555 meters). Blooms Mar-Jun. | **Unlikely.** Chaparral, woodland, and grassland habitats are absent from the Study Area. | No further actions are recommended for this species. |
| fragrant fritillary<br>*Fritillaria liliacea* | Rank 1B.2 | Cismontane woodland, coastal prairie, coastal scrub, valley, and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr. | **Unlikely.** Woodland, coastal prairie, and grassland habitats are absent from the Study Area. The sandy substrate of dune scrub is not suitable for this species. Most of the coastal scrub is disturbed by periodic mowing, which reduces habitat quality. This species typically occurs on finer textured substrate than what is present in the Study Area. | No further actions are recommended for this species. |
| Butano Ridge cypress<br>*Hesperocyparis abramsiana var. butanoensis* | Rank 1B.2 | Chaparral, closed-cone coniferous forest, lower montane coniferous forest. Elevation ranges from 1310 to 1610 feet (400 to 490 meters). Blooms Oct. | **No Potential.** Chaparral and coniferous forest are absent from the Study Area. The Monterey cypresses were planted and are not representative of natural forest. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Kellogg's horkelia<br>*Horkelia cuneata var. sericea* | Rank 1B.1 | Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Elevation ranges from 35 to 655 feet (10 to 200 meters). Blooms Apr-Sep. | **Unlikely.** The Study Area contains potentially suitable coastal scrub habitat, but the nearest occurrence of this species is approximately 12 miles southeast of the Study Area. Additionally, no species of *Horkelia* were observed during the April 26, 2022, site visit. | No further actions are recommended for this species. |
| Point Reyes horkelia<br>*Horkelia marinensis* | Rank 1B.2 | Coastal dunes, coastal prairie, coastal scrub. Elevation ranges from 15 to 2475 feet (5 to 755 meters). Blooms May-Sep. | **Unlikely.** The Study Area contains potentially suitable coastal scrub habitat, but the nearest occurrence of this species is approximately 12 miles southeast of the Study Area. Additionally, no species of *Horkelia* were observed during the April 26, 2022, site visit. | No further actions are recommended for this species. |
| harlequin lotus<br>*Hosackia gracilis* | Rank 4.2 | Broadleaved upland forest, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, north coast coniferous forest, valley, and foothill grassland. Elevation ranges from 0 to 2295 feet (0 to 700 meters). Blooms Mar-Jul. | **High Potential.** This species was observed in coastal scrub and sea bluff habitats in the western and central portions of the Study Area. | **Present.** This species was detected during the rare plant survey. Avoidance and mitigation measures are listed in Section 7.1 of the Biological Resources Technical Report prepared in 2022 by WRA. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| coast iris<br>*Iris longipetala* | Rank 4.2 | Coastal prairie, lower montane coniferous forest, meadows, and seeps. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms Mar-May (Jun). | **Unlikely.** Coastal prairie, coniferous forest, and meadow and seep habitats are absent from the Study Area. | No further actions are recommended for this species. |
| perennial goldfields<br>*Lasthenia californica ssp. macrantha* | Rank 1B.2 | Coastal bluff scrub, coastal dunes, coastal scrub. Elevation ranges from 15 to 1705 feet (5 to 520 meters). Blooms Jan-Nov. | **Moderate Potential.** The Study Area contains potentially suitable coastal scrub and coastal bluff scrub habitats. However, this perennial species was not observed during the April 26, 2022, survey, and is therefore assumed to be absent from the Study Area. | **Not Observed.** This species was not detected during the rare plant survey. No further actions are recommended for this species. |
| large-flowered leptosiphon<br>*Leptosiphon grandiflorus* | Rank 4.2 | Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 15 to 4005 feet (5 to 1220 meters). Blooms Apr-Aug. | **Unlikely.** This species is known from open, grassy areas, and open areas in coastal scrub in the Study Area are disturbed by periodic mowing and/or often have a strong presence of invasive species, which reduces habitat quality. Additionally, there are no records of this species from San Mateo County. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| rose leptosiphon<br>*Leptosiphon rosaceus* | Rank 1B.1 | Coastal bluff scrub. Elevation ranges from 0 to 330 feet (0 to 100 meters). Blooms Apr-Jul. | **Unlikely.** Potentially suitable coastal bluff scrub habitat is present. However, the nearest occurrences of this species are from 1896 and 1943 and are likely extirpated. The nearest extant occurrence is located approximately 20 miles north of the Study Area. Additionally, this species was not observed during April 26, 2022, site visit, which occurred when this species would have been evident. | No further actions are recommended for this species. |
| Point Reyes meadowfoam<br>*Limnanthes douglasii ssp. sulphurea* | Rank 1B.2 | Coastal prairie, marshes and swamps, meadows and seeps, vernal pools. Elevation ranges from 0 to 460 feet (0 to 140 meters). Blooms Mar-May. | **No Potential**. This species is known from herb-dominated seasonal wetland habitats, which are absent from the Study Area. | No further actions are recommended for this species. |
| arcuate bush-mallow<br>*Malacothamnus arcuatus* | Rank 1B.2 | Chaparral, cismontane woodland. Elevation ranges from 50 to 1165 feet (15 to 355 meters). Blooms Apr-Sep. | **No Potential.** Chaparral and cismontane woodland habitats and gravelly alluvium substrate are absent from the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Mt. Diablo cottonweed<br>*Micropus amphibolus* | Rank 3.2 | Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 150 to 2705 feet (45 to 825 meters). Blooms Mar-May. | **No Potential.** Broadleaf upland forest, chaparral, woodland, and grassland habitats are absent from the Study Area. | No further actions are recommended for this species. |
| marsh microseris<br>*Microseris paludosa* | Rank 1B.2 | Cismontane woodland, closed-cone coniferous forest, coastal scrub, valley, and foothill grassland. Elevation ranges from 15 to 1165 feet (5 to 355 meters). Blooms Apr-Jun (Jul). | **Unlikely.** Woodland, coniferous forest, and grassland habitats are absent from the Study Area. Scrub habitat is unlikely to support this species because while it was open at the time of the site visit, the openness is a result of mowing and not typical of un-mowed conditions, which are dense and therefore unlikely to be suitable for this species. | No further actions are recommended for this species. |
| elongate copper moss<br>*Mielichhoferia elongata* | Rank 4.3 | Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest. Elevation ranges from 0 to 6430 feet (0 to 1960 meters). | **Unlikely.** The dense vegetation in the Study Area would likely outcompete this species. The nearest occurrence of this species is 5 miles southeast of the Study Area on moist, shaded rock, and such habitat is absent from the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| woodland woollythreads<br>*Monolopia gracilens* | Rank 1B.2 | Broadleaved upland forest, chaparral, cismontane woodland, north coast coniferous forest, valley and foothill grassland. Elevation ranges from 330 to 3935 feet (100 to 1200 meters). Blooms (Feb)Mar-Jul. | **Unlikely.** Broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and grassland habitats are absent from the Study Area. Plant communities are likely too densely vegetated to support this species. The nearest occurrence is 10 miles northeast of the Study Area. | No further actions are recommended for this species. |
| Gairdner's yampah<br>*Perideridia gairdneri ssp. gairdneri* | Rank 4.2 | Broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 2000 feet (0 to 610 meters). Blooms Jun-Oct. | **Unlikely.** Although seasonally wet areas are present, the nearest occurrence of this species is approximately 11 miles east-southeast of the Study Area, east of the Santa Cruz Mountains crest, and with the lack of a nearby seed source, this species is unlikely to colonize the Study Area. | No further actions are recommended for this species. |
| Monterey pine<br>*Pinus radiata* | Rank 1B.1 | Cismontane woodland, closed-cone coniferous forest. Elevation ranges from 80 to 605 feet (25 to 185 meters). | **No Potential.** The Study Area is located well outside of any known historic or modern native occurrences of this species. Additionally, no species of *Pinus* were observed in the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Choris' popcornflower<br>*Plagiobothrys chorisianus var. chorisianus* | Rank 1B.2 | Chaparral, coastal prairie, coastal scrub. Elevation ranges from 10 to 525 feet (3 to 160 meters). Blooms Mar-Jun. | **High Potential.** This species was observed in mowed coastal scrub habitat in the central portion of the Study Area. | **Present.** This species was detected during the rare plant survey. Avoidance and mitigation measures are listed in Section 7.1 of the Biological Resources Technical Report prepared in 2022 by WRA. |
| San Francisco popcornflower<br>*Plagiobothrys diffusus* | Rank 1B.1 | Coastal prairie, valley and foothill grassland. Elevation ranges from 195 to 1180 feet (60 to 360 meters). Blooms Mar-Jun. | **No Potential.** Coastal prairie and grassland habitats are absent from the Study Area. | No further actions are recommended for this species. |
| pine rose<br>*Rosa pinetorum* | Rank 1B.2 | Cismontane woodland, closed-cone coniferous forest. Elevation ranges from 5 to 3100 feet (2 to 945 meters). Blooms May-Jul. | **No Potential.** Woodland and coniferous forest habitats are absent from the Study Area. The Monterey cypresses were planted and are not representative of natural forest habitat. | No further actions are recommended for this species. |
| Hoffmann's sanicle<br>*Sanicula hoffmannii* | Rank 4.3 | Broadleafed upland forest, chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, lower montane coniferous forest. Elevation ranges from 100 to 985 feet (30 to 300 meters). Blooms Mar-May. | **Unlikely.** All occurrences of this species in the region are from shady, forested habitat, which is absent from the Study Area. The Monterey cypresses were planted and are not representative of natural forest habitat. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Scouler's catchfly<br>*Silene scouleri ssp. scouleri* | Rank 2B.2 | Coastal bluff scrub, coastal prairie, valley and foothill grassland. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms (Mar-May)Jun-Aug(Sep). | **Unlikely.** Although coastal bluff scrub habitat is present, this species is known from rocky habitats in San Mateo County, and such habitat is absent from the Study Area. | No further actions are recommended for this species. |
| San Francisco campion<br>*Silene verecunda ssp. verecunda* | Rank 1B.2 | Chaparral, coastal bluff scrub, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 100 to 2115 feet (30 to 645 meters). Blooms (Feb)Mar-Jul(Aug). | **Unlikely.** Although coastal scrub and coastal bluff scrub habitats are present, this species typically occurs on mudstone or shale or in loose sandy substrates, which are absent from the Study Area. Additionally, the nearest occurrence is approximately 10 miles southeast of the Study Area. | No further actions are recommended for this species. |
| Santa Cruz microseris<br>*Stebbinsoseris decipiens* | Rank 1B.2 | Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 1640 feet (10 to 500 meters). Blooms Apr-May. | **Unlikely.** Although scrub habitat is present, this species is typically known from ridges and slopes, not the near flat topography along the immediate coast. Additionally, coastal scrub is disturbed by periodic mowing. The nearest occurrence of this species is approximately 6 miles southeast of the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| northern slender pondweed<br>*Stuckenia filiformis ssp. alpina* | Rank 2B.2 | Marshes and swamps. Elevation ranges from 985 to 7055 feet (300 to 2150 meters). Blooms May-Jul. | **No Potential.** Marsh and swamp habitats are absent from the Study Area. | No further actions are recommended for this species. |
| Santa Cruz clover<br>*Trifolium buckwestiorum* | Rank 1B.1 | Broadleafed upland forest, cismontane woodland, coastal prairie. Elevation ranges from 345 to 2000 feet (105 to 610 meters). Blooms Apr-Oct. | **No Potential.** Broadleafed upland forest, cismontane woodland, and coastal prairie habitats are absent from the Study Area. | No further actions are recommended for this species. |

*** Key to status codes:**

| | |
|---|---|
| FE | Federal Endangered |
| FT | Federal Threatened |
| SE | State Endangered |
| SD | State Delisted |
| ST | State Threatened |
| SR | State Rare |
| Rank 1A | CNPS Rank 1A: Plants presumed extinct in California |
| Rank 1B | CNPS Rank 1B: Plants rare, threatened or endangered in California and elsewhere |
| Rank 2A | CNPS Rank 2A: Plants presumed extirpated in California, but more common elsewhere |
| Rank 2B | CNPS Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere |
| Rank 3 | CNPS Rank 3: Plants about which CNPS needs more information (a review list) |
| Rank 4 | CNPS Rank 4: Plants of limited distribution (a watch list) |

**Potential to Occur:**

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

**Results and Recommendations:**

Present. Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Not Present. Species is assumed to not be present due to a lack of key habitat components.

Not Observed. Species was not observed during surveys.

Presence Unknown: A survey was not conducted to determine absence or presence of this species.

**APPENDIX C**

**LIST OF PLANT SPECIES OBSERVED IN THE STUDY AREA**

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**Appendix C.** Plant Species Observed in the Study Area, April 26, 2022.

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Achillea millefolium* | Yarrow | native | perennial herb | - | - | FACU |
| *Acmispon wrangelianus* | Chilean trefoil | native | annual herb | - | - | - |
| *Aira caryophyllea* | Silvery hairgrass | non-native | annual grass | - | - | FACU |
| *Angelica hendersonii* | Henderson's angelica | native | perennial herb | - | - | - |
| *Armeria maritima* ssp. *californica* | Sea thrift | native | perennial herb | - | - | FACU |
| *Artemisia pycnocephala* | Beach sagewort | native | perennial herb | - | - | - |
| *Avena barbata* | Slim oat | non-native (invasive) | annual, perennial grass | - | Moderate | - |
| *Baccharis pilularis* ssp. *consanguinea* | Coyote brush | native | shrub | - | - | - |
| *Baccharis pilularis* ssp. *pilularis* | Coyote brush | native | shrub | - | - | - |
| *Brassica rapa* | Common mustard | non-native (invasive) | annual herb | - | Limited | FACU |
| *Briza maxima* | Rattlesnake grass | non-native (invasive) | annual grass | - | Limited | - |
| *Briza minor* | Little rattlesnake grass | non-native | annual grass | - | - | FAC |
| *Bromus diandrus* | Ripgut brome | non-native (invasive) | annual grass | - | Moderate | - |
| *Bromus hordeaceus* | Soft chess | non-native (invasive) | annual grass | - | Limited | FACU |
| *Bromus rubens* | Red brome | non-native (invasive) | annual grass | - | High | UPL |
| *Cardamine hirsuta* | Hairy bitter cress | non-native | annual herb | - | - | FACU |
| *Carduus pycnocephalus* ssp. *pycnocephalus* | Italian thistle | non-native (invasive) | annual herb | - | Moderate | - |
| *Carex barbarae* | Valley sedge | native | perennial grasslike herb | - | - | FAC |
| *Carex densa* | Dense sedge | native | perennial grasslike herb | - | - | OBL |
| *Carpobrotus chilensis* | Sea fig | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Carpobrotus edulis* | Iceplant | non-native (invasive) | perennial herb | - | High | - |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Cerastium glomeratum* | Large mouse ears | non-native | annual herb | - | - | UPL |
| *Chasmanthe floribunda* | Chasmanthe | non-native | perennial herb | - | Watch | - |
| *Chlorogalum pomeridianum* | Amole | native | perennial herb | - | - | - |
| *Cirsium occidentale* | Western thistle | native | perennial herb | - | - | - |
| *Cirsium vulgare* | Bullthistle | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Clinopodium douglasii* | Yerba buena | native | perennial herb | - | - | FACU |
| *Cotula coronopifolia* | Brass buttons | non-native (invasive) | perennial herb | - | Limited | OBL |
| *Daucus pusillus* | Wild carrot | native | annual herb | - | - | - |
| *Distichlis spicata* | Salt grass | native | perennial grass | - | - | FAC |
| *Dudleya farinosa* | Sea lettuce | native | perennial herb | - | - | - |
| *Elymus glaucus* | Blue wildrye | native | perennial grass | - | - | FACU |
| *Erigeron glaucus* | Seaside daisy | native | perennial herb | - | - | FACU |
| *Eriogonum latifolium* | Coast buckwheat | native | perennial herb | - | - | - |
| *Eriophyllum staechadifolium* | Lizard tail | native | perennial herb | - | - | - |
| *Eschscholzia californica* | California poppy | native | annual, perennial herb | - | - | - |
| *Festuca bromoides* | Brome fescue | non-native | annual grass | - | - | FACU |
| *Festuca myuros* | Rattail sixweeks grass | non-native (invasive) | annual grass | - | Moderate | FACU |
| *Festuca perennis* | Italian rye grass | non-native (invasive) | annual, perennial grass | - | Moderate | FAC |
| *Frangula californica* | California coffeeberry | native | shrub | - | - | - |
| *Galium aparine* | Cleavers | native | annual herb | - | - | FACU |
| *Gamochaeta ustulata* | Featherweed | native | annual herb | - | - | - |
| *Geranium dissectum* | Wild geranium | non-native (invasive) | annual herb | - | Limited | - |
| *Grindelia stricta* | Gumweed | native | perennial herb | - | - | FACW |
| *Hesperocyparis macrocarpa* | Monterey cypress | native | tree | Rank 1B.2 | - | - |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Holcus lanatus* | Common velvetgrass | non-native (invasive) | perennial grass | - | Moderate | FAC |
| *Hosackia gracilis* | Harlequin lotus | native | perennial herb | Rank 4.2 | - | FACW |
| *Hypochaeris radicata* | Hairy cats ear | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Iris douglasiana* | Douglas iris | native | perennial herb | - | - | - |
| *Isolepis cernua* | Low bulrush | native | annual grasslike herb | - | - | OBL |
| *Juncus effusus* | Common bog rush | native | perennial grasslike herb | - | - | FACW |
| *Juncus hesperius* | Coast rush | native | perennial grasslike herb | - | - | FACW |
| *Juncus patens* | Common rush | native | perennial grasslike herb | - | - | FACW |
| *Juncus phaeocephalus* | Brown headed rush | native | perennial grasslike herb | - | - | FACW |
| *Koeleria macrantha* | June grass | native | perennial grass | - | - | - |
| *Leucanthemum vulgare* | Oxe eye daisy | non-native (invasive) | perennial herb | - | Moderate | UPL |
| *Linum bienne* | Narrow-leaved flax | non-native | annual herb | - | - | - |
| *Lotus corniculatus* | Bird's foot trefoil | non-native | perennial herb | - | - | FAC |
| *Lupinus arboreus* | Coastal bush lupine | native | shrub | - | - | - |
| *Lupinus littoralis* var. *variicolor* | Varied lupine | native | shrub | - | - | - |
| *Lysimachia arvensis* | Scarlet pimpernel | non-native | annual herb | - | - | FAC |
| *Lythrum hyssopifolia* | Hyssop loosestrife | non-native (invasive) | annual, perennial herb | - | Limited | OBL |
| *Medicago polymorpha* | Bur clover | non-native (invasive) | annual herb | - | Limited | FACU |
| *Morella californica* | California wax myrtle | native | shrub | - | - | FACW |
| *Myosotis discolor* | Forget me not | non-native | annual herb | - | - | FAC |
| *Oxalis pes-caprae* | Bermuda buttercup | non-native (invasive) | perennial herb | - | Moderate | - |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Parapholis incurva* | Sickle grass | non-native | annual grass | - | - | FACU |
| *Parentucellia viscosa* | Yellow glandweed | non-native (invasive) | annual herb | - | Limited | FAC |
| *Plagiobothrys chorisianus* var. *chorisianus* | Choris's popcorn flower | native | annual herb | Rank 1B.2 | - | OBL |
| *Plantago coronopus* | Cut leaf plantain | non-native | annual herb | - | - | FAC |
| *Plantago lanceolata* | Ribwort | non-native (invasive) | perennial herb | - | Limited | FAC |
| *Plantago maritima* | Maritime plantain | native | perennial herb | - | - | FACW |
| *Polycarpon tetraphyllum* var. *tetraphyllum* | Four leaved allseed | non-native | annual herb | - | - | - |
| *Polygonum paronychia* | Dune knotweed | native | perennial herb | - | - | - |
| *Polypodium* sp. | Polypody fern | Native | perennial herb | - | - | - |
| *Polystichum munitum* | Western sword fern | native | fern | - | - | FACU |
| *Potentilla anserina* | Silver weed cinquefoil | native | perennial herb | - | - | OBL |
| *Pseudognaphalium stramineum* | Cottonbatting plant | native | perennial herb | - | - | FAC |
| *Rubus ursinus* | California blackberry | native | vine, shrub | - | - | FAC |
| *Rumex acetosella* | Sheep sorrel | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Rumex crispus* | Curly dock | non-native (invasive) | perennial herb | - | Limited | FAC |
| *Rumex salicifolius* | Willow leaved dock | native | perennial herb | - | - | FACW |
| *Salix lasiolepis* | Arroyo willow | native | tree, shrub | - | - | FACW |
| *Sanicula crassicaulis* | Pacific sanicle | native | perennial herb | - | - | - |
| *Scrophularia californica* | California bee plant | native | perennial herb | - | - | FAC |
| *Senecio vulgaris* | Common groundsel | non-native | annual herb | - | - | FACU |
| *Sidalcea malviflora* | Wild hollyhock | native | perennial herb | - | - | FACW |
| *Silene gallica* | Common catchfly | non-native | annual herb | - | - | - |
| *Sisyrinchium californicum* | California golden eyed grass | native | perennial herb | - | - | FACW |
| *Sonchus oleraceus* | Common sow thistle | non-native | annual herb | - | - | UPL |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Spergularia marina* | Salt sand spurry | native | annual herb | - | - | OBL |
| *Stachys bullata* | Southern hedge nettle | native | perennial herb | - | - | - |
| *Symphyotrichum chilense* | Pacific aster | native | perennial herb | - | - | FAC |
| *Toxicodendron diversilobum* | Poison oak | native | vine, shrub | - | - | FACU |
| *Vicia sativa* | Spring vetch | non-native | annual herb, vine | - | - | FACU |
| *Vicia tetrasperma* | Four seeded vetch | non-native | annual herb | - | - | - |
| *Viola adunca* ssp. *adunca* | Western dog violet | native | perennial herb | - | - | FAC |
| *Wyethia angustifolia* | Narrow leaved mule ears | native | perennial herb | - | - | FACU |
| *Zantedeschia aethiopica* | Callalily | non-native (invasive) | perennial herb | - | Limited | OBL |

All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2022]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2022] or Inventory of Rare and Endangered Plants (CNPS 2022). Sp.: "species", intended to indicate that the observer was confident in the identity of the genus but uncertain which species.

[1] **California Native Plant Society. 2022. Inventory of Rare and Endangered Plants (online edition, v9-01 1.5). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: April 2022.**

| | |
|---|---|
| FE: | Federal Endangered |
| FT: | Federal Threatened |
| SE: | State Endangered |
| ST: | State Threatened |
| SR: | State Rare |
| Rank 1A: | Plants presumed extinct in California |
| Rank 1B: | Plants rare, threatened, or endangered in California and elsewhere |
| Rank 2: | Plants rare, threatened, or endangered in California, but more common elsewhere |
| Rank 3: | Plants about which we need more information – a review list |
| Rank 4: | Plants of limited distribution – a watch list |

[2] **California Invasive Plant Council. 2022. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: http://www.cal-ipc.org/paf/; most recently accessed: April 2022.**

| | |
|---|---|
| High: | Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically. |
| Moderate: | Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited-moderate distribution ecologically |
| Limited: | Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically |
| Assessed: | Assessed by Cal-IPC and determined to not be an existing current threat |

[3] **U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. Online at: http://wetland-plants.usace.army.mil/**

| | |
|---|---|
| OBL: | Almost always found in wetlands |
| FACW: | Usually found in wetlands |
| FAC: | Equally found in wetlands and uplands |
| FACU: | Usually not found in wetlands |
| UPL: | Almost never found in wetlands |
| NL: | Not listed, assumed almost never found in wetlands |

NI: No information; not factored during wetland delineation

# APPENDIX D

# REPRESENTATIVE PHOTOGRAPHS OF THE STUDY AREA

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Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*) inflorescence. Photo taken on April 26, 2022.

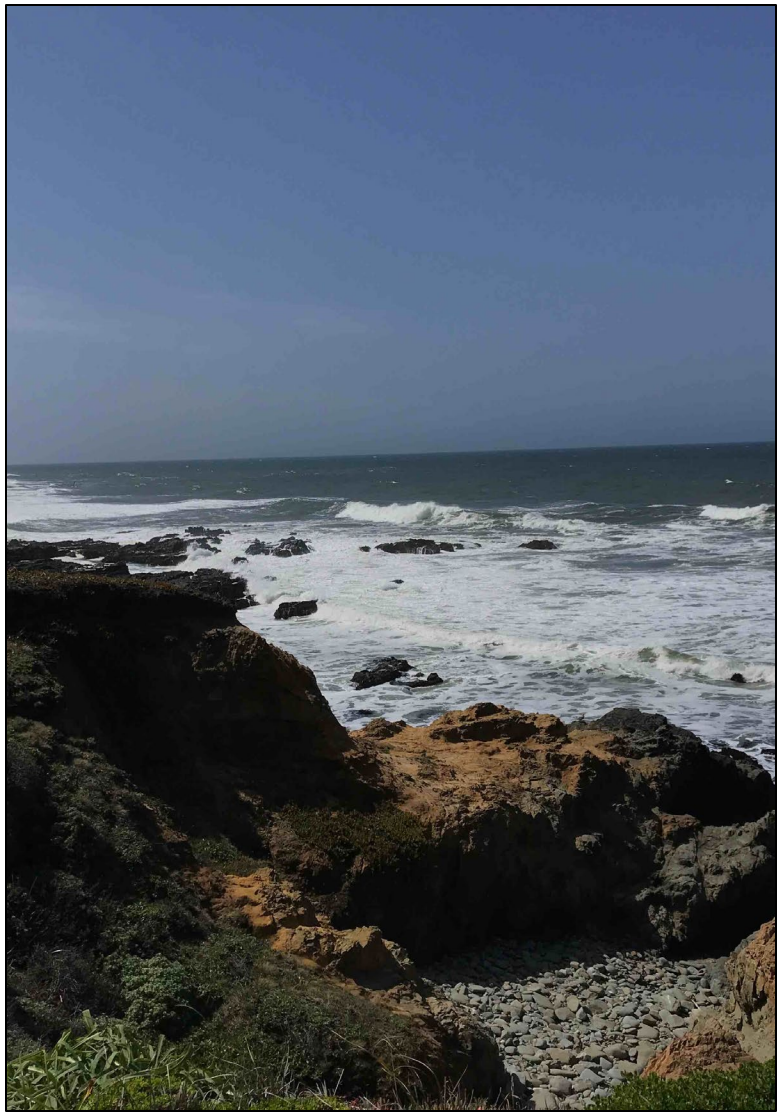
Nutlet from Choris' popcornflower. Photo taken on April 26, 2022.

Example of a cluster of Choris' popcornflower in the foreground. Photo taken on April 26, 2022.

Harlequin lotus (*Hosackia gracilis*) inflorescence. Photo taken on April 26, 2022.

Harlequin lotus inflorescence. Photo taken on April 26, 2022.

Example of a harlequin lotus individual. Photo taken on April 26, 2022.



Sea cliff land cover type. Photo taken on April 26, 2022, facing west.

Seasonal wetland land cover type. Photo taken on April 26, 2022, facing west.

Mowed northern coastal scrub habitat. Photo taken on April 26, 2022, facing west.

Monterey cypress stand. Photo taken on April 26, 2022, facing north.

Coastal bluff scrub habitat. Photo taken on April 26, 2022, facing west.

Scrub-shrub wetland in background. Photo taken on April 26, 2022, facing west.

# APPENDIX E

# ANTECEDENT PRECIPITATION TOOL ANALYSIS

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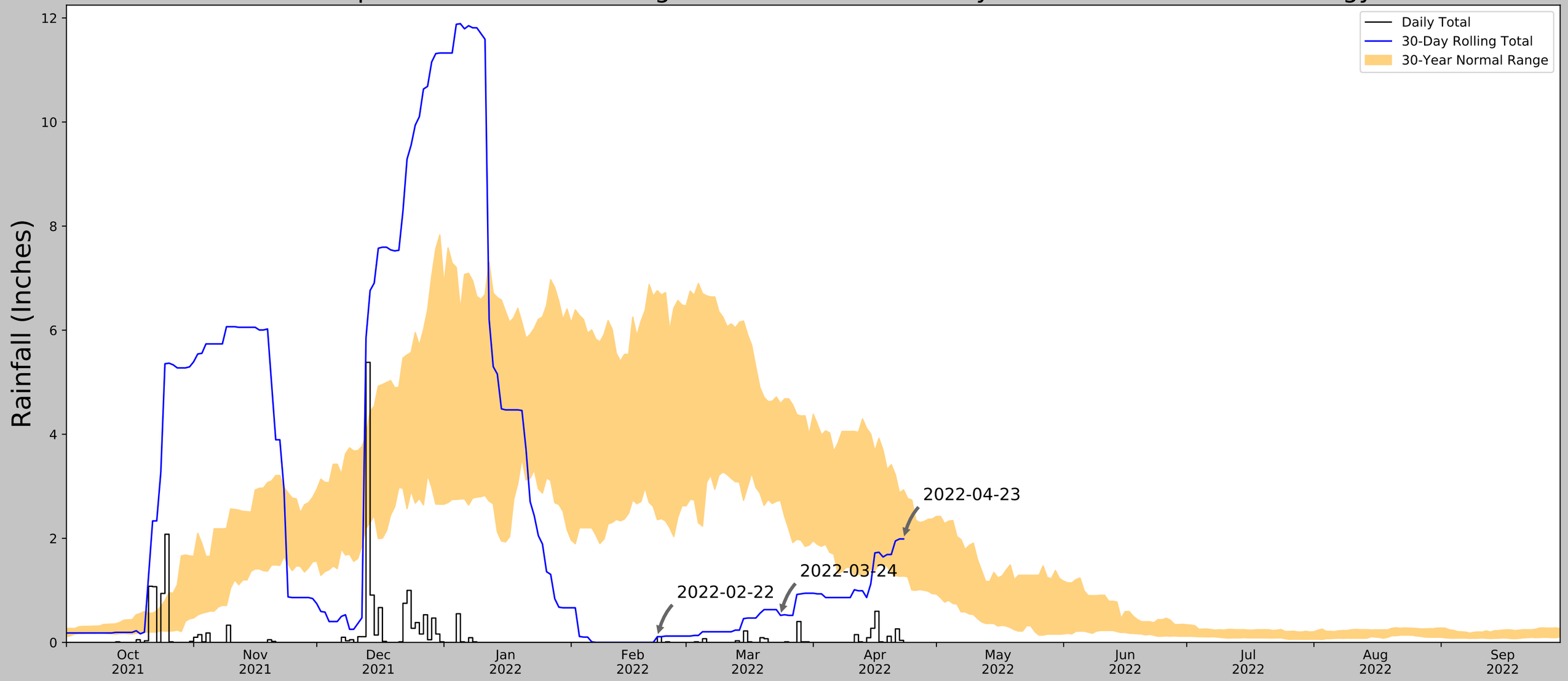
# Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network




| | |
|---|---|
| Coordinates | 37.209120, -122.399980 |
| Observation Date | 2022-04-23 |
| Elevation (ft) | 122.64 |
| Drought Index (PDSI) | Severe drought (2022-03) |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30$^{th}$ %ile (in) | 70$^{th}$ %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-04-23 | 1.274803 | 2.931496 | 1.988189 | Normal | 2 | 3 | 6 |
| 2022-03-24 | 2.729134 | 4.590158 | 0.519685 | Dry | 1 | 2 | 2 |
| 2022-02-22 | 2.359055 | 6.759843 | 0.110236 | Dry | 1 | 1 | 1 |
| Result | | | | | | | Drier than Normal - 9 |

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted Δ | Days (Normal) | Days (Antecedent) |
|---|---|---|---|---|---|---|---|
| HALF MOON BAY | 37.4725, -122.4433 | 26.903 | 18.353 | 95.737 | 10.016 | 10555 | 87 |
| SAN GREGORIO 2 SE | 37.3117, -122.3617 | 274.934 | 7.394 | 152.294 | 4.453 | 766 | 0 |
| DAVENPORT 3.1 NW | 37.0436, -122.2293 | 46.916 | 14.805 | 75.724 | 7.784 | 2 | 0 |
| HALF MOON BAY 1.0 S | 37.455, -122.4383 | 64.961 | 17.119 | 57.679 | 8.691 | 20 | 2 |
| HALF MOON BAY 0.5 SSW | 37.463, -122.4408 | 54.134 | 17.684 | 68.506 | 9.169 | 9 | 1 |
| MOUNTAIN VIEW 1.2 S | 37.3848, -122.0752 | 108.924 | 21.587 | 13.716 | 10.01 | 1 | 0 |

# BIOLOGICAL RESOURCES TECHNICAL REPORT

## YOUNGER PROPERTY

### PESCADERO, SAN MATEO, CALIFORNIA

**Prepared for:**

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WRA #320050
JULY 2022

ENVIRONMENTAL CONSULTANTS

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## LIST OF APPENDICES



## LIST OF PREPARERS

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Katie Tyree – Plant Biologist
Scott Batiuk – Plant Biologist
Neal Jander – GIS Analyst

# LIST OF ACRONYMS

| | |
|---|---|
| APT | Antecedent Precipitation Tool |
| BCC | USFWS Birds of Conservation Concern |
| BGEPA | Bald and Golden Eagle Protection Act |
| BIOS | Biogeographic Information and Observation System |
| BRA | Biological Resources Assessment |
| CCC | California Coastal Commission |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CESA | California Endangered Species Act |
| CEQA | California Environmental Quality Act |
| CFGC | California Fish and Game Code |
| CFP | California Fully Protected Species |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPPA | California Native Plant Protection Act |
| CNPS | California Native Plant Society |
| Corps | U.S. Army Corps of Engineers |
| County | County of San Mateo |
| CRLF | California Red-legged Frog |
| CRPR | California Rare Plant Rank |
| CWA | Clean Water Act |
| EFH | Essential Fish Habitat |
| EIR | Environmental Impact Report |
| EPA | U.S. Environmental Protection Agency |
| ESA | Federal Endangered Species Act |
| LCP | Local Coastal Program (San Mateo County) |
| Magnuson-Stevens Act | Magnuson-Stevens Fishery Conservation & Management |
| MBTA | Migratory Bird Treaty Act |
| NMFS | National Marine Fisheries Service |
| NOAA | National Oceanic and Atmospheric Administration |
| NRCS | Natural Resource Conservation Service |
| NWI | National Wetland Inventory |
| NWPL | National Wetland Plant List |
| OHWM | Ordinary High Water Mark |
| PDSI | Palmer Drought Severity Index |
| RWQCB | Regional Water Quality Control Board |
| SFGS | San Francisco Garter Snake |
| SSC | Species of Special Concern |
| SWRCB | State Water Resource Control Board |
| TOB | Top of Bank |
| USDA | U.S. Department of Agriculture |

| | |
|---|---|
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| WBWG | Western Bat Working Group |
| WRA | WRA, Inc. |
| WRCC | Western Regional Climate Center |

# 1.0 INTRODUCTION

On April 26, 2022, WRA, Inc. conducted a biological resource assessment of the Younger property (Study Area) located in the unincorporated community of Pescadero, in San Mateo County, California (Figure 1). The Study Area is comprised of Assessor Parcel Numbers [APNs] 087-250-140, 087-250-150, and 087-250-160. This Biological Resources Technical Report evaluates existing biological resources, potential impacts, and mitigation measures (if required) for installing a well to support the potential future development of a single-family residence.

## 1.1 Overview and Purpose

This report provides an assessment of biological resources within the Study Area and the immediate vicinity. The assessment included a biological resources assessment in addition to a rare plant survey. A wetland delineation was conducted concurrently with the biological assessment and detailed information relating to the wetland delineation is included in a separate report. The purpose of the assessment was to identify, describe, and map any sensitive habitats, including riparian, wetland, and stream areas, or other Environmental Sensitive Habitat Areas (ESHAs); and "rare, threatened, or endangered" species, which may occur in the Study Area. WRA performed the biological resources assessment in accordance with the San Mateo County (County) Midcoast Local Coastal Program (LCP), including Sections 7.1-7.19. This report contains an evaluation of potential impacts to special-status species or ESHAs that may occur as a result of the proposed project and potential mitigation measures to compensate for those impacts to support a California Environmental Quality Act (CEQA) evaluation. If the project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. Additional focused surveys may be required to support endangered species consultation, regulatory permit applications, or to implement preconstruction impact avoidance measures included in this report. This assessment is based on information available at the time of the study and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

## 1.2 Project Description

While no formal project has been proposed at this time, this report will be submitted to the County along with applications for a Coastal Development Permit for domestic well construction to determine if the property contains sufficient water to supply a single-family residence. A map of proposed well sites is provided as Figure 7.

## 1.3 Summary of Results

The Study Area (6.52 acres) is located in a rural residential area on the western side of Highway 1, bordering the Pacific Ocean. The dominant land cover types are northern coastal scrub and coastal bluff scrub, both non-sensitive land cover types. The other non-sensitive land cover type includes a stand of planted and naturalized Monterey cypress trees. The Study Area contains sensitive habitats including wetlands and sea cliffs.

Two wetlands occur on site, seasonal wetland (0.29 acres) and scrub shrub wetland (0.62 acres). The potential project location is intentionally sited to avoid on-site seasonal wetlands, which are potentially jurisdictional by U.S. Army Corps of Engineers and Regional Water Quality Control Board and regulated by the California Coastal Commission (CCC). A combination of avoidance and preservation is recommended to ensure consistency with the LCP policies and state and federal regulations.

The sea cliffs land cover type area encompasses 0.47 acres of the Study Area and incorporates the unvegetated cliffs down to the Pacific Ocean. Sea cliffs are under CCC/LCP jurisdiction. The Study Area is intentionally sited to avoid sea cliffs and mitigation measures and best management practices have been developed and provided herein to avoid impacts to this land cover type.

Ten special-status plant species have the potential to occur within the Study Area. A protocol-level rare plant survey conducted on April 26, 2022, documented two special-status plants: Harlequin lotus (*Hosackia gracilis*, CRPR 4.2) and Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*, CRPR 1B). Both populations of plants have been mapped and impacts to the species will be less than significant with the combination of avoidance and mitigation measures.

One special-status wildlife species has a moderate potential to occur within the Study Area, San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), as well as non-status birds with baseline legal protections, have the potential to occur in the Study Area. Mitigation measures and best management practices have been developed and provided herein to avoid impacts to these species.

**TABLE 1. Summary of Biological Resources Evaluation**

| CEQA Assessment Category[1] IV. -Biological Resources | Biological Resources Considered | Relevant Laws and Regulations | Responsible Regulatory Agency | Summary of Findings & Report Section[2] |
|---|---|---|---|---|
| Question A. Special-status species | Special-status Plants<br>Special-status Wildlife<br>Designated Critical Habitat | Federal Endangered Species Act<br>California Endangered Species Act<br>California Native Plant Protection Act<br>Migratory Bird Treaty Act | U.S. Fish and Wildlife Service<br>National Marine Fisheries Service<br>California Department of Fish and Wildlife | Mitigation measures are recommended to reduce potential impacts to a level that is less than significant.<br><br>**See Section 7.0 for more information** |
| Question B. Sensitive natural communities & riparian habitat | Sensitive Natural Communities<br>Streams, Lakes, & Riparian Habitat | California Fish and Game Code<br>Porter-Cologne Act<br>Clean Water Act | California Department of Fish and Wildlife<br>State Water Resources Control Board<br>Regional Water Quality Control Board | Mitigation measures are recommended to reduce potential impacts to a level that is less than significant.<br><br>**See Section 7.0 for more information** |
| Question C. State and federally protected wetlands | Wetlands<br>Unvegetated Waters | Clean Water Act Sections 404/401<br>Porter Cologne Act | U.S. Army Corps of Engineers<br>U.S. Environmental Protection Agency<br>State Water Resources Control Board<br>Regional Water Quality Control Board | Mitigation measures are recommended to reduce potential impacts to a level that is less than significant.<br><br>**See Section 7.0 for more information** |
| Question D. Fish & wildlife corridors | Essential Fish Habitat<br>Wildlife Corridors | California Fish and Game Code<br>Magnuson-Stevens Fishery Conservation & Management Act | California Department of Fish and Wildlife<br>National Marine Fisheries Service | No impact.<br><br>**See Section 7.0 for more information** |
| Question E. Local policies | Coastal Zone Resources<br>Protected Trees | Local Tree Ordinance<br>San Mateo County LCP (e.g., Stream & Wetland | San Mateo County<br>California Coastal Commission<br>San Mateo County | Mitigation measures are recommended to reduce potential impacts to a level |

*[1] CEQA Questions have been summarized here; see Section 6.2 for details.*

*[2] As given in this report; see Section 5.0 subheadings*

| CEQA Assessment Category[1] IV. -Biological Resources | Biological Resources Considered | Relevant Laws and Regulations | Responsible Regulatory Agency | Summary of Findings & Report Section[2] |
|---|---|---|---|---|
| | | Setbacks)<br>Local ordinances | | that is less than significant.<br><br>**See Section 7.0 for more information** |
| Question F. Local, state, federal conservation plans | Habitat Conservation Plans<br>Natural Community Conservation Plans | Federal Endangered Species Act<br>Natural Community Conservation Planning Act | U.S. Fish and Wildlife Service<br>California Department of Fish and Wildlife | No impact.<br><br>**See Section 7.0 for more information** |

# 2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 1 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

## 2.1 Federal and State Regulatory Setting

### *2.1.1 Aquatic Resources and Sensitive Communities*

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Game (CDFW), and aquatic communities protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). Additionally, local laws and policies that apply to Environmentally Sensitive Habitat Areas (ESHAs) and project activities in the coastal zone, are enacted by the California Coastal Commission (CCC) and the San Mateo Local Coastal Plan (LCP). The laws and regulations that provide protection for these resources are summarized below.

Waters of the United States, Including Wetlands: The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

Waters of the State, Including Wetlands: The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification

Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Section 30121 of the Coastal Act: The California Coastal Commission (CCC)/LCP regulates the diking, filling, or dredging of wetlands within the coastal zone. Section 30121 of the Coastal Act defines "wetlands" as land "which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The 1981 CCC Statewide Interpretive Guidelines state that hydric soils and hydrophytic vegetation "are useful indicators of wetland conditions," but the presence or absence of hydric soils and/or hydrophytes alone are not necessarily determinative when the CCC identifies wetlands under the Coastal Act.

Sections 1600-1616 of California Fish and Game Code: Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGC). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

Sensitive Natural Communities: Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2021a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2021b). Vegetation alliances are ranked 1 through 5 in the CNDDB based on NatureServe's (2022) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code.

Environmentally Sensitive Habitat Areas: The California Coastal Act Section 30107.5 defines ESHAs as "any area in which plant or animal life or their habitats 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." Coastal Act Section 30240 protects ESHAs from "significant disruption of habitat values," limits allowable land uses within ESHAs, and requires adjacent uses to be designed to be compatible with habitat benefits provided by ESHAs. The Coastal Act includes wetlands as ESHAs but does not specifically define every vegetation community defined as an ESHA. Instead, the California Coastal Commission (CCC) often delegates the responsibility for administering the California Coastal Act to local

municipalities through the approval of Local Coastal Programs (LCPs). Many LCPs provide more specific lists of communities that are considered ESHAs. More information about ESHAs defined by the local San Mateo County LCP is provided in Section 2.2 below.

### *2.1.2 Special-status Species*

Endangered and Threatened Plants, Fish, and Wildlife. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing, and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. "Take" under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species". Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGC 2050 et seq.) prohibits a take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species which are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species. This category includes specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 "rare" or "endangered" plant species, and

prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats. The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species (bald eagle [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*)] that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Species of Special Concern, Movement Corridors, and Other Special-status Species under CEQA. To address additional species protections afforded under CEQA, CDFW has developed a list of special species as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (Inventory) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 species and all Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

## 2.2 Local Plans and Policies

San Mateo County Local Coastal Program (LCP)

The San Mateo County LCP (San Mateo County 2013) identifies ESHAs to include, but is not limited to, "riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species." Further, the County LCP defines sensitive habitats as:

> *…any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.*
>
> County LCP (2013), Policy 7.1

For the purposes of this report, WRA has taken into consideration any areas that may meet the definition of any ESHA defined by the San Mateo County LCP.

In areas defined as wetlands, buffer zones must be established according to the following guidelines:

*Buffer zones shall extend a minimum of 100 feet landward from the outermost line of wetland vegetation. This setback may be reduced to no less than 50 feet only where: (1) no alternative development site or design is possible; and (2) adequacy of the alternative setback to protect wetland resources is conclusively demonstrated by a professional biologist to the satisfaction of the County and the State Department of Fish and Game. A larger setback shall be required as necessary to maintain the functional capacity of the wetland ecosystem.*

County LCP (2013), Policy 7.18

Additionally, the County LCP defines Riparian Corridors as a sensitive habitat, where riparian corridors are defined as:

*…the "limit of riparian vegetation" (i.e., a line determined by the association of plant and animal species normally found near streams, lakes and other bodies of freshwater: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder). Such a corridor must contain at least a 50% cover of some combination of the plants listed.*

County LCP (2013), Policy 7.7

This County LCP further clarifies in Policy 7.8, that riparian corridors be established for all perennial and intermittent streams, lakes, and other bodies of freshwater in the Coastal Zone. Guidelines for establishing buffer zones are described as:

a. *On both sides of riparian corridors, from the "limit of riparian vegetation" extend buffer zones 50 feet outward for perennial streams and 30 feet outward for intermittent streams.*
b. *Where no riparian vegetation exists along both sides of riparian corridors, extend buffer zones 50 feet from the predictable high water point for perennial streams and 30 feet from the midpoint of intermittent streams.*
c. *Along lakes, ponds, and other wet areas, extend buffer zones 100 feet from the high water point except for manmade ponds and reservoirs used for agricultural purposes for which no buffer zone is designated.*

County LCP (2013), Policy 7.11

The County LCP defines sea cliffs or coastal bluffs (below) and restricts development in those areas:

"*The area of demonstration of stability includes the base, face, and top of all bluffs and cliffs. The extent of the bluff top considered should include the area between the face of the bluff and a line described on the bluff top by the intersection of a plane inclined at a 20º angle from the horizontal passing through the toe of the bluff or cliff, or 50 feet inland from the edge of the cliff or bluff, whichever is greater*"

"*Permit bluff and cliff top development only if design and setback provisions are adequate to assure stability and structural integrity for the expected economic life span of the development (at least 50 years) and if the development (including storm runoff, foot traffic, grading, irrigation, and septic tanks) will neither create nor contribute significantly to erosion problems or geologic instability of the site or surrounding area".*

County LCP (2013), Hazards Component

The LCP considers The CCC's requirement for Coastal Development Permits (CDP) for new development involving wells within the coastal zone:

> "*Approval of any new private well or development that relies on a new private well may only be considered if a connection to the public water supply is not available. In such instances, the applicant for the development must obtain a coastal development permit (CDP) for a test well, and document compliance with all Environmental Health standards and requirements for the proposed use of the well, prior to submitting a CDP application for the development. The CDP application for the development shall include a report prepared by a California Registered Geologist or Registered Civil Engineer which demonstrates, to the satisfaction of the Environmental Health Director and the Community Development Director, that:*
>
> *i. The yield of the well meets the Standards for Adequate Water as described in the County Well Ordinance and will be adequate to meet the needs of the development for the design life of the development;*
>
> *ii. The water quality meets safe drinking water standards, or will meet such standards with treatment;*
>
> *iii. The well will be sited, designed, and operated in a manner that avoids contamination from any potential pollutant sources; and iv. Operation of the well will, at the level contemplated for the development, avoid individual or cumulative adverse impacts to other wells, or to biological resources including streams, riparian habitats, and wetlands*.".
>
> County LCP (2013), Section 1.19

The LCP lists one sensitive species known to occur near the Study Area: San Francisco garter snake (*Thamnophis sirtalis tetrataenia*; SFGS). Section 7.36 of the LCP states the County will:

> "a. Prevent any development where there is known to be a riparian or wetland location for the San Francisco garter snake with the following exceptions: (1) existing manmade impoundments smaller than one-half acre in surface, and (2) existing manmade impoundments greater than one-half acre in surface providing mitigation measures are taken to prevent disruption of no more than one half of the snake's known habitat in that location in accordance with recommendations from the State Department of Fish and Game.
>
> b. Require developers to make sufficiently detailed analyses of any construction which could impair the potential or existing migration routes of the San Francisco garter snake. Such analyses will determine appropriate mitigation measures to be taken to provide for appropriate migration corridors."

# 3.0 ASSESSMENT METHODOLOGY

On April 26, 2022, WRA, Inc. (WRA) biologists visited the Study Area to map vegetation, aquatic communities, unvegetated land cover types, document plant and wildlife species present, and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive biological communities (e.g., wetlands) and special-status species (e.g., endangered plants), including:

- Web Soil Survey, California (USDA 2022)
- Contemporary aerial photographs (Google Earth 2022)
- Historical aerial photographs (NETR 2022)
- National Wetlands Inventory (USFWS 2022a)
- CNDDB (CDFW 2022b)
- CNPS Inventory (CNPS 2022a)
- Consortium of California Herbaria (CCH1 2022, CCH2 2022)
- USFWS List of Federal Endangered and Threatened Species (USFWS 2022b)
- eBird Online Database (eBird 2018)
- CDFW Publication, California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2022b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Davenport, Ano Nuevo, Big Basin, and Franklin Point USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists completed a field review to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) are present, and (4) if special-status species are present.

## 3.1 Biological Communities

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the Preliminary Descriptions of the *Terrestrial Natural Communities of California* (Holland 1986) and *A Manual of California Vegetation, Online Edition* (CNPS 2022b). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]) (CDFW 2022a), were evaluated as sensitive as part of this evaluation.

## 3.2 Sensitive Communities

The Study Area was evaluated for the presence of other sensitive biological communities, including and sensitive plant communities recognized by CDFW or ESHAs under the San Mateo LCP Policies Sections 7.1-7.14. Prior to the site visit, aerial photographs, local soil maps, *A Manual of California Vegetation* (Sawyer et al. 2009), and the LCP were reviewed to assess the potential for sensitive biological communities to occur in the Study Area.

## 3.3 Aquatic Resources Delineation

The Study Area was reviewed for the presence of wetlands and other aquatic resources regulated by the Corps, RWQCB, and CCC/LCP according to the methods described in the Corps Manual (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West/Western Mountains and Valleys Region*. Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above. The boundaries of areas regulated by the Corps and CCC/LCP are often not the same due to the differing goals of the respective regulatory programs and because these agencies use different definitions for determining the extent of wetland areas. For example, the Corps requires that positive indicators for the presence of wetland hydrology, hydric soils, and a predominance of hydrophytic vegetation be present for an area to meet the Corps' wetland definition. The CCC does not necessarily require that all three wetland indicators (wetland hydrology, hydric soils, and a predominance of hydrophytic vegetation) be present for an area to be determined to by a "wetland"; rather, the presence of hydric soils in the absence of a predominance of hydrophytes (or vice versa) could be sufficient for a positive wetland determination. The detailed results of the wetland delineation will be included in a separate report.

## 3.4 Special-status Species Habitat Assessment

WRA plant and wildlife biologists conducted the habitat assessment on the entirety of the Study Area to determine whether habitats containing or supporting rare, endangered, or unique species are present. Potential occurrences of special-status species in the Study Area were evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review, described above. Presence of suitable habitat for special-status species was evaluated during the April 26, 2022, site visit based on physical and biological conditions of the site as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

- **Present.** Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site in the recent past.

The site assessment was intended to identify the presence or absence of suitable habitat for each special-status species known to occur in the vicinity in order to determine its potential to occur in the Study Area. Appendix C presents the evaluation of potential for occurrence of each special-status plant and wildlife species known to occur in the vicinity of the Study Area with their habitat requirements, potential for occurrence, and rationale for the classification based on criteria listed above. The BRTR does not constitute a protocol-level wildlife survey and was not intended to determine the actual presence or absence of a wildlife species; however, if a special-status wildlife species was observed during the site visit, its presence was recorded and discussed. A protocol-level special-status plant species survey (rare plant survey) was conducted on April 26, 2022, during the blooming period for all species with a moderate or high potential to occur within the Study Area. A Rare Plant Survey Report with field methods and results will be submitted to support this BRTR; and is discussed in more detail in Section 3.5. If a special-status plant species was observed during the site visit, its presence was recorded and discussed below in Section 5.2.

## 3.5 Protocol-level Rare Plant Survey

A floristic, protocol-level rare plant survey was conducted concurrent with the April 2022 site assessment. The surveys followed the protocol for rare plant surveys described by CNPS (2001) and CDFW (2018). The timing of the survey corresponded to peak blooming or fruiting periods for observing and accurately identifying plant species in western San Mateo County, including all of the special-status plant species with the potential to occur in the Study Area. The field survey was conducted by two botanists familiar with the flora of seasonal wetlands and coastal scrub habitats of San Mateo County.

## 3.6 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (BIOS; CDFW 2021). Additionally, aerial imagery (Google 2022) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly [*Danaus plexippus*]).

# 4.0 ECOLOGICAL SETTING

The approximately 6.5-acre Study Area is located in the unincorporated community of Pescadero in San Mateo County, California. The Study Area is west of Highway 1, bordering the sea cliffs overlooking the Pacific Ocean. The bordering land use includes rural private residences, open land, and State-owned and operated public beach access. The Study Area includes the entire property; additional details of the local setting are below.

## 4.1 Soils and Topography

The overall topography of the Study Area is relatively flat, sloping slightly west with elevations ranging from approximately 40 to 73 feet above sea level. The Study Area includes steep sea cliffs, which change in elevation from 40 to 1.5 feet above sea level in as short as 30 lateral feet. According to the *Web Soil Survey* (USDA 2022), the Study Area is underlain by three soil mapping units: Elkhorn sandy loam, moderately steep, eroded (EhD2), Elkhorn sandy loam, thick surface, gently sloping (EtB), and terrace escarpments (Ta). Soils within the Study Area are shown in Appendix A – Figure 3 and Figure 3A. The parent soil series of all the Study Area's mapping units are summarized below.

Elkhorn series: This series consists of deep, well drained soils that formed in material weathered from alluvium from mixed rock sources. Elkhorn soils are on coastal terraces and have slopes of 2 to 50 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 58 degrees Fahrenheit (USDA 2003).

Elkhorn sandy loam soil type falls under Capability Unit IIs-3, according to the U.S. Department of Agriculture (USDA) Soil Conservation Service Land Use Capability Classification. The Capability Classification of Elkhorn sandy loam defines the soil as suited to a fairly wide range of crops, but their depth is unfavorable for some deep-rooted plants (WRA 2022). Soils with a Capability Classification of Class I or Class II fall under the definition of Prime Agricultural Lands according to the LCP. Parcels which contain land/ soils suitable for agriculture must be designated as agriculture on the LCP Land Use Plan Map. Permitted uses of prime agricultural land includes the cultivation of foods, fiber, flowers, grazing growing, or pasturing of livestock, etc. The LCP conditionally permits the development of single-family residences on prime agricultural land. The development of a single-family residence on land designated as agriculture requires the conversion of prime agricultural land to a conditionally permitted use and must demonstrate:

1. That no alternative site exists for the use
2. Clearly defined buffer areas are provided between agricultural and non-agricultural uses
3. The productivity of any adjacent agricultural land will not be diminished
4. Public service and facility expansions and permitted uses will not impair agricultural viability, including by increased assessment costs or degraded air and water quality

## 4.2 Climate and Hydrology

The Study Area is located in the unincorporated community of Pescadero in San Mateo County, California. The average monthly maximum temperature in the area is 64.6 degrees Fahrenheit, while the average monthly minimum temperature is 44.5 degrees Fahrenheit. Predominantly, precipitation falls as rainfall

between November and March with an annual average precipitation of 29.42 inches (WRCC 2022). The Antecedent Precipitation Tool (APT), developed by the US Army Corps, assists in supporting "decisions as to whether field data collection and other site-specific observations occurred under normal climatic conditions". At the time of the site visit, the area was experiencing drier than normal conditions and a Palmer Drought Severity Index (PDSI) classification of severe drought.

The local watershed is Gazos Creek-Frontal Ano Nuevo Bay (HUC 12: 180500060303) and the regional watershed is San Francisco Coastal South (HUC 8: 18050006). The Study Area is located in the central portion of the Gazos Creek-Frontal Ano Nuevo Bay watershed. There are no blue-line streams in the Study Area (NWI 2022). However, because the Study Area is directly adjacent to the Pacific Ocean, the beach, exposed during the low tides is categorized as M2RSN: regularly flooded, high energy coastlines characterized by large boulders or bedrock. Additionally, the Pacific Ocean is classified as N1UBL: permanently flooded, open ocean deepwater habitat (NWI 2022). No other aquatic resources were mapped during the desktop review. Detailed descriptions of aquatic resources are provided in Section 5.1 below.

## 4.3 Land Use

The Study Area is a regularly mowed, undeveloped, rural parcel of land, adjacent to the Pacific Ocean. It is bordered by Highway 1 and open space to the east, the Pacific Ocean to the west, and rural residences to the north and south. Historical imagery shows the site was used for agricultural purposes during the 1950's (Google Earth 2022; NETR 2022). Agricultural rows/ crops were abandoned around the 1980's. Aerials show the Study Area has been regularly mowed since at least 2006 (Google Earth 2022). Detailed plant community descriptions are included in Section 5.1 below, and all observed plant species are included in Appendix B. Areas to the north and west of the Study Area are developed residential properties, and the property is bordered to the west by the Pacific Ocean and to the east by Highway 1/Cabrillo Highway and undeveloped open space.

Photo 1: Overview of the Study Area. 04/26/2022.

# 5.0 ASSESSMENT RESULTS

## 5.1 Biological Communities

Non-sensitive biological communities in the Study Area include planted Monterey cypress stands and coastal scrub. Three ESHAs occur within the Study Area: sea cliffs, scrub shrub wetland, and seasonal wetland. Descriptions for each biological community are contained in the following sections and are illustrated in Figure 4. Acreage summations for biological communities are detailed in Table 2.

**TABLE 2. VEGETATION COMMUNITY AND LAND COVER TYPES**

| COMMUNITY/LAND COVER TYPES | SENSITIVE STATUS[3] | RARITY RANKING | ACRES WITHIN STUDY AREA |
|---|---|---|---|
| ***Biological Community*** | | | |
| Monterey cypress | Non-sensitive | N/A | 0.33 |
| Coastal Bluff Scrub | Non-sensitive | S5/G5 | 0.42 |
| Northern Coastal Scrub | Non-sensitive | S5/G5 | 4.39 |
| Sea Cliffs | Sensitive | N/A | 0.47 |
| ***Aquatic Resources*** | | | |
| Scrub shrub wetland | Sensitive | N/A | 0.62 |
| Seasonal wetland | Sensitive | N/A | 0.29 |

### *5.1.1 Terrestrial Land Cover*

**Non-sensitive Land Cover Types**

Monterey Cypress Stand. (No vegetation alliance). CDFW Rank: None.

Monterey cypress (*Hesperocyparis macrocarpa*) stands are found in headlands and sheltered areas near the coast in granitic-derived soils (CNPS 2022b). A stand of planted Monterey cypress is located on the northern boundary of the Study Area and separates the Study Area from the neighboring parcel. This stand is dominated by a canopy of Monterey cypress with a sparse understory. CNPS has protections for natural communities of Monterey cypress, however there are only two known native occurrences of Monterey cypress and they are located in Monterey County.

Photo 2: Monterey cypress in the background, northern coastal scrub in the foreground. 4/26/2022.

[3] Determination based on the *List of California Terrestrial Natural Communities* (CDFG 2010) and the *San Mateo County Local Coastal Program* (County 1998)

Northern Coastal Scrub (*Baccharis pilularis* Shrubland Alliance). CDFW Rank: S5/G5.
Coastal scrub communities are located extensively along the entire length of the California coastline. These communities are dominated by native shrubs tolerant of frequent and often high winds, salt spray, and extended cloud cover in summer months (Holland 1986). One vegetation alliance was documented within the northern coastal scrub in the Study Area: coyote brush (*Baccharis pilularis*) scrub (CNPS 2022b). Coyote brush scrub is a mixed community dominated by coyote brush and a mixture of native and non-native forbs. Within the Study Area, coyote brush was the dominant species with both poison oak (*Toxicodendron diversilobum*) and Pacific blackberry (*Rubus ursinus*) in the overstory. Other species in this community included soap plant (*Chlorogalum pomeridianum*), yarrow (*Achillea millefolium*), four seeded vetch (*Vicia tetrasperma*), and brome fescue (*Festuca bromoides*). The Study Area was recently mowed at the time of the site visit, resulting in disturbed habitat conditions as evidenced by an abundance of Bermuda buttercup (*Oxalis pes-caprae*) cover and overall reduction in cover of native plant species. Rush species including *Juncus patens* and *J. hesperius* were abundant, but their cover is representative of the mowed, un-natural conditions of the site and not indicative of wetland conditions. It is presumed if they site were left un-mowed, coyote brush would dominate and shade out the grasses, herbs, and forbs currently found within the area. A narrow, un-mowed strip on the south edge of the site, included in this biological community, is characterized by coyote brush and Pacific blackberry and also included multiple yellow bush lupine (*Lupinus arboreus*) individuals and common velvet grass (*Holcus lanatus*) in the understory.

Coastal Bluff Scrub (*Baccharis pilularis* Shrubland Alliance). CDFW Rank: S5/G5. Coastal bluff scrub is located in the interface between the sea cliffs and the mowed northern coastal scrub. Although it is part of the same vegetation alliance as northern coastal scrub, the composition of the community is significantly different. This community is un-mowed and characterized by a narrow band of generally short, dense vegetation. The dominate shrub is coyote brush mixed with an overstory of coastal bush lupine (*Lupinus arboreus*) and poison oak, with an understory of herbs including soap plant and Douglas iris (*Iris douglasiana*).

**Sensitive Land Cover Types**

Photo 3: Sea cliffs at the western boundary of the Study Area. 4/26/2022.

Sea Cliffs. (No Vegetation Alliance). CDFW Rank: None.
Sea cliffs occur along the western perimeter of the Study Area. As defined by the CCC/LCP, a sea cliff is a scarp or steep face of rock, weathered rock, sediment, or soil resulting from marine erosion, faulting, folding, or excavation of the land mass. The cliff or bluff may be simple planar or curved surface or it may be step-like in section. Sea Cliffs are subject to CCC/LCP jurisdiction as an ESHA.

### *5.1.2 Aquatic Resources*

Scrub-Shrub Wetland. (No vegetation alliance). CDFW Rank: None.
Scrub-shrub wetland communities are dominated by woody vegetation less than twenty feet tall. They typically occur within or adjacent to stream channels, along seasonally flooded arroyos, or in depressional areas located close to ground water. Within the Study Area, this community occurs as a dense, wind-pruned willow (*Salix lasiolepis*, FACW) thicket in a depressional area along a coastal bluff near the southwestern boundary in the Study Area. This community may be regulated by CDFW jurisdiction as riparian vegetation and CCC/LCP jurisdiction as ESHA and a one-parameter wetland.

Seasonal Wetland. (No vegetation alliance). CDFW Rank: None.
The seasonal wetland within the Study Area intergrades closely with northern coastal scrub. Wetland-adapted plant species including softrush (*Juncus effusus,* FACW), common rush (*Juncus patens*, FACW), sedges (*Carex sp*.), hedge nettle (*Stachys ajugoides*, OBL), and occasional wax myrtle (*Morella californica,* FACW) occur on flat to slightly concave topography in association with upland (non-wetland) Northern coastal scrub species including coyote brush and soap plant. Due to the co-dominance of wetland and upland species, portions of this community may satisfy the dominance test for hydrophytic vegetation and meet the CCC/LCP's one-parameter wetland criteria. Areas where saturation was observed may also meet the Corps' three-parameter wetland criteria. A more accurate determination of seasonal wetlands will be concluded in the Wetland Delineation Report (WRA 2022) using the results of the formal delineation of the Study Area conducted on April 26, 2022. Seasonal wetlands are likely subject to the Corps and RWQCB jurisdiction as Waters of the U.S./State. Seasonal wetlands and any identified coastal seasonal wetlands are subject to CCC/LCP jurisdiction as an ESHA.

## 5.2 Special-status Species

### *5.2.1 Special-status Plants*

Based upon a review of the resource databases listed in Section 3.0, 66 special-status plant species have been documented in the vicinity of the Study Area. Ten of these species were considered to have the potential to occur in the Study Area, and two were observed during field surveys. The remaining species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., riverine) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., serpentine, clay) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., montane) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., coniferous forest, woodlands, prairies, coastal dunes, meadows, vernal pools) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g., below elevation) from the documented range of the special-status plant species;
- Land use history and contemporary management (e.g., mowing) has degraded the localized habitat necessary to support the special-status plant species.

WRA biologists conducted a protocol-level rare plant survey on April 26, 2022, a period sufficiently timed to identify all special-status plant species with the potential to occur. Two special-status plants were identified in the Study Area during protocol-level surveys: Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus)*, CRPR 1B.2 and Harlequin lotus (*Hosackia gracilis*), CRPR 4. Detailed results of this survey can be found in the Rare Plant Report, to be submitted after this report.

Harlequin lotus (*Hosackia gracilis*). CRPR 4. Moderate Potential. Harlequin lotus is a perennial forb in the pea family (Fabaceae) that blooms from March to July. It typically occurs in wetlands or ditches in broadleaf upland forest, coastal bluff scrub, coastal scrub, closed-cone coniferous forest, cismontane woodland, coastal prairie, meadow and seep, marsh and swamp, North Coast coniferous forest, and valley and foothill grassland habitats at elevations ranging from 0 to 2,295 feet (CNPS 2022). Known associated species include coyote brush, little rattlesnake grass (*Briza minor*), blue-eyed grass (*Sisyrinchium bellum*), western rush (*Juncus occidentalis*), sky lupine (*Lupinus nanus*), big heron bill (*Erodium botrys*), scarlet pimpernel (*Lysimachia arvensis*), and common velvet grass (CCH1 2022). Figure 5 depicts the location of the individuals of harlequin lotus found within the Study Area.

Choris popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*, CRPR 1B.2). Moderate Potential. Choris popcornflower is an annual herb in the borage family (Boraginaceae) that blooms March through June. It typically occurs in mesic niches within chaparral, coastal prairie, non-native grassland, and coastal scrub at elevations range 9 to 420 feet (CNPS 2022b). Known associated species include coast live oak, coyote bush, seaside daisy, common spikerush, bristly oxtongue, harlequin lotus, and Chilean rabbitsfoot grass (*Polypogon australis*). Choris popcorn flower is known from Alameda, Monterey, Santa Clara, Santa Cruz, San Francisco, San Mateo counties (CNPS 2022b). Figure 5 depicts the location of the populations of Choris' popcornflower found within the Study Area.

California Rare Plant Rank 1A, 1B, and 2 plants consist of individuals that may qualify for listing by state and federal agencies. As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the California Fish and Game Code. CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2001).

### *5.2.2 Special-status Wildlife*

Of the 25 special-status wildlife species documented in the vicinity of the Study Area, most are excluded from the Study Area based on a lack of habitat features. Features not found within the Study Area that are required to support special-status wildlife species include:

- Vernal pools;
- Perennial aquatic habitat (e.g. streams, rivers or ponds);
- Tidal marsh areas;
- Old growth redwood or fir forest;
- Serpentine soils to support host plants;
- Sandy beaches or alkaline flats;
- Presence of specific host plants; and
- Dead trees, caves, mine shafts, or abandoned buildings.

The absence of such habitat features eliminates components critical to the survival or movement of most special-status species found in the vicinity. For instance, the California black rail *(Laterallus jamaicensis coturniculus)* is an obligate salt marsh species and has no potential to occur within the Study Area as there is no salt marsh present.

One special status species has a moderate potential to occur within the Study Area: San Francisco common yellowthroat. Other species may occur, but it is unlikely. These species are discussed in greater detail below.

<u>San Francisco (saltmarsh) common yellowthroat (*Geothlypis trichas sinuosa*), CDFW Species of Special Concern</u>**.** San Francisco (saltmarsh) common yellowthroat is found in freshwater marshes, coastal swales, riparian thickets, brackish marshes, and saltwater marshes. Their breeding range extends from Tomales Bay in the north, Carquinez Strait to the east, and Santa Cruz County to the south. This species requires thick, continuous cover such as tall grasses, tule patches, or riparian vegetation down to the water surface for foraging; and prefers willows for nesting (Shuford and Gardali 2008). Although this species is typically associated with nesting near open water, the willow riparian habitat within the Study Area is suitable for nesting by this species. There is a moderate potential for this species to nest within the riparian habitat in the Study Area.

Photo 4: Seasonal wetland depression. Potential non-breeding habitat within the Study Area. 4/26/2022.

*Special-status wildlife species unlikely within the Study Area, but potentially in adjacent habitat:*

<u>California red-legged frog (*Rana draytonii*). Federal Threatened, CDFW Species of Special Concern.</u> California red-legged frog is dependent on suitable aquatic, estivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, these frogs disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat is characterized by dense, shrubby, riparian vegetation and deep, still, or slow-moving water. Breeding occurs between late November and late April. This species estivates (a period of inactivity) during the dry months in small mammal burrows, moist leaf litter, incised stream channels, and large cracks in the bottom of dried ponds. There is a seasonal wetland within the Study Area which could provide potential aquatic habitat, however, burrows on site were not near the wetland area nor were they abundant. The proximity to the coast makes the site an unlikely destination for dispersal habitat because the nearest flowing freshwater sources are a mile north and more than a mile south. However, the Study Area is adjacent to properties with suitable habitat for this species: cattle/stock ponds. Traversing highway 1 is a dangerous endeavor that may reduce the likelihood of CRLF dispersing into the Study Area for use of aquatic habitat. However, non-breeding habitat and dispersal habitat could be present in the Study Area. There is a low potential that CRLF will use the Study Area during or after rain events or heavily foggy events. Critical habitat, habitat elements, and nearby occurrences of CRLF to the Study Area are discussed further in Section 5.2.3.

American badger (*Taxidea taxus*), CDFW Species of Special Concern. American badgers are most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils and open, uncultivated ground. This species preys on burrowing rodents. The Study Area is adjacent to the coast and covered by heavy mist in the mornings, reducing the likelihood that the soils would be suitable for habitat. The Study Area is not within the known occurrences for the species nor does it connect habitatbetween known ranges. There was a documented sighting about one mile south of the Study Area; a result of a vehicular collision in 2015. No badgers were observed during the site visits and burrows found within the Study Area were not large enough to indicate the presence of dens . Therefore, it is unlikely that American badgers traverse through or use burrows within the Study Area.

Monarch butterfly (*Danaus plexippus*). CDFW Roost Protected. Winter roost sites for monarch butterflies extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind protected tree groves, with nectar and water sources nearby. They are often on south, southwest, or west facing slopes which may provide more favorable temperature regimes and protection from the wind (Leong et al. 2004). Monarch butterflies typically arrive in mid-October to overwintering sites along the California coast and remain until late February or March (Jepsen et al. 2015). No documented roosts are known within the Study Area. Potentially suitable winter roost sites exist for this species in the Monterey cypress stands within the Study Area; however, roost sites are typically in more sheltered locations further inland from the coastline. Monarch butterflies were not observed within the Study Area. In addition, roosting by monarchs was not observed in the Monterey cypress stand within the Study Area.Also, no foraging habitat is present within the Study Area. But, because the Monterey cypress stands are exposed and monarchs were not observed roosting during the site visits, monarch butterflies are considered unlikely to establish winter roost sites on the Study Area.

San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). Federal Endangered, State Endangered, CDFW Fully Protected Species. Historically, San Francisco garter snake (SFGS) occurred in scattered wetland areas on the San Francisco Peninsula, approximately from the San Francisco County line to the Santa Cruz Mountains. SFGS occurred along the eastern and western bases of the Santa Cruz Mountains as far as Upper Crystal Springs Reservoir, and along the coast south to Año Nuevo Point, San Mateo County, and Waddell Creek, Santa Cruz County. This species prefers a densely vegetated pond near open hillsides where they can sun, feed, and find cover in rodent burrows. However, less ideal habitats can also be successfully occupied; including temporary ponds and other seasonal freshwater habitats. There is no standing water in the Study Area to provide aquatic habitat for breeding or non-breeding activities. However, the Study Area is adjacent to several cattle ponds and a manmade drainage along Highway 1, all of which are within the historical range with known occurrences for SFGS. The nearest occurrences in CNDDB, without having the locations disclosed, are in San Gregorio (2008) and Ano Nuevo (2015), in a freshwater pond on agriculture lands. Therefore, due to the lack of the habitat available, it is unlikely that San Francisco garter snake will establish within the Study Area. Habitat elements for SFGS within the Study Area are discussed further in Section 5.2.3.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), CDFW Species of Special Concern. San Francisco dusky-footed woodrat occurs in the Coast Ranges between the San Francisco Bay and the Salinas River (Matocq 2003). Occupied habitats are variable and include forest, woodland, riparian areas, and chaparral. Woodrats feed on woody plants, but will also consume fungi, grasses, flowers, and acorns. Foraging occurs on the ground and in bushes and trees. This species constructs robust stick houses/structures in areas with moderate cover and a well-developed understory containing woody debris. Breeding takes place from December to September. Individuals are active year-round and are generally nocturnal. The Monterey cypress stand within the Study Area does not contain understory

vegetation and is unlikely to be used by woodrats based upon lack of suitable vegetation and proximity to sea spray from the coast. No woodrat houses were observed in the Monterey cypress stand during the site visits. There is scrub shrub riparian habitat present in the Study Area that could provide some refuge, however, no woodrat houses were observed within the Project Area. Therefore, this species unlikely to establish in the riparian scrub habitats within the Project Area.

Western bumble bee (*Bombus occidentalis)*. USFWS Sensitive Species. The western bumble bee has two subspecies, the subspecies *B. o. occidentalis* is distributed from the southern part of British Columbia to central California. These bees were once widely distributed, but they population numbers are quickly declining due to pathogens and insecticides. This species uses urbanized environments as well as agricultural lands, farmlands, mixed woodlands, montane meadows, and western edges or prairie grassland for habitat. The mixed grassland and nearby agricultural lands adjacent to the Study Area provides suitable foraging habitat for this species. Western bumblebee could opportunistically forage within the Study Area.

### *5.2.3 Rare, Unique, and Endangered Species Habitat*

California Red-legged Frog

California red-legged frog (CRLF) was listed as federally threatened on May 23, 1996 (61 FR 25813-25833). Critical habitat for CRLF was designated on April 13, 2006 (71 FR 19243-19346), and the revised designation was finalized March 17, 2010 (75 FR 12815-12959). A Recovery Plan for the CRLF was published by the USFWS on May 28, 2002. The Study Area falls within USFWS-designated Critical Habitat unit SNM-2 (USFWS 2010).

There are four primary constituent elements (PCEs) that are considered essential for the conservation or survival of CRLF (USFWS 2010):

1. aquatic breeding habitat;
2. non-breeding aquatic habitat;
3. upland habitat; and
4. dispersal habitat.

The Study Area contains dispersal habitat and is 0.3 to 0.8 miles away from suitable aquatic breeding and non-breeding habitat. The PCEs are discussed in greater detail below.

*Aquatic Breeding and Non-breeding Habitat*

Aquatic breeding habitat consists of low-gradient freshwater bodies, including natural and manmade (e.g., stock) ponds, backwaters within streams and creeks, marshes, lagoons, and dune ponds. It does not include deep water habitat, such as lakes and reservoirs. Aquatic breeding habitat must hold water for a minimum of 20 weeks in most years. This is the average amount of time needed for egg, larvae, and tadpole development and metamorphosis so that juveniles can become capable of surviving in upland habitats (USFWS 2010).

Aquatic non-breeding habitat may or may not hold water long enough for this species to hatch and complete its aquatic life cycle, but it provides shelter, foraging, predator avoidance, and aquatic dispersal

for juvenile and adult CRLF. These waterbodies include plunge pools within intermittent creeks, seeps, quiet water refugia during high water flows, and springs of sufficient flow to withstand the summer dry period. CRLF can use large cracks in the bottom of dried ponds as refugia to maintain moisture and avoid heat and solar exposure (Alvarez 2004). Non-breeding aquatic features enable CRLF to survive drought periods and to disperse to other aquatic breeding habitat (USFWS 2010).

There is no potential for aquatic breeding and minimal potential for aquatic non-breeding habitat within the Study Area. According to CNDDB (2022) Arroyo de los Frijoles Creek and Lake Lucerne, 0.8 and 0.9 miles northeast of the Study Area contain the nearest aquatic habitat for breeding and non-breeding

*Upland Habitat*

Upland habitats include areas adjacent to aquatic and riparian habitats, and are comprised of grasslands, woodlands, and/or vegetation that provide shelter, habitat for foraging, and predator avoidance. These upland features provide feeding and sheltering habitat for juvenile and adult frogs (e.g., shelter, shade, moisture, cooler temperatures, a prey base, foraging opportunities, and areas for predator avoidance). Upland habitats usually include structural features such as boulders, rocks and organic debris (e.g. downed trees, logs), as well as small mammal burrows and moist leaf litter (USFWS 2010).

The Study Area contains sparse, low-growing vegetation and no burrows or cracks that could support CRLF. Although the Study Area is within a 1-mile radius of Lake Lucerne and Arroyo de los Frijoles Creek, there is no suitable cover for CRLF to use as refugia or for foraging; therefore, the Study Area does not contain the necessary habitat elements to serve as upland habitat.

*Dispersal Habitat*

Dispersal habitat is accessible upland or riparian areas between occupied locations within 0.7 mi of each other that allow for movement between these sites. Dispersal habitat includes various natural and altered habitats such as agricultural fields, which do not contain barriers to dispersal. Moderate to high density urban or industrial developments, large reservoirs, and heavily traveled roads without bridges or culverts are considered barriers to dispersal (USFWS 2010).

Dispersal distances are typically less than 0.5 miles, with a few individuals moving in excess of one mile (Fellers and Kleeman 2007). Movements typically occur along riparian corridors, but some individuals, especially on rainy nights, move directly from one site to another through normally inhospitable habitats, such as heavily grazed pastures or oak-grassland savannas (Fellers and Kleeman 2007). Bulger et al (2003) documented dispersing frogs in northern Santa Cruz County traveling distances from 0.25 miles to more than 2 miles without apparent regard to topography, vegetation type, or riparian corridors.

The nearest documented occurrence of CRLF was found less than 0.8-mile south of the Study Area near Spring Breach Gulch (CDFW 2022). The lack of vegetative cover poses a high risk for CRLF dispersing through Study Area. Furthermore, CRLF are only likely to move through the Study Area under appropriate weather conditions, such as rainy nights. The Study Area is outside of mapped critical habitat for CRLF, but it has the potential to provide dispersal habitat.

San Francisco Garter Snake

San Francisco Garter Snake (SFGS) requires seasonal or permanent water bodies as a basic habitat requirement. In addition to the basic requirement of a water source, there are four main habitat requirements for SFGS (USFWS 2006b):

- freshwater marsh habitat with a diversity of habitat components including dense vegetation near the pond edge and open water;
- basking sites upland of the water;
- food sources for all life stages of the snake; and
- shallow water near the shoreline, providing access to food sources.

During the summer, snakes may disperse from the typical vegetated aquatic-edge habitat into adjacent areas to feed on amphibians or to hibernate in rodent burrows. Typically, SFGS utilize upland rodent burrows, including Botta's pocket gopher *(Thomomys bottae)* and California meadow vole *(Microtus californicus)*, within several hundred feet of their aquatic habitat (McGinnis 2001, USFWS 2006). Literature suggests that lowland rodent burrows are not utilized for hibernation due to the potential for flooding (McGinnis 2001).

During periods of heavy rain or shortly after, SFGS may make long-distance movements of up to 1.25 miles along drainages within dense riparian cover and are not documented to travel over open terrain (McGinnis 2001).

There are no occurrences of SFGS within five miles of the Study Area; however, occurrence information is confidential and exact locations cannot be disclosed in public documents. Based on this occurrence information and habitat conditions, it is likely that SFGS use creeks in San Gregorio such as Pomponio Creek as a dispersal corridor. However, the Study Area does not contain suitable habitat elements for SFGS, such as aquatic habitat, vegetative cover, or prey items. The burrows found were outside of the Study Area and may not be of sufficient size for SFGS to occupy, were not within a few hundred feet of foraging grounds (vegetated ponds). The nearest potential foraging pond for SFGS is 0.3 miles east of the Study Area. In addition, SFGS is unlikely to use the Study Area for refuge or basking because of the high levels of disturbance from vegetation mowing.

Although the Study Area does not contain any of the main habitat requirements of SFGS, the Study Area is in close proximity to Arroyo de los Frijoles and several potential foraging ponds within 1.25 miles. Therefore, SFGS has the potential to disperse along the Arroyo de los Frijoles riparian corridor but is unlikely to pass through or reside within the Study Area.

## 5.3 Wildlife Corridors and Native Wildlife Nursery Sites

The Study Area is part of a large natural habitat area, but no native wildlife nursery sites are present in the Study Area.

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms “landscape linkage” and “wildlife corridor” are often used interchangeably when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat

blocks, also referred to as core habitat areas (Beier and Loe 1992; Soulé and Terbough 1999). It is useful to think of a "landscape linkage" as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term "wildlife corridor" is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

Photo 5. Site adjacent to Highway 1 is a scenic corridor (but not a wildlife corridor). 4/26/2022.

According to CalTrans and the San Mateo LCP, the Study Area is not within a designated wildlife corridor. The site is located within a much larger tract of lightly developed land within a rural portion of the San Mateo County coast. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the Study Area itself does not provide corridor functions beyond connecting similar land parcels in surrounding areas.

## 6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

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

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a "substantial adverse effect" is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.

# 7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.2 above, this impact assessment evaluates impacts that may occur as a result of potential future site development, and is based on the significance thresholds and methodology discussed above in Section 6.0. Because no specific project has been proposed at this time and a site plan has not been prepared, the following impacts and mitigation evaluation is provided at a conceptual level to guide future planning efforts. Recommended impact avoidance, minimization and mitigation measures in this section are subject to change following preparation of a site plan.

## 7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

> *Does the project have the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

<u>California Red-legged Frog and San Francisco Garter Snake</u>

California red-legged frog and SFGS have low to unlikely potential to inhabit the Study Area because of the absence of preferred habitat components and distance from suitable and/or occupied habitats. However, because of the suitability of nearby habitats, these species, although unlikely, may on occasion disperse through the Study Area under certain conditions. No suitable breeding habitat is present within the Study Area; however, CRLF or SFGS may occasionally disperse through the Study Area. WRA recommends the following impact avoidance and minimization measures (AMMs) be implemented to avoid take of CRLF and SFGS.

**AMM BIO-1: California Red-legged Frog and San Francisco Garter Snake**

- All ground disturbance activities shall be restricted to the dry season (April 15 through October 15) when all habitats have dried to reduce potential for CRLF and SFGS to disperse through the Study Area.
- A qualified biologist shall survey the work site immediately before the onset of vegetation clearing or ground disturbance activities to verify if species are present and all if habitats are dry. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move the species from the work site before work activities begin. Any SFGS shall be allowed to leave the work area on their own, and shall be monitored by the biologist to ensure they do not reenter the work area.
- Prior to the start of groundbreaking activities, all construction personnel will receive training on listed species and their habitats by a qualified biologist. The importance of these species and their habitat will be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the project. An educational brochure containing color photographs of all listed species in the work area will be distributed to all employees working within the Study Area. The original list of employees who attend the training sessions will be

maintained by the contractor and be made available for review by the USFWS and the CDFW upon request.

- The contractor shall designate a person or employee to monitor on-site compliance with all minimization measures. The on-site monitor(s) will be on-site daily for the duration of the Project, including vegetation removal, grading and clean-up activities.
- All vehicles and equipment associated with work-activities will be parked or staged only within designated staging areas at the end of each workday or when not in use to minimize habitat disturbance and water quality degradation.
- Wildlife exclusion fencing would be erected and maintained around the project construction staging areas, to prevent SFGS and CRLF from entering staging areas overnight.
- Installation of fencing will be performed under the supervision of a qualified biologist.
- No work shall occur within 48 hours of a rain event (over 0.25 inch in a 24-hour period). Following a rain event, a qualified biologist shall survey the work site immediately before reinitiating ground disturbance activities to verify if species are present. If CRLF or SFGS are observed, then the steps previously described for the initial pre-construction survey shall be followed.
- Any erosion control materials used shall be made of tightly woven fiber netting or similar material to ensure that the CRLF and SFGS do not get trapped. This limitation will be communicated to the contractor. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material shall not be used at the Study Area because CRLF, SFGS, and other species may become entangled or trapped in it.
- No trash shall be deposited on the site during construction activities. All trash shall be placed in trash receptacles with secure lids stored in vehicles and removed nightly from the Study Area.
- Any fueling and maintenance of equipment shall be conducted off-site and at least 50 feet from any wetland or designated ESHA.
- CRLF and SFGS may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped. Therefore, all construction pipes, culverts, or similar structures that are stored at the site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the on-site monitor and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. It is also recommended these structures, if stored, are kept within off the ground by being placed on pallets within the staging areas either in developed areas or within wildlife exclusion fencing. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move them from the work site before work activities begin. If SFGS is found, it shall be allowed to passively leave the work area on its own, as determined by the on-site monitor, unless in circumstances where the animal is determined to be trapped as discussed below.
- Furthermore, to prevent inadvertent entrapment of CRLF or SFGS during construction, the on-site monitor and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-site biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-site biologist and/or construction foreman/manager.
- If at any time a trapped CRLF or SFGS is discovered by the on-site biologist or anyone else, the animal shall be allowed to passively leave the work area on its own, as determined by the onsite

biologist. If a CRLF or SFGS is trapped, only a USFWS-approved biologist shall move the individual under the direction of USFWS and CDFW. The biologist will also report these findings, as required, to appropriate the agencies.

Special-Status Wildlife Species and Other Nesting Bird Species

One special-status bird species, San Francisco (saltmarsh) common yellowthroat could be impacted by site development. In addition, any other species protected under the Migratory Bird Act is included in this measure. Impacts to these species and their eggs, chicks, and young could occur during the removal of vegetation or other ground-disturbing activities. These activities could result in the direct removal or destruction of active nests, as well as indirect nest abandonment due to audible and vibratory and/or visual disturbances. Potential impacts to nesting San Francisco common yellowthroat and any other nesting bird species through the direct removal/destruction of active nests would be considered significant under CEQA. WRA recommends implementation of the following avoidance and minimization measure (AMM) to avoid impacts to nesting birds.

**AMM BIO-2: Special-Status Wildlife Species and Other Nesting Bird Species**
Pre-construction surveys for avian species are recommended for Project activities that must occur during the nesting bird season (March 1 through July 31). If active nests (containing eggs, chicks or young) are discovered during pre-construction surveys, a qualified biologist would establish a species-specific no-work buffer around the active nest. Project activities may be postponed until the conclusion of the nesting season, or the biologist may perform follow-up checks to determine whether the nest is still active. A nesting bird management plan may be prudent to establish a programmatic approach to nest surveys, buffer size, duration, and may include other abatement or attenuation recommendations that might allow for size reductions in the exclusion buffers, or other such measures satisfactory to the lead agency to reduce the impacts to a less than significant level.

Special-Status Plant Species

Of the 66 special-status plant species known to occur in the vicinity of the Study Area, two were observed in the Study Area on April 26, 2022, during their documented blooming periods: harlequin lotus and Choris' popcorn flower. If complete avoidance to special-status species is infeasible, mitigation may be required by the CCC and the County. WRA recommends implementation of the following measure to avoid, minimize, and mitigate potential impacts to special-status plant species.

**AMM BIO-3: Special-Status Plants**

- Choris popcorn flower: WRA recommends designing future site plans to avoid the Choris' popcorn flower population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, Choris' popcorn flower seeds would be collected from the planned limit of disturbance and planted in other suitable habitat areas. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.
- Harlequin lotus: WRA recommends designing future site plans to avoid the harlequin lotus population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, harlequin lotus seeds would be collected from the planned limit of disturbance and planted in other suitable habitat areas. This mitigation program would be

coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

## 7.2 Sensitive Natural Communities and Land Cover Types

This section addresses the question:

> *b) Does the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*

Sensitive natural communities within the Study Area include sea cliffs, scrub shrub wetland, and seasonal wetland.

Wetlands

The scrub shrub wetland could be classified as a riparian corridor in the LCP due to the dominance of arroyo willows. However, setbacks for riparian corridors are related to stream classification, and the scrub shrub wetland will be regulated under the wetland category which contains more stringent setbacks and regulations. The San Mateo County LCP establishes a wetland setback of 100 feet or 50 feet where no alternative development site or design is possible. Impacts to both the seasonal wetland and scrub shrub wetland will be mitigated through AMM BIO-5 to a level that is ***less than significant***.

Sea Cliffs

Sea cliffs are designated ESHA's by the LCP and CCC. Sea cliffs are located on the western border of the Study Area shown in Figure 4. Where nesting or roosting bird activity exists within the sea cliffs, only education and research activities are permitted. If nesting or roosting does not exist, road and underground utility and intake or outfall lines are permitted where no feasible alternative exists.

> **AMM BIO-4: Sea cliffs**
> Sea cliffs will be avoided as part of the project. The applicant will submit engineered drawings demonstrating that the project avoids CCC/LCP regulated sensitive habitat areas to the County for review and approval. A setback of at least 50 feet will be provided to protect public land, based on local geology and erosion rates Loss of sea cliffs due to Project activities will be reduced to a ***less than significant*** level with the implementation of Mitigation Measure BIO-4.

## 7.3 Aquatic Resources

This section analyzes the Project's potential impacts and recommends mitigation measures for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

> *c) Does the Project have the potential to have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

Seasonal wetlands and scrub-shrub wetlands are subject to the jurisdiction to the Corps and RWQCB under the federal Clean Water Act. Impacts to potential seasonal wetlands within the Study Area would

likely require a Corps Section 404 Permit and RWQCB Section 401 Water Quality Certification. Lastly, because the Study Area is within the Coastal Zone, wetlands as defined through CCC, are only required to meet one of three wetland indicators: hydrophytic vegetation, hydrology, and hydric soils. This is referred to as the one-parameter test, and it is explained in greater detail in the Wetland Delineation Report (WRA 2022).

**AMM BIO-5: State and Federally Protected Wetlands and Waters**
It is recommended that any future development be designed, to the maximum extent feasible, to avoid impacts to state and federally protected wetlands. If impacts to seasonal wetlands regulated by the Corps/RWQCB cannot be avoided, then a CWA Section 404 permit would need to be obtained prior to site development. In addition, the project proponent would be required to submit to the RWQCB an application for Section 401 Water Quality Certification. Lastly, because the Study Area is within the

Impacts to more than 0.5 acres of wetlands would trigger the need for an individual Section 404 permit from the Corps. As part of the permitting process, both the Corps and the RWQCB would require the preparation of a Clean Water Act 404(b)(1) Alternatives Analysis and the project would need to demonstrate that the proposed site plan is the "Least Environmentally Damaging Practicable Alternative" or LEDPA. The term "practicable" in this context means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose. The preparation of an Alternatives Analysis requires coordination between several different subject matter experts including environmental consultants and permitting specialists, civil engineers, developers, economists, and land use attorneys. The Corps and RWQCB would likely want to see one or more project alternatives that would reduce impacts to wetlands. An individual permit, as a federal action, will require National Environmental Protection Act (NEPA) compliance, which is typically fulfilled through the preparation of an Environmental Assessment (EA); however, projects with larger impacts sometimes require the preparation of a more detailed Environmental Impact Statement (EIS). The Corps would not make a decision on NEPA compliance until after receiving comments on the public notice issued by the Corps. Additionally, the RWQCB and CDFW would not issue permits for the project until the project has complied with the California Environmental Quality Act (CEQA).

Impacts to jurisdictional wetland features typically require compensatory mitigation at a minimum 1:1 ratio on a functions and values basis ("no net loss"); however, the final wetland mitigation requirements are determined by the regulatory agencies during the permitting process. Required mitigation ratios can be met by creating and enhancing wetlands on-site or off-site (may require a higher than 1:1 replacement to impacts ratio) or purchasing wetland credits from a wetland mitigation bank. Purchase of mitigation credits would be subject to approval and verification by Corps and RWQCB. The project proponent would be required to prepare a mitigation plan to be submitted with the agency permit applications that provides detailed information about the bank, and how this approach will result in no net loss of wetlands. The plan would be prepared pursuant to, and through consultation with, the Corps and RWQCB. As conditions of permit approval, impact minimization measures may also be required and could include implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate.

These permits will be acquired, and all conditions will be agreed to prior to project construction. The project proponent will be responsible for complying with all conditions outlined in the applicable Corps and RWQCB permits.

Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) should be developed for the Project and all measures included in the SWPPP should be implemented during all phases of construction, as appropriate. The SWPPP should include measures for spill prevention and cleanup, as well as erosion control measures to be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter waters.

Implementation of this mitigation measure would reduce impacts to state and federal protected wetlands and waters to levels considered ***less than significant***.

## 7.4 Wildlife Corridors and Native Wildlife Nursery Sites

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

> *d) Does the Project have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*

As noted in Section 5.3, the Study Area does not provide a native wildlife nursery, lacking the necessary components to maintain species of special concern in their breeding and non-breeding seasons. There is little connectivity within the Study Area provided between areas of suitable habitat. If standing water is sufficient to last longer than a couple of weeks, a stopover for migratory birds or other terrestrial wildlife can occur, however, it is unlikely. For aquatic species, all portions of the Study Area are within a greater context of rural grassland and light development, with only drainage ditches providing connectivity between the Study Area and upstream freshwater habitats. No impact will occur to migratory corridors for terrestrial and aquatic species and impacts to wildlife corridors as a result of the Project is considered ***less than significant***.

## 7.5 Local Policies and Ordinances

This section analyzes the potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

> *e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*

Local plans and policies related to biological resources examined in this analysis are:

- San Mateo County (County) Midcoast Local Coastal Program (LCP): Sensitive Habitats Component, including Policies 7.1-7.19
- San Mateo County General Plan

The County's LCP is a subset of the County General Plan, and the two documents are internally consistent. The following sections describe policies by which a potential future development in the Study Area would be evaluated for consistency with the LCP. The LCP is more specific than the General Plan with regard to issues raised by a project, and therefore also addresses a project's consistency with the County's General Plan.

Project Components- Wells

Discussed in Section 2.2 Local Plans and Policies, The San Mateo County LCP and CCC requires a Coastal Development Permit before any new construction or drilling of a well can occur.

Wetlands

As discussed in the Assessments Results section 5.0, seasonal wetlands, scrub-shrub wetlands, and sea cliffs are ESHAs subject to the jurisdiction to the CCC and County LCP. Impacts to these sensitive habitats within the Study Area would require a coastal development permit (CDP) through the CCC and County. Further, work within buffers of potential seasonal wetlands may also require a CDP through the CCC and County. The CCC and County LCP generally prohibit land use or development that would have significant adverse impact on ESHAs. The County LCP defines specific criteria for allowable development areas in ESHAs, requires ESHA impacts to be minimized to the maximum extent feasible through siting and design, requires that mitigation measures implemented where impacts to ESHAs may occur. A 100-foot minimum buffer is typically required surrounding wetlands by the County LCP code. This setback may be reduced only where (1) no alternative development site or site design is possible and (2) adequacy of the alternative setback to protect wetland resources is conclusively demonstrated by a professional biologist to the satisfaction of the County. It is recommended that potential future development avoid impacting these sensitive habitats. However, if avoidance of these features is not feasible, standard impact minimization and mitigation measures are provided in section 7.2 and mitigated through AMM BIO-5.

Sea Cliffs

The Study Area is bound by sea cliffs and coastal bluffs along the western boundary, which are subject to LCP policies pertaining to sensitive habitats. Specifically, policy 7.31 outlines the following development standards pertaining to cliffs and bluffs:

a) Restrict pedestrian traffic in bluff and cliff areas and on faces to a limited number of well-defined trails which avoid seabird nesting and roosting sites.
b) Post signs informing recreational users not to disturb natural vegetation or nesting and roosting sites.

The Visual Resources Component of the LCP contains policies specific to the protection of these natural features.

a) Prohibit development on bluff faces except public access stairways where deemed necessary and erosion control structures which are in conformity with coastal policies on access and erosion
b) Set back bluff top development and landscaping from the bluff edge (i.e., decks, patios, structures, trees, shrubs, etc.) sufficiently far to ensure it is not visually obtrusive when viewed from the shoreline except in highly developed areas where adjoining development is nearer the bluff edge, or in special cases where a public facility is required to serve the public safety, health, and welfare.

It is recommended that potential future development avoid impacting these sensitive habitats. However, if avoidance of these features is not feasible, standard impact minimization and mitigation measures are provided in section 7.2 and mitigated through AMM BIO-4.

Special-Status Species

The confirmed or potential presence of special-status species is discussed in section 5.0. Two special-status plant species were observed in the Study Area and two special-status wildlife species have the potential to be present. Standard protection measures to avoid impacting special-status wildlife species are provided in section 7.1 and mitigated through AMM BIO-1 and BIO-2. The LCP's development standards discourage development within 50 feet of any special-status plant population. However, LCP Policy 7.42 (Development Standards) states that when no feasible alternative exists, the County will allow development if: (1) the site or a significant portion thereof is returned to a natural state to allow for the reestablishment of the plant, or (2) a new site is made available for the plant to inhabit. Standard protection measures to avoid impacting special-status plant species are also provided in section 7.1 and mitigated through AMM BIO-3.

Trees

The Study Area contains mature Monterey Cypress trees that may be protected by the County's Significant Tree Ordinance and Heritage Tree Ordinance. The Visual Resources Component of the LCP contains Policy 8.9 specific to tree protection:

a) Locate and design new development to minimize tree removal.
b) Employ the regulations of the Significant Tree Ordinance to protect significant trees (38 inches or more in circumference) which are located in urban areas zoned Design Review (DR).
c) Employ the regulations of the Heritage Tree Ordinance to protect unique trees which meet specific size and locational requirements.
d) Protect trees specifically selected for their visual prominence and their important scenic or scientific qualities.
e) Prohibit the removal of trees in scenic corridors except by selective harvesting which protects the existing visual resource from harmful impacts or by other cutting methods necessary for development approved in compliance with LCP policies and for opening up the display of important views from public places, i.e., vista points, roadways, trails, etc.
f) Prohibit the removal of living trees in the Coastal Zone with a trunk circumference of more than 55 inches measured 4 1/2 feet above the average surface of the ground, except as may be permitted for development under the regulations of the LCP, or permitted under the Timber Harvesting Ordinance, or for reason of danger to life or property.
g) Allow the removal of trees which are a threat to public health, safety, and welfare

## 7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

> *f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

The Study Area is not located within the plan area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and therefore would not have the potential to conflict with any such plans.

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# APPENDIX A – FIGURES


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**Sources**: ESRI Topo, WRA | Prepared By: njander, 5/31/2022

## Figure 1. Study Area Regional Location Map

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 0.25 0.5 Miles

N

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**Sources**: San Mateo County Imagery 2018, | Prepared By: njander, 5/31/2022

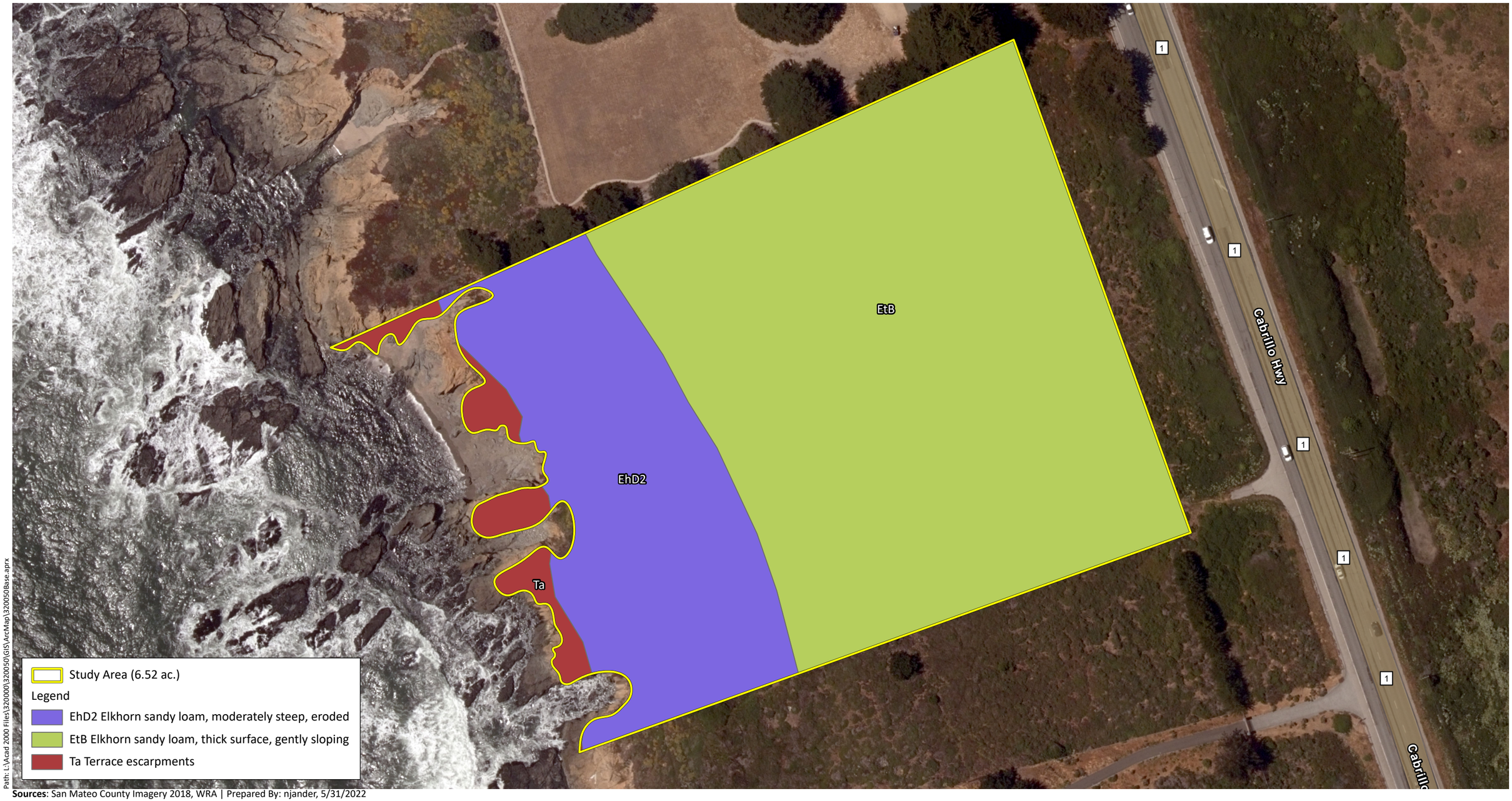
## Figure 2. Aerial Photograph of Study Area

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50
Feet

N

wra
ENVIRONMENTAL CONSULTANTS




**Sources**: San Mateo County Imagery 2018, WRA | Prepared By: njander, 5/31/2022

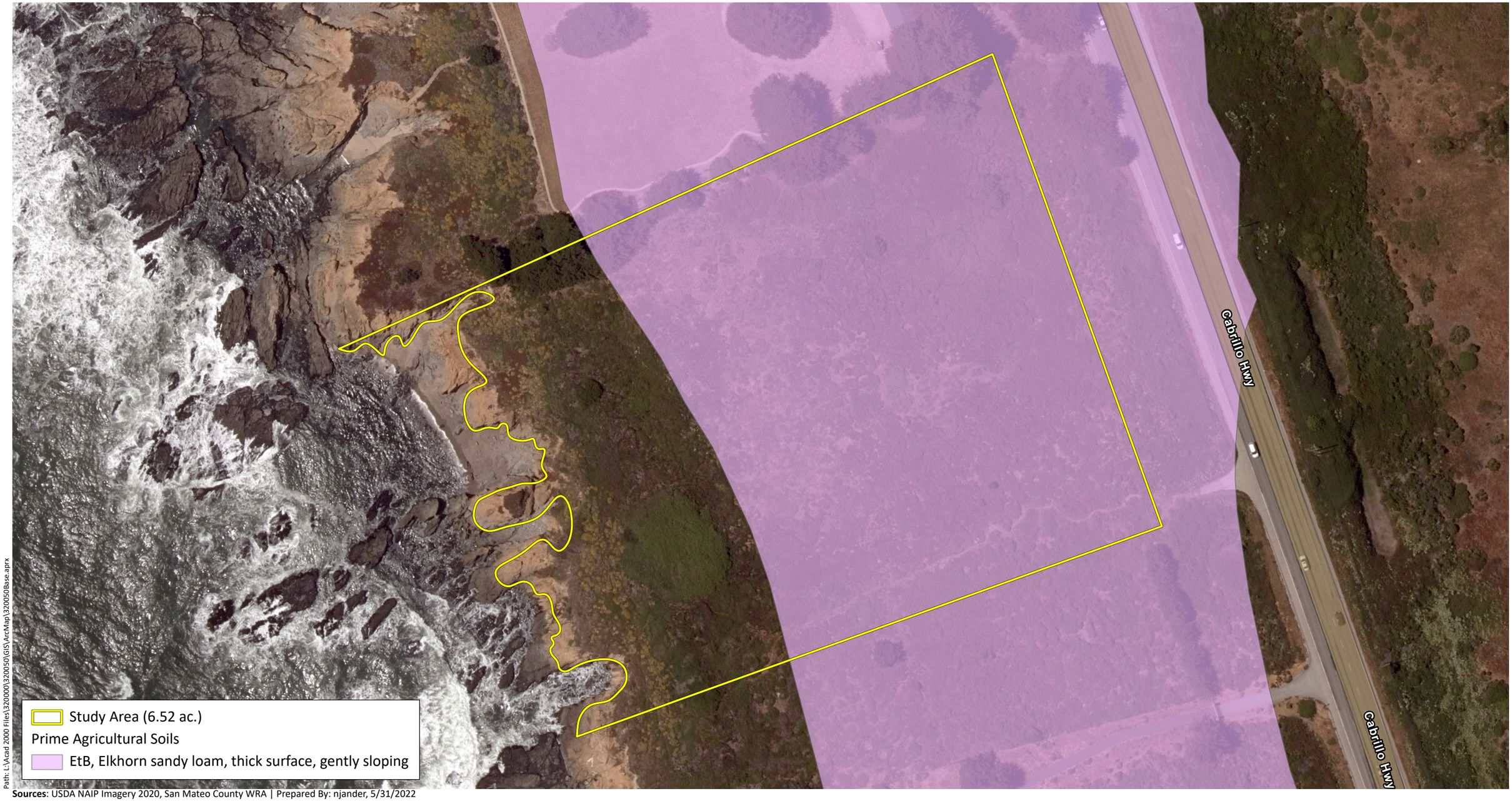
## Figure 3. Map of Soils within the Study Area

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50 Feet

N

wra ENVIRONMENTAL CONSULTANTS

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**Sources**: USDA NAIP Imagery 2020, San Mateo County WRA | Prepared By: njander, 5/31/2022

## Figure 3a. San Mateo County Prime Soils

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50
Feet

N

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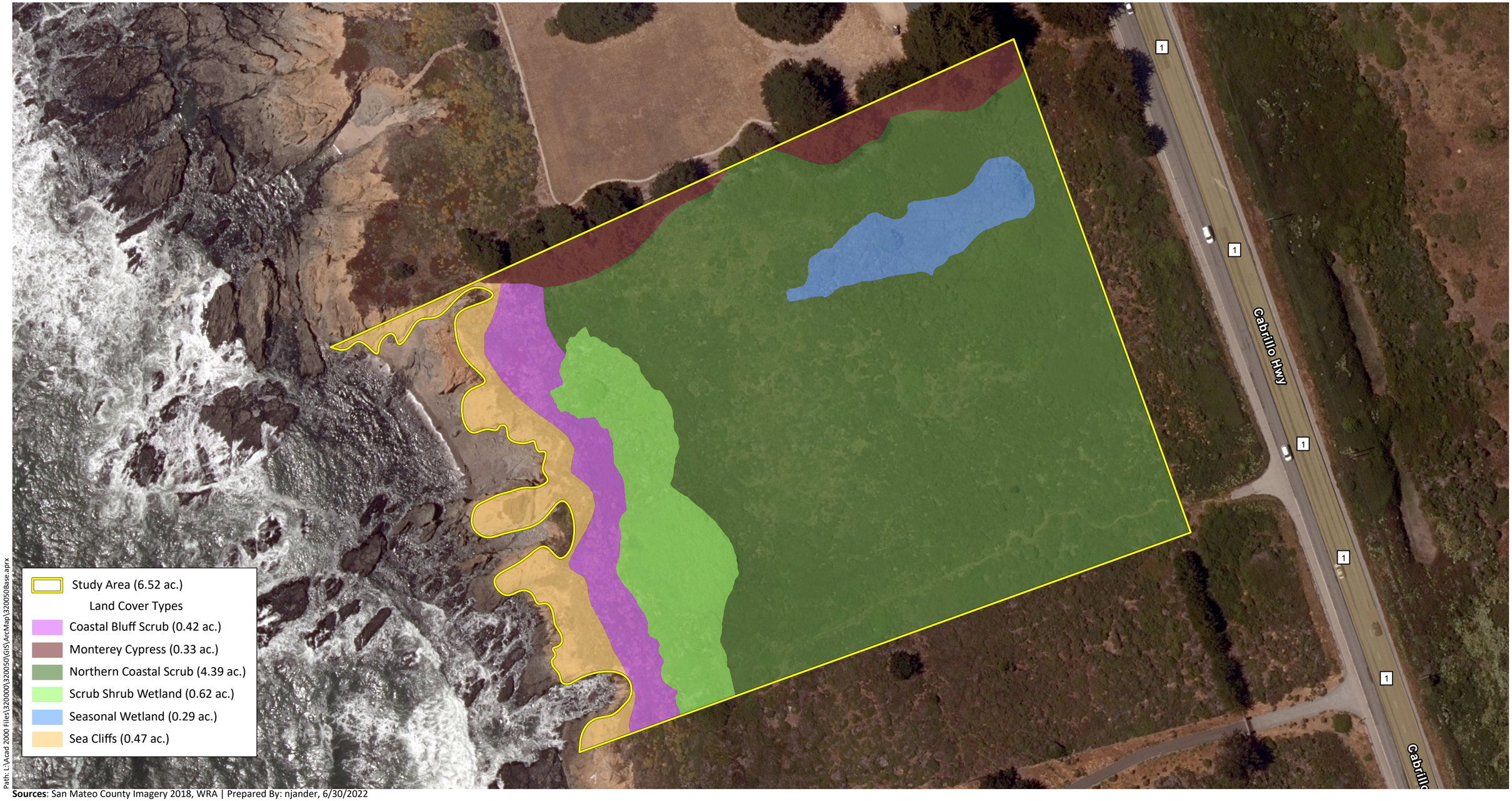
ENVIRONMENTAL CONSULTANTS

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**Sources**: San Mateo County Imagery 2018, WRA | Prepared By: njander, 6/30/2022

## Figure 4. Land Cover Types within the Study Area

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

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**Figure 5. Observed Special-status Plant Species in the Study Area**

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50 Feet

N

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| ID | Type | Acres | Linear Feet |
|---|---|---|---|
| SSW01 | Scrub Shrub Wetland | 0.62 | N/A |
| SW01 | Seasonal Wetland | 0.29 | N/A |

-122.406116, 37.210698

-122.404656, 37.210617

P05

P04

P03

SW01

SSW01

P08

P02

P01

P06

P07

Cabrillo Hwy

1

Study Area (6.52 ac.)

Sample Point

Control Point

Contour 1ft

100 Foot Setback

Potential Jurisdictional Aquatic Features

Corps/RWQCB/CCC Jurisdictional Scrub Shrub Wetland (0.62 ac.)

Corps/RWQCB/CCC Jurisdictional Seasonal Wetland (0.29 ac.)

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**Sources**: San Mateo County Imagery 2018, 2016 USGS Lidar: West Coast El Nino WRA | Prepared By: njander, 6/30/2022

## Figure 6. Potential Jurisdictional Aquatic Features Located within the Study Area

0 25 50 Feet

N

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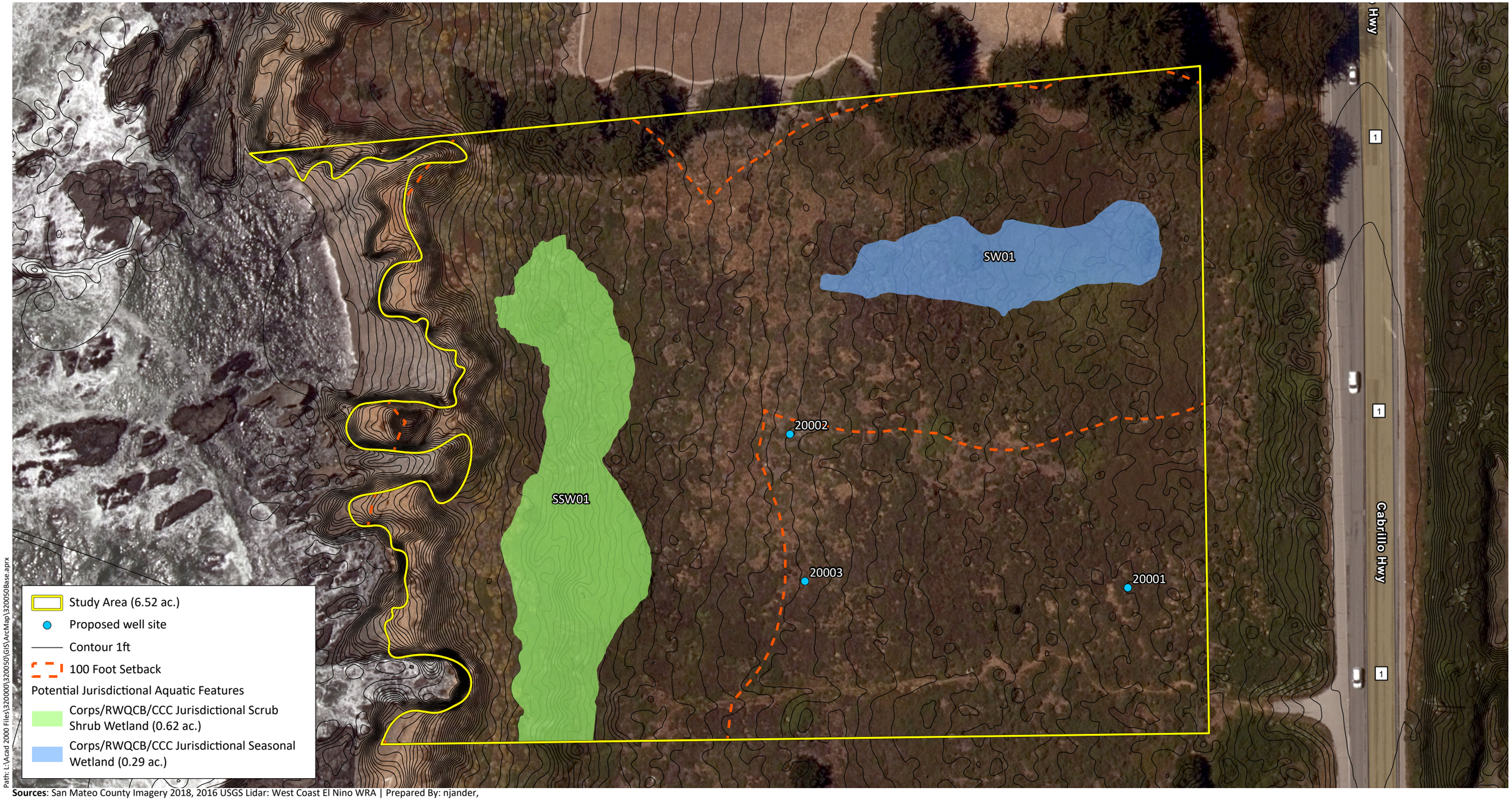
Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)




**Sources**: San Mateo County Imagery 2018, 2016 USGS Lidar: West Coast El Nino WRA | Prepared By: njander, 7/6/2022

## Figure 7. Map of Proposed Well Sites

Younger Property Assessment
(APNs 087-250-140, 087-250-150, and 087-250-160)

0 25 50 Feet

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# APPENDIX B – SPECIES OBSERVED IN AND AROUND THE STUDY AREA

**Appendix B.** Plant Species Observed in the Study Area, April 26, 2022.

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Achillea millefolium* | Yarrow | native | perennial herb | - | - | FACU |
| *Acmispon wrangelianus* | Chilean trefoil | native | annual herb | - | - | - |
| *Aira caryophyllea* | Silvery hairgrass | non-native | annual grass | - | - | FACU |
| *Angelica hendersonii* | Henderson's angelica | native | perennial herb | - | - | - |
| *Armeria maritima* ssp. *californica* | Sea thrift | native | perennial herb | - | - | FACU |
| *Artemisia pycnocephala* | Beach sagewort | native | perennial herb | - | - | - |
| *Avena barbata* | Slim oat | non-native (invasive) | annual, perennial grass | - | Moderate | - |
| *Baccharis pilularis* ssp. *consanguinea* | Coyote brush | native | shrub | - | - | - |
| *Baccharis pilularis* ssp. *pilularis* | Coyote brush | native | shrub | - | - | - |
| *Brassica rapa* | Common mustard | non-native (invasive) | annual herb | - | Limited | FACU |
| *Briza maxima* | Rattlesnake grass | non-native (invasive) | annual grass | - | Limited | - |
| *Briza minor* | Little rattlesnake grass | non-native | annual grass | - | - | FAC |
| *Bromus diandrus* | Ripgut brome | non-native (invasive) | annual grass | - | Moderate | - |
| *Bromus hordeaceus* | Soft chess | non-native (invasive) | annual grass | - | Limited | FACU |
| *Bromus rubens* | Red brome | non-native (invasive) | annual grass | - | High | UPL |
| *Cardamine hirsuta* | Hairy bitter cress | non-native | annual herb | - | - | FACU |
| *Carduus pycnocephalus* ssp. *pycnocephalus* | Italian thistle | non-native (invasive) | annual herb | - | Moderate | - |
| *Carex barbarae* | Valley sedge | native | perennial grasslike herb | - | - | FAC |
| *Carex densa* | Dense sedge | native | perennial grasslike herb | - | - | OBL |
| *Carpobrotus chilensis* | Sea fig | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Carpobrotus edulis* | Iceplant | non-native (invasive) | perennial herb | - | High | - |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Cerastium glomeratum* | Large mouse ears | non-native | annual herb | - | - | UPL |
| *Chasmanthe floribunda* | Chasmanthe | non-native | perennial herb | - | Watch | - |
| *Chlorogalum pomeridianum* | Amole | native | perennial herb | - | - | - |
| *Cirsium occidentale* | Western thistle | native | perennial herb | - | - | - |
| *Cirsium vulgare* | Bullthistle | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Clinopodium douglasii* | Yerba buena | native | perennial herb | - | - | FACU |
| *Cotula coronopifolia* | Brass buttons | non-native (invasive) | perennial herb | - | Limited | OBL |
| *Daucus pusillus* | Wild carrot | native | annual herb | - | - | - |
| *Distichlis spicata* | Salt grass | native | perennial grass | - | - | FAC |
| *Dudleya farinosa* | Sea lettuce | native | perennial herb | - | - | - |
| *Elymus glaucus* | Blue wildrye | native | perennial grass | - | - | FACU |
| *Erigeron glaucus* | Seaside daisy | native | perennial herb | - | - | FACU |
| *Eriogonum latifolium* | Coast buckwheat | native | perennial herb | - | - | - |
| *Eriophyllum staechadifolium* | Lizard tail | native | perennial herb | - | - | - |
| *Eschscholzia californica* | California poppy | native | annual, perennial herb | - | - | - |
| *Festuca bromoides* | Brome fescue | non-native | annual grass | - | - | FACU |
| *Festuca myuros* | Rattail sixweeks grass | non-native (invasive) | annual grass | - | Moderate | FACU |
| *Festuca perennis* | Italian rye grass | non-native (invasive) | annual, perennial grass | - | Moderate | FAC |
| *Frangula californica* | California coffeeberry | native | shrub | - | - | - |
| *Galium aparine* | Cleavers | native | annual herb | - | - | FACU |
| *Gamochaeta ustulata* | Featherweed | native | annual herb | - | - | - |
| *Geranium dissectum* | Wild geranium | non-native (invasive) | annual herb | - | Limited | - |
| *Grindelia stricta* | Gumweed | native | perennial herb | - | - | FACW |
| *Hesperocyparis macrocarpa* | Monterey cypress | native | tree | Rank 1B.2 | - | - |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Holcus lanatus* | Common velvetgrass | non-native (invasive) | perennial grass | - | Moderate | FAC |
| *Hosackia gracilis* | Harlequin lotus | native | perennial herb | Rank 4.2 | - | FACW |
| *Hypochaeris radicata* | Hairy cats ear | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Iris douglasiana* | Douglas iris | native | perennial herb | - | - | - |
| *Isolepis cernua* | Low bulrush | native | annual grasslike herb | - | - | OBL |
| *Juncus effusus* | Common bog rush | native | perennial grasslike herb | - | - | FACW |
| *Juncus hesperius* | Coast rush | native | perennial grasslike herb | - | - | FACW |
| *Juncus patens* | Common rush | native | perennial grasslike herb | - | - | FACW |
| *Juncus phaeocephalus* | Brown headed rush | native | perennial grasslike herb | - | - | FACW |
| *Koeleria macrantha* | June grass | native | perennial grass | - | - | - |
| *Leucanthemum vulgare* | Oxe eye daisy | non-native (invasive) | perennial herb | - | Moderate | UPL |
| *Linum bienne* | Narrow-leaved flax | non-native | annual herb | - | - | - |
| *Lotus corniculatus* | Bird's foot trefoil | non-native | perennial herb | - | - | FAC |
| *Lupinus arboreus* | Coastal bush lupine | native | shrub | - | - | - |
| *Lupinus littoralis* var. *variicolor* | Varied lupine | native | shrub | - | - | - |
| *Lysimachia arvensis* | Scarlet pimpernel | non-native | annual herb | - | - | FAC |
| *Lythrum hyssopifolia* | Hyssop loosestrife | non-native (invasive) | annual, perennial herb | - | Limited | OBL |
| *Medicago polymorpha* | Bur clover | non-native (invasive) | annual herb | - | Limited | FACU |
| *Morella californica* | California wax myrtle | native | shrub | - | - | FACW |
| *Myosotis discolor* | Forget me not | non-native | annual herb | - | - | FAC |
| *Oxalis pes-caprae* | Bermuda buttercup | non-native (invasive) | perennial herb | - | Moderate | - |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Parapholis incurva* | Sickle grass | non-native | annual grass | - | - | FACU |
| *Parentucellia viscosa* | Yellow glandweed | non-native (invasive) | annual herb | - | Limited | FAC |
| *Plagiobothrys chorisianus* var. *chorisianus* | Choris's popcorn flower | native | annual herb | Rank 1B.2 | - | OBL |
| *Plantago coronopus* | Cut leaf plantain | non-native | annual herb | - | - | FAC |
| *Plantago lanceolata* | Ribwort | non-native (invasive) | perennial herb | - | Limited | FAC |
| *Plantago maritima* | Maritime plantain | native | perennial herb | - | - | FACW |
| *Polycarpon tetraphyllum* var. *tetraphyllum* | Four leaved allseed | non-native | annual herb | - | - | - |
| *Polygonum paronychia* | Dune knotweed | native | perennial herb | - | - | - |
| *Polypodium* sp. | Polypody fern | Native | perennial herb | - | - | - |
| *Polystichum munitum* | Western sword fern | native | fern | - | - | FACU |
| *Potentilla anserina* | Silver weed cinquefoil | native | perennial herb | - | - | OBL |
| *Pseudognaphalium stramineum* | Cottonbatting plant | native | perennial herb | - | - | FAC |
| *Rubus ursinus* | California blackberry | native | vine, shrub | - | - | FAC |
| *Rumex acetosella* | Sheep sorrel | non-native (invasive) | perennial herb | - | Moderate | FACU |
| *Rumex crispus* | Curly dock | non-native (invasive) | perennial herb | - | Limited | FAC |
| *Rumex salicifolius* | Willow leaved dock | native | perennial herb | - | - | FACW |
| *Salix lasiolepis* | Arroyo willow | native | tree, shrub | - | - | FACW |
| *Sanicula crassicaulis* | Pacific sanicle | native | perennial herb | - | - | - |
| *Scrophularia californica* | California bee plant | native | perennial herb | - | - | FAC |
| *Senecio vulgaris* | Common groundsel | non-native | annual herb | - | - | FACU |
| *Sidalcea malviflora* | Wild hollyhock | native | perennial herb | - | - | FACW |
| *Silene gallica* | Common catchfly | non-native | annual herb | - | - | - |
| *Sisyrinchium californicum* | California golden eyed grass | native | perennial herb | - | - | FACW |
| *Sonchus oleraceus* | Common sow thistle | non-native | annual herb | - | - | UPL |

| Scientific name | Common name | Life form | Origin | Rare Status[1] | Invasive Status[2] | Wetland indicator (AW 2020)[3] |
|---|---|---|---|---|---|---|
| *Spergularia marina* | Salt sand spurry | native | annual herb | - | - | OBL |
| *Stachys bullata* | Southern hedge nettle | native | perennial herb | - | - | - |
| *Symphyotrichum chilense* | Pacific aster | native | perennial herb | - | - | FAC |
| *Toxicodendron diversilobum* | Poison oak | native | vine, shrub | - | - | FACU |
| *Vicia sativa* | Spring vetch | non-native | annual herb, vine | - | - | FACU |
| *Vicia tetrasperma* | Four seeded vetch | non-native | annual herb | - | - | - |
| *Viola adunca* ssp. *adunca* | Western dog violet | native | perennial herb | - | - | FAC |
| *Wyethia angustifolia* | Narrow leaved mule ears | native | perennial herb | - | - | FACU |
| *Zantedeschia aethiopica* | Callalily | non-native (invasive) | perennial herb | - | Limited | OBL |

All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2022]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2022] or Inventory of Rare and Endangered Plants (CNPS 2022). Sp.: "species", intended to indicate that the observer was confident in the identity of the genus but uncertain which species.

[1] **California Native Plant Society. 2022. Inventory of Rare and Endangered Plants (online edition, v9-01 1.5). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: April 2022.**

| | |
|---|---|
| FE: | Federal Endangered |
| FT: | Federal Threatened |
| SE: | State Endangered |
| ST: | State Threatened |
| SR: | State Rare |
| Rank 1A: | Plants presumed extinct in California |
| Rank 1B: | Plants rare, threatened, or endangered in California and elsewhere |
| Rank 2: | Plants rare, threatened, or endangered in California, but more common elsewhere |
| Rank 3: | Plants about which we need more information – a review list |
| Rank 4: | Plants of limited distribution – a watch list |

[2] **California Invasive Plant Council. 2022. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: http://www.cal-ipc.org/paf/; most recently accessed: April 2022.**

| | |
|---|---|
| High: | Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically. |
| Moderate: | Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited-moderate distribution ecologically |
| Limited: | Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically |
| Assessed: | Assessed by Cal-IPC and determined to not be an existing current threat |

[3] **U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. Online at: http://wetland-plants.usace.army.mil/**

| | |
|---|---|
| OBL: | Almost always found in wetlands |
| FACW: | Usually found in wetlands |
| FAC: | Equally found in wetlands and uplands |
| FACU: | Usually not found in wetlands |
| UPL: | Almost never found in wetlands |
| NL: | Not listed, assumed almost never found in wetlands |
| NI: | No information; not factored during wetland delineation |

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# APPENDIX C – SPECIAL-STATUS SPECIES POTENTIAL TABLE

**Appendix C.** Potential for Rare Plant Species to Occur in the Study Area. List compiled from database searches for the Pigeon Point, San Gregorio, Franklin Point, La Honda, and Año Nuevo U.S. Geological Survey 7.5-minute Quadrangles in the California Natural Diversity Database (CDFW 2022) and the California Native Plant Society Inventory of Rare and Endangered Plants of California (CNPS 2022b).

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| **Plants** | | | | |
| Blasdale's bent grass<br>*Agrostis blasdalei* | Rank 1B.2 | Coastal bluff scrub, coastal dunes, coastal prairie. Elevation ranges from 0 to 490 feet (0 to 150 meters). Blooms May-Jul. | **High Potential.** The Study Area contains potentially suitable coastal bluff scrub habitat. A small number of individuals of an unknown species of grass that vegetatively resembles this species was observed in coastal bluff scrub in the Study Area; however, the identity of this species could not be confirmed because the plants were not flowering at the time of the April 26, 2022, site visit. | Although the identity of the plants in question was not confirmed, the plants occur adjacent to sea cliff habitat, within a 50-foot setback where no development will occur. As such, no further actions are recommended for this species. |
| bent-flowered fiddleneck<br>*Amsinckia lunaris* | Rank 1B.2 | Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevation ranges from 10 to 1640 feet (3 to 500 meters). Blooms Mar-Jun. | **Unlikely.** Cismontane woodland and grassland habitats are absent from the Study Area. Coastal bluff scrub is present, but the nearest occurrence is 12 miles south of the Study Area. Additionally, this species was not observed during the April 26, 2022, survey, which occurred during the blooming period of this species. As such, this species is assumed to absent from the Study Area | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Anderson's manzanita<br>*Arctostaphylos andersonii* | Rank 1B.2 | Broadleaved upland forest, chaparral, north coast coniferous forest. Elevation ranges from 195 to 2495 feet (60 to 760 meters). Blooms Nov-May. | **No Potential.** Broadleaved upland forest, chaparral, and North Coast coniferous forest are absent from the Study Area. | No further actions are recommended for this species. |
| Schrieber's manzanita<br>*Arctostaphylos glutinosa* | Rank 1B.2 | Closed-cone coniferous forest and chaparral habitats on diatomaceous shale substrate. Elevation ranges from 560 to 2245 feet (170 to 685 meters). Blooms Mar-Apr (Nov). | **No Potential.** Diatomaceous shale substrate is absent from the Study Area | No further actions are recommended for this species. |
| Kings Mountain manzanita<br>*Arctostaphylos regismontana* | Rank 1B.2 | Broadleaved upland forest, chaparral, north coast coniferous forest. Elevation ranges from 1000 to 2395 feet (305 to 730 meters). Blooms Dec-Apr. | **No Potential.** This species occurs on granitic or sandstone outcrops, which are absent from the Study Area. | No further actions are recommended for this species. |
| ocean bluff milk-vetch<br>*Astragalus nuttallii var. nuttallii* | Rank 4.2 | Coastal bluff scrub, coastal dunes. Elevation ranges from 10 to 395 feet (3 to 120 meters). Blooms Jan-Nov. | **Moderate Potential.** Potentially suitable coastal bluff scrub habitat is present in the Study Area. However, this perennial species is conspicuous year-round, and none were observed during the April 26, 2022, survey. As such, this species is assumed to be absent from the Study Area. | **Not Observed.** No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| coastal marsh milk-vetch<br>*Astragalus pycnostachyus var. pycnostachyus* | Rank 1B.2 | Coastal dunes, coastal scrub, marshes and swamps. Elevation ranges from 0 to 100 feet (0 to 30 meters). Blooms (Apr)Jun-Oct. | **Moderate Potential.** Potentially suitable mesic coastal scrub habitat is present in the Study Area. However, a reference site was visited on April 26, 2022, prior to the site visit, and this species was observed. It was not blooming, but it is distinct and readily identifiable vegetatively. This species was not observed in the Study Area and is assumed to absent from the Study Area. | **Not Observed.** No further actions are recommended for this species. |
| johnny-nip<br>*Castilleja ambigua var. ambigua* | Rank 4.2 | Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug. | **High Potential.** Potentially suitable coastal bluff scrub habitat is present, and the nearest occurrence is approximately 1.5 miles north-northwest of the Study Area. However, this perennial species was not observed during the April 26, 2022, survey, and is assumed to be absent from the Study Area. | **Not Observed.** No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Monterey Coast paintbrush<br>*Castilleja latifolia* | Rank 4.3 | Cismontane woodland, closed-cone coniferous forest, coastal dunes, coastal scrub. Elevation ranges from 0 to 605 feet (0 to 185 meters). Blooms Feb-Sep. | **No Potential.** This species is known from loose, sandy substrate, which is absent from the Study Area | No further actions are recommended for this species. |
| Franciscan thistle<br>*Cirsium andrewsii* | Rank 1B.2 | Broadleaved upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Elevation ranges from 0 to 490 feet (0 to 150 meters). Blooms Mar-Jul. | **Unlikely.** The Study Area contains potentially suitable mesic areas in coastal scrub and coastal bluff scrub, but the closest occurrence is 7 miles south of the Study Area, and it is historical and has not been verified. The nearest verifiable occurrence is in San Francisco. | No further actions are recommended for this species. |
| San Francisco collinsia<br>*Collinsia multicolor* | Rank 1B.2 | Closed-cone coniferous forest, coastal scrub. Elevation ranges from 100 to 900 feet (30 to 275 meters). Blooms (Feb)Mar-May. | **Unlikely.** Closed-cone coniferous forest habitat is absent. Coastal scrub habitat is disturbed by periodic mowing, which reduces habitat quality. The nearest occurrence of this species is approximately 10 miles southeast of the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| mountain lady's-slipper<br>*Cypripedium montanum* | Rank 4.2 | Broadleaved upland forest, cismontane woodland, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 605 to 7300 feet (185 to 2225 meters). Blooms Mar-Aug. | **No Potential.** Broadleaved upland forest, cismontane woodland, and coniferous forest habitats are absent from the Study Area. This species is known from dry, undisturbed slopes, and such habitat is absent from the Study Area. | No further actions are recommended for this species. |
| western leatherwood<br>*Dirca occidentalis* | Rank 1B.2 | Broadleaved upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1395 feet (25 to 425 meters). Blooms Jan-Mar (Apr). | **No Potential.** Broadleaved upland forest, chaparral, cismontane woodland, coniferous forest, riparian forest, and riparian woodland habitats. The nearest occurrence of this species is 10 miles northeast of the Study Area. | No further actions are recommended for this species. |
| California bottle-brush grass<br>*Elymus californicus* | Rank 4.3 | Broadleaved upland forest, cismontane woodland, north coast coniferous forest, riparian woodland. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms May-Aug (Nov). | **Unlikely.** The Study Area is characterized primarily by open, sunny habitats, which are unsuitable for this species. The scrub-shrub wetland is too wet and densely vegetated to support this species. The Monterey cypresses are planted and not true forested habitat and are therefore unlikely to support this species. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| San Mateo woolly sunflower *Eriophyllum latilobum* | FE, SE, Rank 1B.1 | Cismontane woodland, coastal scrub, lower montane coniferous forest. Elevation ranges from 150 to 1085 feet (45 to 330 meters). Blooms May-Jun. | **Unlikely.** Woodland and coniferous forest habitats are absent from the Study Area. Most of the coastal scrub is disturbed by periodic mowing, which reduces habitat quality. The nearest reported occurrence is approximately 7 miles northeast of the Study Area, on the other side of the Santa Cruz Mountains ridgeline, and the identity of this occurrence is in question. | No further actions are recommended for this species. |
| Jepson's coyote-thistle *Eryngium jepsonii* | Rank 1B.2 | Valley and foothill grassland, vernal pools. Elevation ranges from 10 to 985 feet (3 to 300 meters). Blooms Apr-Aug. | **No Potential.** Clay soils and vernal pool habitats are absent from the Study Area. | No further actions are recommended for this species. |
| sand-loving wallflower *Erysimum ammophilum* | Rank 1B.2 | Chaparral, coastal dunes, coastal scrub. Elevation ranges from 0 to 195 feet (0 to 60 meters). Blooms Feb-Jun(Jul-Aug). | **No Potential.** This species is known from dune habitat, which is absent from the Study Area | No further actions are recommended for this species. |
| San Francisco wallflower *Erysimum franciscanum* | Rank 4.2 | Chaparral, coastal dunes, coastal scrub, valley, and foothill grassland. Elevation ranges from 0 to 1805 feet (0 to 550 meters). Blooms Mar-Jun. | **Unlikely.** This species is known from sandy, serpentine, rocky, and/or granitic substrates, all of which are absent from the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| minute pocket moss<br>*Fissidens pauperculus* | Rank 1B.2 | North coast coniferous forest. Elevation ranges from 35 to 3360 feet (10 to 1024 meters). | **No Potential.** North Coast coniferous forest is absent from the Study Area. | No further actions are recommended for this species. |
| stinkbells<br>*Fritillaria agrestis* | Rank 4.2 | Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 35 to 5100 feet (10 to 1555 meters). Blooms Mar-Jun. | **Unlikely.** Chaparral, woodland, and grassland habitats are absent from the Study Area. | No further actions are recommended for this species. |
| fragrant fritillary<br>*Fritillaria liliacea* | Rank 1B.2 | Cismontane woodland, coastal prairie, coastal scrub, valley, and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr. | **Unlikely.** Woodland, coastal prairie, and grassland habitats are absent from the Study Area. The sandy substrate of dune scrub is not suitable for this species. Most of the coastal scrub is disturbed by periodic mowing, which reduces habitat quality. This species typically occurs on finer textured substrate than what is present in the Study Area. | No further actions are recommended for this species. |
| Butano Ridge cypress<br>*Hesperocyparis abramsiana var. butanoensis* | Rank 1B.2 | Chaparral, closed-cone coniferous forest, lower montane coniferous forest. Elevation ranges from 1310 to 1610 feet (400 to 490 meters). Blooms Oct. | **No Potential.** Chaparral and coniferous forest are absent from the Study Area. The Monterey cypresses were planted and are not representative of natural forest. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Kellogg's horkelia<br>*Horkelia cuneata var. sericea* | Rank 1B.1 | Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Elevation ranges from 35 to 655 feet (10 to 200 meters). Blooms Apr-Sep. | **Unlikely.** The Study Area contains potentially suitable coastal scrub habitat, but the nearest occurrence of this species is approximately 12 miles southeast of the Study Area. Additionally, no species of *Horkelia* were observed during the April 26, 2022, site visit. | No further actions are recommended for this species. |
| Point Reyes horkelia<br>*Horkelia marinensis* | Rank 1B.2 | Coastal dunes, coastal prairie, coastal scrub. Elevation ranges from 15 to 2475 feet (5 to 755 meters). Blooms May-Sep. | **Unlikely.** The Study Area contains potentially suitable coastal scrub habitat, but the nearest occurrence of this species is approximately 12 miles southeast of the Study Area. Additionally, no species of *Horkelia* were observed during the April 26, 2022, site visit. | No further actions are recommended for this species. |
| harlequin lotus<br>*Hosackia gracilis* | Rank 4.2 | Broadleaved upland forest, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, north coast coniferous forest, valley, and foothill grassland. Elevation ranges from 0 to 2295 feet (0 to 700 meters). Blooms Mar-Jul. | **High Potential.** This species was observed in coastal scrub and sea bluff habitats in the western and central portions of the Study Area. | **Present.** This species was detected during the rare plant survey. Avoidance and mitigation measures are listed in Section 7.1 of the Biological Resources Technical Report prepared in 2022 by WRA. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| coast iris<br>*Iris longipetala* | Rank 4.2 | Coastal prairie, lower montane coniferous forest, meadows, and seeps. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms Mar-May (Jun). | **Unlikely.** Coastal prairie, coniferous forest, and meadow and seep habitats are absent from the Study Area. | No further actions are recommended for this species. |
| perennial goldfields<br>*Lasthenia californica ssp. macrantha* | Rank 1B.2 | Coastal bluff scrub, coastal dunes, coastal scrub. Elevation ranges from 15 to 1705 feet (5 to 520 meters). Blooms Jan-Nov. | **Moderate Potential.** The Study Area contains potentially suitable coastal scrub and coastal bluff scrub habitats. However, this perennial species was not observed during the April 26, 2022, survey, and is therefore assumed to be absent from the Study Area. | **Not Observed.** This species was not detected during the rare plant survey. No further actions are recommended for this species. |
| large-flowered leptosiphon<br>*Leptosiphon grandiflorus* | Rank 4.2 | Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 15 to 4005 feet (5 to 1220 meters). Blooms Apr-Aug. | **Unlikely.** This species is known from open, grassy areas, and open areas in coastal scrub in the Study Area are disturbed by periodic mowing and/or often have a strong presence of invasive species, which reduces habitat quality. Additionally, there are no records of this species from San Mateo County. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| rose leptosiphon<br>*Leptosiphon rosaceus* | Rank 1B.1 | Coastal bluff scrub. Elevation ranges from 0 to 330 feet (0 to 100 meters). Blooms Apr-Jul. | **Unlikely.** Potentially suitable coastal bluff scrub habitat is present. However, the nearest occurrences of this species are from 1896 and 1943 and are likely extirpated. The nearest extant occurrence is located approximately 20 miles north of the Study Area. Additionally, this species was not observed during April 26, 2022, site visit, which occurred when this species would have been evident. | No further actions are recommended for this species. |
| Point Reyes meadowfoam<br>*Limnanthes douglasii ssp. sulphurea* | Rank 1B.2 | Coastal prairie, marshes and swamps, meadows and seeps, vernal pools. Elevation ranges from 0 to 460 feet (0 to 140 meters). Blooms Mar-May. | **No Potential**. This species is known from herb-dominated seasonal wetland habitats, which are absent from the Study Area. | No further actions are recommended for this species. |
| arcuate bush-mallow<br>*Malacothamnus arcuatus* | Rank 1B.2 | Chaparral, cismontane woodland. Elevation ranges from 50 to 1165 feet (15 to 355 meters). Blooms Apr-Sep. | **No Potential.** Chaparral and cismontane woodland habitats and gravelly alluvium substrate are absent from the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Mt. Diablo cottonweed<br>*Micropus amphibolus* | Rank 3.2 | Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 150 to 2705 feet (45 to 825 meters). Blooms Mar-May. | **No Potential.** Broadleaf upland forest, chaparral, woodland, and grassland habitats are absent from the Study Area. | No further actions are recommended for this species. |
| marsh microseris<br>*Microseris paludosa* | Rank 1B.2 | Cismontane woodland, closed-cone coniferous forest, coastal scrub, valley, and foothill grassland. Elevation ranges from 15 to 1165 feet (5 to 355 meters). Blooms Apr-Jun (Jul). | **Unlikely.** Woodland, coniferous forest, and grassland habitats are absent from the Study Area. Scrub habitat is unlikely to support this species because while it was open at the time of the site visit, the openness is a result of mowing and not typical of un-mowed conditions, which are dense and therefore unlikely to be suitable for this species. | No further actions are recommended for this species. |
| elongate copper moss<br>*Mielichhoferia elongata* | Rank 4.3 | Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest. Elevation ranges from 0 to 6430 feet (0 to 1960 meters). | **Unlikely.** The dense vegetation in the Study Area would likely outcompete this species. The nearest occurrence of this species is 5 miles southeast of the Study Area on moist, shaded rock, and such habitat is absent from the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| woodland woollythreads<br>*Monolopia gracilens* | Rank 1B.2 | Broadleaved upland forest, chaparral, cismontane woodland, north coast coniferous forest, valley and foothill grassland. Elevation ranges from 330 to 3935 feet (100 to 1200 meters). Blooms (Feb)Mar-Jul. | **Unlikely.** Broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and grassland habitats are absent from the Study Area. Plant communities are likely too densely vegetated to support this species. The nearest occurrence is 10 miles northeast of the Study Area. | No further actions are recommended for this species. |
| Gairdner's yampah<br>*Perideridia gairdneri ssp. gairdneri* | Rank 4.2 | Broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 2000 feet (0 to 610 meters). Blooms Jun-Oct. | **Unlikely.** Although seasonally wet areas are present, the nearest occurrence of this species is approximately 11 miles east-southeast of the Study Area, east of the Santa Cruz Mountains crest, and with the lack of a nearby seed source, this species is unlikely to colonize the Study Area. | No further actions are recommended for this species. |
| Monterey pine<br>*Pinus radiata* | Rank 1B.1 | Cismontane woodland, closed-cone coniferous forest. Elevation ranges from 80 to 605 feet (25 to 185 meters). | **No Potential.** The Study Area is located well outside of any known historic or modern native occurrences of this species. Additionally, no species of *Pinus* were observed in the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Choris' popcornflower<br>*Plagiobothrys chorisianus var. chorisianus* | Rank 1B.2 | Chaparral, coastal prairie, coastal scrub. Elevation ranges from 10 to 525 feet (3 to 160 meters). Blooms Mar-Jun. | **High Potential.** This species was observed in mowed coastal scrub habitat in the central portion of the Study Area. | **Present.** This species was detected during the rare plant survey. Avoidance and mitigation measures are listed in Section 7.1 of the Biological Resources Technical Report prepared in 2022 by WRA. |
| San Francisco popcornflower<br>*Plagiobothrys diffusus* | Rank 1B.1 | Coastal prairie, valley and foothill grassland. Elevation ranges from 195 to 1180 feet (60 to 360 meters). Blooms Mar-Jun. | **No Potential.** Coastal prairie and grassland habitats are absent from the Study Area. | No further actions are recommended for this species. |
| pine rose<br>*Rosa pinetorum* | Rank 1B.2 | Cismontane woodland, closed-cone coniferous forest. Elevation ranges from 5 to 3100 feet (2 to 945 meters). Blooms May-Jul. | **No Potential.** Woodland and coniferous forest habitats are absent from the Study Area. The Monterey cypresses were planted and are not representative of natural forest habitat. | No further actions are recommended for this species. |
| Hoffmann's sanicle<br>*Sanicula hoffmannii* | Rank 4.3 | Broadleafed upland forest, chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, lower montane coniferous forest. Elevation ranges from 100 to 985 feet (30 to 300 meters). Blooms Mar-May. | **Unlikely.** All occurrences of this species in the region are from shady, forested habitat, which is absent from the Study Area. The Monterey cypresses were planted and are not representative of natural forest habitat. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| Scouler's catchfly<br>*Silene scouleri ssp. scouleri* | Rank 2B.2 | Coastal bluff scrub, coastal prairie, valley and foothill grassland. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms (Mar-May)Jun-Aug(Sep). | **Unlikely.** Although coastal bluff scrub habitat is present, this species is known from rocky habitats in San Mateo County, and such habitat is absent from the Study Area. | No further actions are recommended for this species. |
| San Francisco campion<br>*Silene verecunda ssp. verecunda* | Rank 1B.2 | Chaparral, coastal bluff scrub, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 100 to 2115 feet (30 to 645 meters). Blooms (Feb)Mar-Jul(Aug). | **Unlikely.** Although coastal scrub and coastal bluff scrub habitats are present, this species typically occurs on mudstone or shale or in loose sandy substrates, which are absent from the Study Area. Additionally, the nearest occurrence is approximately 10 miles southeast of the Study Area. | No further actions are recommended for this species. |
| Santa Cruz microseris<br>*Stebbinsoseris decipiens* | Rank 1B.2 | Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 1640 feet (10 to 500 meters). Blooms Apr-May. | **Unlikely.** Although scrub habitat is present, this species is typically known from ridges and slopes, not the near flat topography along the immediate coast. Additionally, coastal scrub is disturbed by periodic mowing. The nearest occurrence of this species is approximately 6 miles southeast of the Study Area. | No further actions are recommended for this species. |

| SPECIES | STATUS* | HABITAT | POTENTIAL FOR OCCURRENCE** | RECOMMENDATIONS |
|---|---|---|---|---|
| northern slender pondweed<br>*Stuckenia filiformis ssp. alpina* | Rank 2B.2 | Marshes and swamps. Elevation ranges from 985 to 7055 feet (300 to 2150 meters). Blooms May-Jul. | **No Potential.** Marsh and swamp habitats are absent from the Study Area. | No further actions are recommended for this species. |
| Santa Cruz clover<br>*Trifolium buckwestiorum* | Rank 1B.1 | Broadleafed upland forest, cismontane woodland, coastal prairie. Elevation ranges from 345 to 2000 feet (105 to 610 meters). Blooms Apr-Oct. | **No Potential.** Broadleafed upland forest, cismontane woodland, and coastal prairie habitats are absent from the Study Area. | No further actions are recommended for this species. |

*** Key to status codes:**

| | |
|---|---|
| FE | Federal Endangered |
| FT | Federal Threatened |
| SE | State Endangered |
| SD | State Delisted |
| ST | State Threatened |
| SR | State Rare |
| Rank 1A | CNPS Rank 1A: Plants presumed extinct in California |
| Rank 1B | CNPS Rank 1B: Plants rare, threatened or endangered in California and elsewhere |
| Rank 2A | CNPS Rank 2A: Plants presumed extirpated in California, but more common elsewhere |
| Rank 2B | CNPS Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere |
| Rank 3 | CNPS Rank 3: Plants about which CNPS needs more information (a review list) |
| Rank 4 | CNPS Rank 4: Plants of limited distribution (a watch list) |

**Potential to Occur:**

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

**Results and Recommendations:**

Present. Species was observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Not Present. Species is assumed to not be present due to a lack of key habitat components.

Not Observed. Species was not observed during surveys.

Presence Unknown: A survey was not conducted to determine absence or presence of this species.

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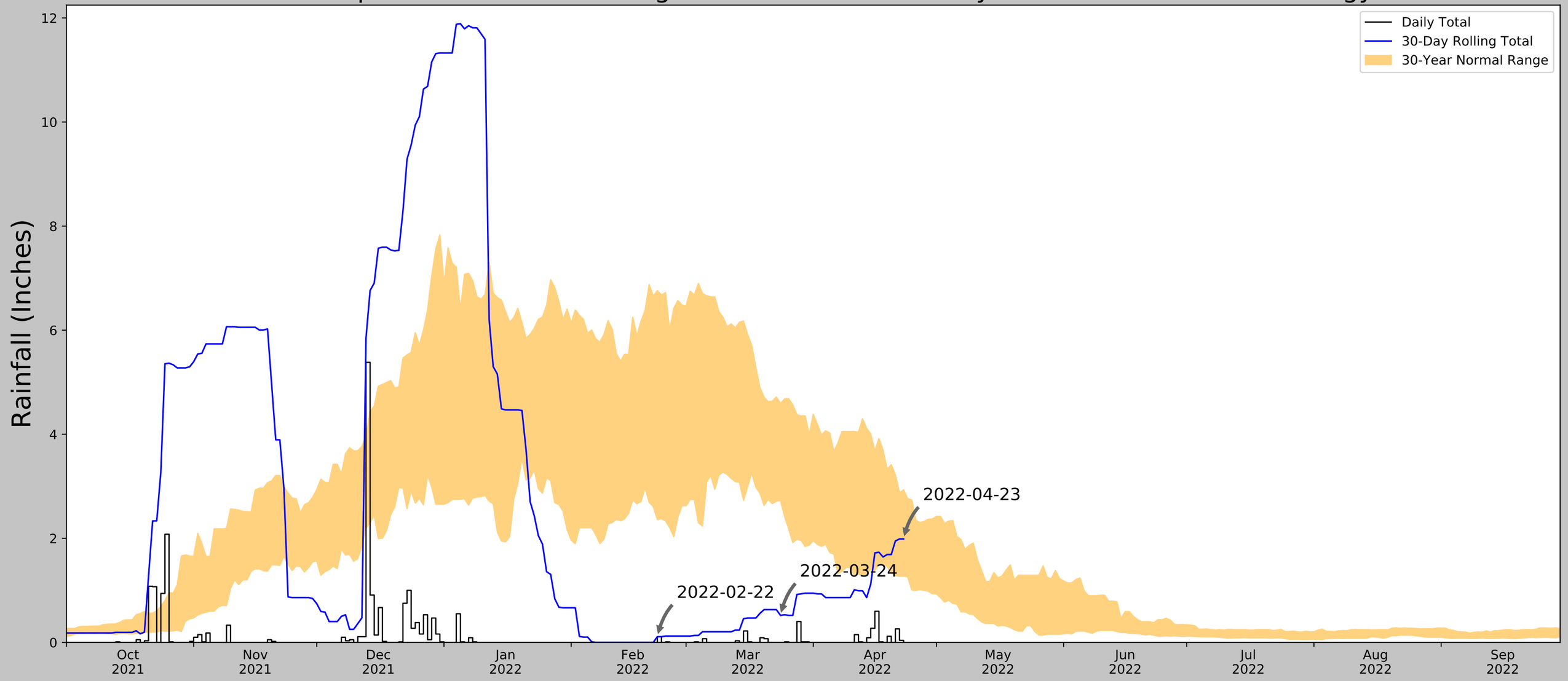
# APPENDIX D – ANTECEDENT PRECIPITATION OUTPUT GRAPH

# Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network




| | |
|---|---|
| Coordinates | 37.209120, -122.399980 |
| Observation Date | 2022-04-23 |
| Elevation (ft) | 122.64 |
| Drought Index (PDSI) | Severe drought (2022-03) |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30$^{th}$ %ile (in) | 70$^{th}$ %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-04-23 | 1.274803 | 2.931496 | 1.988189 | Normal | 2 | 3 | 6 |
| 2022-03-24 | 2.729134 | 4.590158 | 0.519685 | Dry | 1 | 2 | 2 |
| 2022-02-22 | 2.359055 | 6.759843 | 0.110236 | Dry | 1 | 1 | 1 |
| Result | | | | | | | Drier than Normal - 9 |

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted Δ | Days (Normal) | Days (Antecedent) |
|---|---|---|---|---|---|---|---|
| HALF MOON BAY | 37.4725, -122.4433 | 26.903 | 18.353 | 95.737 | 10.016 | 10555 | 87 |
| SAN GREGORIO 2 SE | 37.3117, -122.3617 | 274.934 | 7.394 | 152.294 | 4.453 | 766 | 0 |
| DAVENPORT 3.1 NW | 37.0436, -122.2293 | 46.916 | 14.805 | 75.724 | 7.784 | 2 | 0 |
| HALF MOON BAY 1.0 S | 37.455, -122.4383 | 64.961 | 17.119 | 57.679 | 8.691 | 20 | 2 |
| HALF MOON BAY 0.5 SSW | 37.463, -122.4408 | 54.134 | 17.684 | 68.506 | 9.169 | 9 | 1 |
| MOUNTAIN VIEW 1.2 S | 37.3848, -122.0752 | 108.924 | 21.587 | 13.716 | 10.01 | 1 | 0 |

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

# ATTACHMENT E

COUNTY OF SAN MATEO, PLANNING AND BUILDING DEPARTMENT

# NOTICE OF INTENT TO ADOPT MITIGATED NEGATIVE DECLARATION

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.), that the following project: ***Pescadero Domestic Test Wells*** when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: PLN2022-00211

OWNER: Ellen Skolnick

APPLICANT: Kerry Burke

NAME OF PERSON UNDERTAKING THE PROJECT OR RECEIVING THE PROJECT APPROVAL (IF DIFFERENT FROM APPLICANT): Same as Applicant

ASSESSOR'S PARCEL NO.: APN's 086-250-140,150,160;

LOCATION: Cabrillo Highway (Highway 1) in the community of Pescadero

## PROJECT DESCRIPTION

The applicant is seeking a Coastal Development Permit (CDP), Planned Agricultural District (PAD) Permit and Architectural Review for the drilling of a test domestic well to determine if adequate water is present to serve future development. Three well locations are identified as potential well sites but only one well will be constructed and certified. The three Assessor's Parcel Numbers (APN's) make up one legal parcel of approximately 6.53 acres and the project site is approximately 4 sq. ft. (construction area of each well). The test well locations are located in the central portion of APN: 086-250-150 and the central and eastern portion of APN: 086-250-160.

## FINDINGS AND BASIS FOR A MITIGATED NEGATIVE DECLARATION

The Current Planning Section has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

1. The project will not adversely affect water or air quality or increase noise levels substantially.

2. The project will not have adverse impacts on the flora or fauna of the area.

3. The project will not degrade the aesthetic quality of the area.

4. The project will not have adverse impacts on traffic or land use.

5. In addition, the project will not:

    a. Create impacts which have the potential to degrade the quality of the environment.

    b. Create impacts which achieve short-term to the disadvantage of long-term environmental goals.

    c. Create impacts for a project which are individually limited, but cumulatively considerable.

    d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The County of San Mateo has, therefore, determined that the environmental impact of the project is insignificant.

MITIGATION MEASURES included in the project to avoid potentially significant effects:

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

**Mitigation Measure 1:** The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.
b. Apply water two times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.
d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.
e. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

**Mitigation Measure 2:** All ground disturbance activities shall be restricted to the dry season (May 1 through September 30 ) when all habitats have dried to reduce potential for CRLF and SFGS to disperse through the Study Area.

**Mitigation Measure 3:** A qualified biologist shall survey the work site immediately before the onset of vegetation clearing or ground disturbance activities to verify if species are present and if all habitats are dry. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move

the species from the work site before work activities begin. Any SFGS shall be allowed to leave the work area on their own and shall be monitored by the biologist to ensure they do not reenter the work area.

**Mitigation Measure 4:** Prior to the start of groundbreaking activities, all construction personnel will receive training on listed species and their habitats by a qualified biologist. The importance of these species and their habitat will be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the project. An educational brochure containing color photographs of all listed species in the work area will be distributed to all employees working within the Study Area. The original list of employees who attend the training sessions will be maintained by the contractor and be made available for review by the USFWS and the CDFW upon request.

**Mitigation Measure 5:** The contractor shall designate a person or employee to monitor on-site compliance with all minimization measures. The on-site monitor(s) will be on-site daily for the duration of the Project, including vegetation removal, grading and clean-up activities.

**Mitigation Measure 6:** All vehicles and equipment associated with work-activities will be parked or staged only within designated staging areas at the end of each workday or when not in use to minimize habitat disturbance and water quality degradation.

**Mitigation Measure 9:** No work shall occur within 48 hours of a rain event (over 0.25 inches in a 24-hour period). Following a rain event, a qualified biologist shall survey the work site immediately before reinitiating ground disturbance activities to verify if species are present. If CRLF or SFGS are observed, then the steps previously described for the initial pre-construction survey shall be followed.

**Mitigation Measure 10:** Any erosion control materials used shall be made of tightly woven fiber netting or similar material to ensure that CRLF and SFGS do not get trapped. This limitation shall be communicated to the contractor. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material shall not be used at the Study Area because CRLF, SFGS, and other species may become entangled or trapped in it.

**Mitigation Measure 11:** No trash shall be deposited on the site during construction activities. All trash shall be placed in trash receptacles with secure lids stored in vehicles and removed nightly from the Study Area.

**Mitigation Measure 12:** Any fueling and maintenance of equipment shall be conducted off-site and at least 50 feet from any wetland or designated Environmentally Sensitive Habitat Areas (ESHA).

**Mitigation Measure 13:** California Red-Legged Frog (CRLF) and San Francisco Garter Snake (SFGS) may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped. Therefore, all construction pipes, culverts, or similar structures that are stored at the site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the on-site monitor and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. It is also recommended these structures, if stored, are kept off the ground by being placed on pallets within the staging areas either in developed areas or within wildlife exclusion fencing. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this

determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move them from the work site before work activities begin. If SFGS is found, it shall be allowed to passively leave the work area on its own, as determined by the on-site monitor, unless in circumstances where the animal is determined to be trapped as discussed in Mitigation Measure 14.

**Mitigation Measure 14:** To prevent inadvertent entrapment of CRLF or SFGS during construction, the on-site monitor and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one-foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-site biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-site biologist and/or construction foreman/manager.

**Mitigation Measure 15:** If at any time a trapped CRLF or SFGS is discovered by the on-site biologist or anyone else, the animal shall be allowed to passively leave the work area on its own, as determined by the onsite biologist. If a CRLF or SFGS is trapped, only a USFWS-approved biologist shall move the individual under the direction of USFWS and CDFW. The biologist shall also report these findings, as required, to the appropriate agencies.

**Mitigation Measure 16:** Pre-construction surveys for avian species are required for Project activities that must occur during the nesting bird season (March 1 through July 31). If active nests (containing eggs, chicks or young) are discovered during pre-construction surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Project activities may be postponed until the conclusion of the nesting season, or the biologist may perform follow-up checks to determine whether the nest is still active. Based on the findings from the survey the biologist will determine if a nesting bird management plan is required to establish a programmatic approach to nest surveys, buffer size, duration, and may include other abatement or attenuation recommendations that might allow for size reductions in the exclusion buffers, or other such measures satisfactory to the lead agency to reduce the impacts to a less than significant level.

**Mitigation Measure 17:** Any development shall avoid the Choris' popcorn flower population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, Choris' popcorn flower seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

**Mitigation Measure 18:** Any development shall avoid the harlequin lotus population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, harlequin lotus seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

**Mitigation Measure 19:** Sea cliffs shall be avoided as part of the project. The applicant shall submit to the County for review and approval engineered drawings demonstrating that the project avoids Coastal Commission and Local Coastal Program regulated sensitive habitat areas . Based on local geology and erosion rates, a setback of at least 50 feet from the bluff

edge shall be provided to protect public land and to ensure loss of sea cliffs due to Project activities will be reduced to a *less than significant* level.

**Mitigation Measure 20:** Wildlife exclusion fencing shall be placed around the perimeter of the project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities. Installation of fencing will be performed under the supervision of a qualified biologist

**Mitigation Measure 21:** In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and are satisfactorily implemented.

**Mitigation Measure 22:** Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

**Mitigation Measure 23:** Pursuant to San Mateo County Ordinance Code 4.68.050 *Mitigation of Disturbance at Well Site*, disturbance at a well site for the purposes of construction shall be limited to the minimum amount of disturbance necessary to gain access to drill the well. Drilling fluids and other drilling materials produced or used in connection with well construction shall not be allowed to discharge onto or into streets, waterways, sensitive habitats, or storm drains. Drilling fluids shall be properly managed and disposed of in accordance with applicable local, regional, and state requirements. Upon completion of the construction, the site shall be restored as near as possible to its original condition, and appropriate erosion control measures shall be implemented. Wells constructed during a period where winterization requirements are in effect, between October 1 and May 1, shall comply with County stormwater pollution prevention measures.

**Mitigation Measure 24:** During project construction, the applicant shall, pursuant to Chapter 4.100 of the San Mateo County Ordinance Code, minimize the transport and discharge of stormwater runoff from the construction site:

a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30. Stabilizing shall include both proactive measures, such as the placement of coir netting, and passive measures, such as revegetating disturbed areas with plants propagated from seed collected in the immediate area.
b. Storing, handling, and disposing of construction materials and wastes properly, so as to prevent their contact with stormwater.

c. Controlling and preventing the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges, to storm drains and watercourses.
d. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
e. Delineating with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.
f. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
g. Performing clearing and earth-moving activities only during dry weather.
h. Limiting and timing application of pesticides and fertilizers to prevent polluted runoff.
i. Limiting construction access routes and stabilizing designated access points.
j. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
k. The contractor shall train and provide instruction to all employees and subcontractors regarding the construction Best Management Practices.

**Mitigation Measure 25:** In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

**Mitigation Measure 26:** In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

## INITIAL STUDY

The San Mateo County Current Planning Section has reviewed the Environmental Evaluation of this project and has found that the probable environmental impacts are insignificant. A copy of the initial study is attached.

REVIEW PERIOD: A 20-day public review period for the IS/MND will commence April 26, 2023 and continue through May 16, 2023. All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the County Planning and Building Department, 455 County Center, Second Floor, Redwood City, no later than 5:00 p.m., May 16, 2023. Please send your comments to:

Kanoa Kelley, Planner III
San Mateo County Planning and Building Department
455 County Center, Redwood City, CA 94063
Email: kkelley@smcgov.org

*Document Availability:* Copies of the IS/MND and all documents referenced in the IS/MND are available to view in person at 455 County Center, Redwood City, second Floor or to view and download on the County's website: https://planning.smcgov.org/ceqa-docs

Kanoa Kelley, Project Planner

County of San Mateo
Planning and Building Department

**INITIAL STUDY**
**ENVIRONMENTAL EVALUATION CHECKLIST**
(To Be Completed by Planning Department)

1. **Project Title:** Pescadero Domestic Test Wells

2. **County File Number:** PLN2022-00211

3. **Lead Agency Name and Address:**
   County of San Mateo
   Planning and Building Department
   455 County Center, 2nd Floor
   Redwood City, CA 94063

4. **Contact Person and Phone Number:** Kanoa Kelley Project Planner, (628) 222-3163

5. **Project Location:** Cabrillo Highway (Highway 1) in the community of Pescadero

6. **Assessor's Parcel Number and Size of Parcel:** 086-250-140,150,160; 6.53 acres

7. **Project Sponsor's Name and Address:**
   Kerry Burke
   332 Princeton Avenue
   Half Moon Bay, CA 94019

8. **General Plan Designation:** General Plan: Agriculture; Local Coastal Plan Designation: Agriculture

9. **Zoning:** Planned Agriculture District /Coastal Development (PAD/CD)

10. **Description of the Project:** The applicant is seeking a Coastal Development Permit (CDP), Planned Agricultural District (PAD) Permit and Architectural Review for the drilling of a test domestic well to determine if adequate water is present to serve future development. Three well locations are identified as potential well sites but only one well will be constructed and certified. The three Assessor's Parcel Numbers (APN's) make up one legal parcel of approximately 6.53 acres and the project site is approximately 4 sq. ft. (construction area of each well). The test well locations are located in the central portion of APN: 086-250-150 and the central and eastern portion of APN: 086-250-160.

11. **Surrounding Land Uses and Setting:** The parcel is located approximately 0.8 miles south of Bean Hollow Road and on the west side of Cabrillo Highway (Highway 1). The parcel is relatively flat and is bounded on the north side by residential development on 5+ acres and vacant land to the south. The rural lot is undeveloped and covered with natural vegetation consisting of coastal scrub and coastal bluff scrub, and cypress trees concentrated on the northern most parcel.

12. **Other Public Agencies Whose Approval is Required:** None

13. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?:** This project is subject to California Public Resources Code 21080.3.1 which requires a tribal consultation request be sent within 14 days of determining that an application has been deemed complete or a public agency decides to undertake a project. The County of San Mateo has received a request for formal notification from the Tamien Nation of the greater Santa Clara County. A notice for consultation was sent to the Tamien Nation on January 1, 2023. The notice for consultation was received by the Tamien Nation on March 3, 2023. California Native American Tribes have 30 days from the date the tribal consultation notice was received to request consultation. As of the date of this report, formal consultation on this project has not been requested.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Significant Unless Mitigated" as indicated by the checklist on the following pages.

| | | | | | |
|---|---|---|---|---|---|
| | Aesthetics | | Energy | | Public Services |
| | Agricultural and Forest Resources | | Hazards and Hazardous Materials | | Recreation |
| X | Air Quality | X | Hydrology/Water Quality | | Transportation |
| X | Biological Resources | | Land Use/Planning | X | Tribal Cultural Resources |
| X | Climate Change | | Mineral Resources | | Utilities/Service Systems |
| X | Cultural Resources | | Noise | | Wildfire |
| X | Geology/Soils | | Population/Housing | X | Mandatory Findings of Significance |

## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than

significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources. Sources used or individuals contacted should be cited in the discussion.

| **1. AESTHETICS**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 1.a. Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads? | | | | X |
| **Discussion:** Construction of the domestic well will be located at grade level on a relatively flat parcel. Scenic views from the public roadway will not be adversely impacted.<br>**Source:** Project Plans, Google Earth | | | | |
| 1.b. Significantly damage or destroy scenic | | | | X |

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| | resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | |
| **Discussion:** The parcel is located within the Cabrillo Highway State Scenic Corridor. The potential locations of the test well will not impact existing trees within the property. No rock outcroppings are present within the parcel nor are any designated historic buildings.<br>**Source:** Project Plans, Planning GIS Planning Map Viewer Scenic Corridors Layer, National Park Service National Register of Historic Places, Google Earth | | | | | |
| 1.c. | Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline? | | | | X |
| **Discussion:** Access and construction of the well does not require significant modifications to the topography and will not be located on a ridgeline. Access to the project site is via the existing concrete driveway.<br>**Source:** Project Plans, Google Earth | | | | | |
| 1.d. | Create a new source of significant light or glare that would adversely affect day or nighttime views in the area? | | | | X |
| **Discussion:** No lighting is proposed.<br>**Source:** Project Scope | | | | | |
| 1.e. | Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor? | | | | X |
| **Discussion:** The project site is located within the Cabrillo Highway State Scenic Corridor. Given the ground level height of the well and existing access, no impact is expected to the scenic corridors.<br>**Source:** Project Plans, Planning GIS Planning Map Viewer Scenic Corridors Layer, Google Earth | | | | | |
| 1.f. | If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions? | | | | X |
| **Discussion:** The project is not located within a Design Review district.<br>**Source:** Project Location | | | | | |
| 1.g. | Visually intrude into an area having natural scenic qualities? | | | | X |
| **Discussion:** The parcel is located within the rural surroundings of the Pescadero area. Typically found within the vicinity of the project are agricultural fields and related development, vegetated watercourses, a mix of steep hillsides and flatlands, and low-density residential development. | | | | | |

Construction of the well will not impact the rural scenic qualities found in the vicinity of the project due to its ground level construction and vegetation removal associated with construction will be minimal and site specific.

**Source:** Project Plans, Google Earth

**2. AGRICULTURAL AND FOREST RESOURCES**. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forestland, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
|---|---|---|---|---|---|
| 2.a. | For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | X |
| **Discussion:** Project is not located outside the Coastal Zone.<br>**Source:** Project Location | | | | | |
| 2.b. | Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract? | | | X | |
| **Discussion:** The parcel is not encumbered by a Williamson Act contract or Open Space Easement. The parcel is zoned Planned Agricultural District/Coastal Zone. The potential locations for the well are not located within the active agricultural field and are allowed uses in the PAD/CD Zoning District subject to permit approval.<br>**Source:** Planning Division GIS | | | | | |
| 2.c. | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use? | | | X | |

**Discussion:** According to the Department of Conservation Farmland Mapping and Monitoring Program California Important Farmland Finder (2016 Interactive GIS), the parcel is classified as "other land", which is a general term that includes all other categories of unmapped agricultural land such as vacant non-agricultural land and riparian areas not suitable for livestock grazing.

The USDA Department of Agriculture soil map shows that the eastern portion of the parcels are classified as class 2 prime soils.

If the project area were to be irrigated, the land would be designated as Prime Farmland, which is defined as: *Irrigated land with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.*

According to aerial photos and review of the Department of Conservation Farmland Mapping and Monitoring Program Time Series, the area of the proposed well site has never been farmed.

Construction of the well will convert approximately 4 sq. ft. of potential prime soils and will be located outside of any active agricultural field.

Given the small footprint of the domestic well, the potential Prime Farmland conversion is less than significant.

**Source:** Department of Conservation Farmland Mapping and Monitoring Program California Important Farmland Finder (2016 Interactive GIS), USDA Web Soil Survey, Google Earth

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|---|---|---|---|---|---|
| 2.d. | For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts? | | | X | |

**Discussion:** Soils in the proposed well site areas have an Irrigated Land Capability Classification rating of Class II as identified on the Natural Resources Conservation Service Web Soil Survey. Land capability classification takes into consideration landscape location, slope of the field, depth, texture, and reaction of the soil. The project area is identified on the San Mateo County General Plan Productive Soil Resources with Agricultural Capability Map as Irrigated Rowcrops and Soil Dependent Floriculture, which includes artichokes or Brussels sprouts. Conversion of these soils will occur as a result of this project; however, construction of the well is limited to 4 sq. ft. which is the minimum necessary to establish the domestic water source.

**Source:** Natural Resources Conservation Service Web Soil Survey, General Plan Productive Soil Resources with Agricultural Capability Map

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| 2.e. | Result in damage to soil capability or loss of agricultural land? | | | X | |

**Discussion:** Approximately 4 sq. ft. of agricultural land will be converted for construction of the well and concrete pad. This area is minimal compared to the approximate 6.53 acres of land designated Agriculture (project parcels).

**Source:** Project Plans

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| 2.f. | Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section | | | | X |

| | | | | |
|---|---|---|---|---|
| 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?<br>*Note to reader: This question seeks to address the economic impact of converting forestland to a non-timber harvesting use.* | | | | |

**Discussion:** Construction of the well does not conflict with the current Planned Agricultural District zoning district nor are trees present on the parcel meeting the definition of forest land (land that supports 10% native tree cover of any species and that allows for management of one or more forest resources) or timberland (land capable of growing a crop of trees of a commercial species used to produce lumber and other forest products).

**Source:** Project Site

**3. AIR QUALITY**. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
|---|---|---|---|---|---|
| 3.a. | Conflict with or obstruct implementation of the applicable air quality plan? | | X | | |

**Discussion:** The Bay Area Air Quality Management District (District) 2017 Clean Air Plan (CAP) is the applicable plan for San Mateo County. The District outlines Criteria Air Pollutants and Precursors for Construction-Related Impacts in its CEQA Guidelines for use by Lead Agencies in preliminarily identifying whether such pollutants and/or precursors will exceed the District's Thresholds of Significance (Screening Criteria). The Screening Criteria references Table 3-1 of the District's CEQA Guidelines which identifies land use types of a large scale (e.g., office parks, hospitals, warehouses, manufacturing). These uses are beyond the current project scope. The Screening Criteria also provides for the inclusion of basic construction mitigation measures to reduce potential impacts to less than significant levels. As mitigated, the project will not conflict or obstruct implementation of the 2017 CAP.

**Mitigation Measure 1:** The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with

manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

**Source:** Bay Area Air Quality Management District 2017 Clean Air Plan, Bay Area Air Quality Management District CEQA Guidelines May 2017

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|---|---|---|---|---|---|
| 3.b. | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard? | | X | | |

**Discussion:** The Bay Area Air Quality Management District (District) monitors and regulates air pollution within the nine counties surrounding the San Francisco Bay. According to the District Facility Data Map, no regulated facilities are present within the project vicinity nor is the Pescadero area identified as an Impacted Community (areas with high concentration of air pollution and populations most vulnerable to air pollution's health impacts). The State has met (attainment) the U.S. Environmental Protection Agency standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, and sulfates. However, the State status for particulate matter (PM10) and particulate matter-fine (PM2.5) is non-attainment.

Drilling for the well includes one two-axle bobtail dump truck pulling a portable mud system on a two-axle trailer, one 4,000 gallon water truck, one three-axel drilling rig (69,000 lbs), one pickup truck pulling a mini excavator, and four pickup trucks (inclusive of the one pickup truck pulling the mini excavator). Each well drilling is anticipated to occur over a five day period. All equipment will remain on site during the drilling with exception of the four pickup trucks that will arrive and leave once per day. No operational emissions are expected. Mitigation measure 1 will ensure potential significant construction impacts are minimized.

**Source:** Bay Area Air Quality Management District

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|---|---|---|---|---|---|
| 3.c. | Expose sensitive receptors to significant pollutant concentrations, as defined by BAAQMD? | | | | X |

**Discussion:** Sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities. There are no sensitive receptors near the subject parcel and pollutants are limited to that of construction vehicles and drilling activities and are not expected to continue once well construction is completed.

**Source:** Bay Area Air Quality Management District, County GIS

| | | | | | |
|---|---|---|---|---|---|
| 3.d. | Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | X | |

**Discussion:** No objectionable odors are expected at the conclusion of well drilling. Odors resulting from construction vehicles may occur during well drilling (e.g., gasoline and diesel-fueled construction equipment), however these odors would be temporary in nature and due to the low

density rural setting impact to neighbors will be minimal.

**Source:** Project Scope

| **4.** | **BIOLOGICAL RESOURCES**. Would the project: | | | | |
|---|---|---|---|---|---|
| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 4.a. | Have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | X | | |

**Discussion:** A Biological Resources Technical Report was prepared by WRA Environmental Consultants on July 22, 2022. The report shows that the project site contains sensitive habitat including both seasonal wetland and scrub shrub wetland. Therefore, the site was identified as potential habit for the following special-status plant and animal species.

Special-Status Plant Species

10 special-status plant species have the potential to occur in the study area. Of the 10 only 2 were observed during a field survey by a qualified plant biologist.

***Harlequins Lotus.*** Harlequin Lotus blooms from March to July and grows in the coastal bluff scrub abundant on the subject parcel. As shown in the rare plant survey results map, patches of flowers were observed in the southern central portion of the parcel.

***Choris Popcorn Flower.*** Blooms in March-June and grows in Chaparral, coastal prairie, and coastal scrub. As show in the rare plant survey results map, the flower was observed in close proximity to the Harlequins Lotus and along the edge of the bluff.

The San Mateo County Local Coastal Program (LCP) Policy 7.42 discourages development within 50 feet of any special-status plant population. To comply with this policy all three potential test well sites will be located outside of this 50-foot buffer from the mapped special-status plant species. A mitigation measure has been added requiring the 50-foot buffer and silt/biological fencing be erected to ensure construction vehicles do not cross into areas where the rare plants have been observed. Additional measures include pre-construction surveys, biological fencing, and biological monitors on site during construction.

Special-Status Animal Species

The biological resources assessment has concluded that the parcel provides suitable habitat for nesting birds including one special-status species, the common yellowthroat.

*Saltmarsh Common Yellowthroat (SCY)*. Although this species is typically associated with nesting near open water, willow riparian habitat within the Study Area is suitable for nesting by this species. There is a moderate potential for this species to nest within the riparian habitat in the Study Area.

*California Red-Legged Frog (CRLF)*. CRLF typically inhabit marshes, ponds, and slow-moving streams with well-developed riparian canopy. Breeding habitat occur in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, among others. The site does not contain suitable habitat elements for CRLF. However due to the occurrence of CRLF less than 0.8 miles from the site and the high likelihood of dispersal through the site during rainy conditions, mitigation measures have been added to mitigate impacts to the CRLF.

*San Francisco Garter Snake (SFGS)*. This semi-aquatic species is often found hunting in ponds, slow moving streams, and ephemeral wetlands occupied by their prey - Pacific chorus frog and CFLF. The Study Area does not contain suitable habitat elements for SFGS, such as aquatic habitat, vegetative cover, or prey items therefore it is unlikely to pass through or reside on the subject parcel.

*San Francisco Dusky-Footed Woodrat (SFDW)*. SFDW may occur in scrub shrub riparian habitat on the parcel. However due to lack of natural vegetation and proximity to sea spray from the coast SFDW is unlikely to establish. No nests were observed on site during biological site visits.

Due to the potential for special-status plants and animals on the site, the avoidance and mitigation measures as recommended by the consulting biologist have been added to reduce the impact of the project on local flora and fauna to less than significant levels. A 50-foot buffer from special-status plants and a 100-foot buffer from wetlands has been established as part of the project where no development will occur. A 50-foot buffer from sea cliffs has also been established where nesting activities may exist.

**Mitigation Measure 2:** All ground disturbance activities shall be restricted to the dry season (May 1 through September 30 ) when all habitats have dried to reduce potential for CRLF and SFGS to disperse through the Study Area.

**Mitigation Measure 3:** A qualified biologist shall survey the work site immediately before the onset of vegetation clearing or ground disturbance activities to verify if species are present and if all habitats are dry. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move the species from the work site before work activities begin. Any SFGS shall be allowed to leave the work area on their own, and shall be monitored by the biologist to ensure they do not reenter the work area.

**Mitigation Measure 4:** Prior to the start of groundbreaking activities, all construction personnel will receive training on listed species and their habitats by a qualified biologist. The importance of these species and their habitat will be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the project. An educational brochure containing color photographs of all listed species in the work area will be distributed to all employees working within the Study Area. The original list of employees who attend the training sessions will be maintained by the contractor and be made available for review by the USFWS and the CDFW upon request.

**Mitigation Measure 5:** The contractor shall designate a person or employee to monitor on-site compliance with all minimization measures. The on-site monitor(s) will be on-site daily for the duration of the Project, including vegetation removal, grading and clean-up activities.

**Mitigation Measure 6:** All vehicles and equipment associated with work-activities will be parked or staged only within designated staging areas at the end of each workday or when not in use to minimize habitat disturbance and water quality degradation.

**Mitigation Measure 9:** No work shall occur within 48 hours of a rain event (over 0.25 inches in a 24-hour period). Following a rain event, a qualified biologist shall survey the work site immediately before reinitiating ground disturbance activities to verify if species are present. If CRLF or SFGS are observed, then the steps previously described for the initial pre-construction survey shall be followed.

**Mitigation Measure 10:** Any erosion control materials used shall be made of tightly woven fiber netting or similar material to ensure that CRLF and SFGS do not get trapped. This limitation shall be communicated to the contractor. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material shall not be used at the Study Area because CRLF, SFGS, and other species may become entangled or trapped in it.

**Mitigation Measure 11:** No trash shall be deposited on the site during construction activities. All trash shall be placed in trash receptacles with secure lids stored in vehicles and removed nightly from the Study Area.

**Mitigation Measure 12:** Any fueling and maintenance of equipment shall be conducted off-site and at least 50 feet from any wetland or designated Environmentally Sensitive Habitat Areas (ESHA).

**Mitigation Measure 13:** California Red-Legged Frog (CRLF) and San Francisco Garter Snake (SFGS) may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped. Therefore, all construction pipes, culverts, or similar structures that are stored at the site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the on-site monitor and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. It is also recommended these structures, if stored, are kept off the ground by being placed on pallets within the staging areas either in developed areas or within wildlife exclusion fencing. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move them from the work site before work activities begin. If SFGS is found, it shall be allowed to passively leave the work area on its own, as determined by the on-site monitor, unless in circumstances where the animal is determined to be trapped as discussed in Mitigation Measure 14.

**Mitigation Measure 14:** To prevent inadvertent entrapment of CRLF or SFGS during construction, the on-site monitor and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one-foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-site biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-site biologist and/or construction foreman/manager.

**Mitigation Measure 15:** If at any time a trapped CRLF or SFGS is discovered by the on-site biologist or anyone else, the animal shall be allowed to passively leave the work area on its own, as determined by the onsite biologist. If a CRLF or SFGS is trapped, only a USFWS-approved biologist shall move the individual under the direction of USFWS and CDFW. The biologist shall also report these findings, as required, to the appropriate agencies.

**Mitigation Measure 16:** Pre-construction surveys for avian species are required for Project activities that must occur during the nesting bird season (March 1 through July 31). If active nests

(containing eggs, chicks or young) are discovered during pre-construction surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Project activities may be postponed until the conclusion of the nesting season, or the biologist may perform follow-up checks to determine whether the nest is still active. Based on the findings from the surveythe biologist will determine if a nesting bird management plan is required to establish a programmatic approach to nest surveys, buffer size, duration, and may include other abatement or attenuation recommendations that might allow for size reductions in the exclusion buffers, or other such measures satisfactory to the lead agency to reduce the impacts to a less than significant level.

**Mitigation Measure 17:** Any development shall avoid the Choris' popcorn flower population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, Choris' popcorn flower seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

**Mitigation Measure 18:** Any development shall avoid the harlequin lotus population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, harlequin lotus seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

**Mitigation Measure 19:** Sea cliffs shall be avoided as part of the project. The applicant shall submit to the County for review and approval engineered drawings demonstrating that the project avoids Coastal Commission and Local Coastal Program regulated sensitive habitat areas . Based on local geology and erosion rates, a setback of at least 50 feet from the bluff edge shall be provided to protect public land and to ensure loss of sea cliffs due to Project activities will be reduced to a *less than significant* level.

**Mitigation Measure 20:** Wildlife exclusion fencing shall be placed around the perimeter of the project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities. Installation of fencing will be performed under the supervision of a qualified biologist

**Source:** Biological Resources Technical Report WRA, July 2022; Rare Plant Survey Report, WRA July 2022.

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| 4.b. | Have a significant adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | X | | |

**Discussion:** Refer to Question 4.a.

**Source:** Biological Resources Technical Report WRA, July 2022; Rare Plant Survey Report, WRA

| | | | | | |
|---|---|---|---|---|---|
| July 2022. | | | | | |
| 4.c. | Have a significant adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| **Discussion:** Per LCP Policy 7.18 (Establishment of Buffer Zones) a 100-foot buffer from the outermost line of an onsite wetland has been established. No work is proposed within 100 feet of identified coastal wetlands.<br>**Source:** Biological Resources Technical Report WRA, July 2022; Project Scope; Google Earth | | | | | |
| 4.d. | Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | X | | |
| **Discussion:** No wildlife corridor was identified in the Biological Assessment; however, special-status species may utilize the project site area. Refer to Question 4.a. for mitigations.<br>**Source:** Biological Resources Technical Report WRA, July 2022 | | | | | |
| 4.e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)? | | | | X |
| **Discussion:** No trees are located in the project area.<br>**Source:** Project Plans | | | | | |
| 4.f. | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan? | | | | X |
| **Discussion:** The Project site is not located in an area with an adopted conservation plan.<br>**Source:** Project Location | | | | | |
| 4.g. | Be located inside or within 200 feet of a marine or wildlife reserve? | | | | X |
| **Discussion:** The project is not located within or adjacent to a marine or wildlife reserve<br>**Source:** Project Location | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 4.h. | Result in loss of oak woodlands or other non-timber woodlands? | | | | X |

**Discussion:** No oak woodlands or other non-timber woodlands are present on the parcel.

**Source:** Project Plans

| **5.** | **CULTURAL RESOURCES**. Would the project: | | | | |
|---|---|---|---|---|---|
| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 5.a. | Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Section 15064.5? | | | | X |

**Discussion:** According to a search of the California Historical Resources Information System and the California Office of Historic Preservation, the project site does not contain any historical resources.

**Source:** Project Plans, Project Location, California Office of Historic Preservation, Northwestern Information Center

| | | | | | |
|---|---|---|---|---|---|
| 5.b. | Cause a significant adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5? | | X | | |

**Discussion:** A referral of the project was sent to the California Historical Resources Information System Northwest Information Center (NWIC). The NWIC identified a study covering portions of the proposed project area. The study identified no cultural resources within the study area. However, the database is not comprehensive and the discovery of subsurface archaeological materials during grading or construction work is always a possibility, therefore, the following mitigation measure is recommended:

**Mitigation Measure 21:** In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and are satisfactorily implemented.

**Source:** Project Plans, Project Location, California Office of Historic Preservation, Northwestern Information Center

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| 5.c. | Disturb any human remains, including those interred outside of formal | | X | | |

| | | | | |
|---|---|---|---|---|
| cemeteries? | | | | |

**Discussion:** In the inadvertent event that human remains are discovered during ground disturbance and/or construction related activities, the following mitigation measure is recommended:

**Mitigation Measure 22:** Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

**Source:**

**6. ENERGY**. Would the project:

| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
|---|---|---|---|---|---|
| 6.a. | Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | X | |

**Discussion:**

Construction

The project would require the consumption of nonrenewable energy resources, primarily in the form of fossil fuels (e.g., fuel oil, natural gas, and gasoline) for automobiles (transportation) and construction equipment. Transportation energy use would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would temporary and minimal given the nature of the project scope and short duration for construction activity associated with well drilling. The project would not require expanded energy supplies or the construction of new infrastructure.

Operation

The proposed well would support future residential development near Cabrillo Highway served by existing road infrastructure. During future residential development, energy consumption would be associated with resident and visitor vehicle trips and delivery and supply trucks. Pacific Gas and Electric (PG&E) provides electricity to the project area. Currently, the existing site does not use any electricity because it is an undeveloped parcel. Any future development would be required to conform with all applicable energy and utility service standards to support the development density proposed at that time. It is expected that nonrenewable energy resources would be used efficiently during operation and construction of the project given the financial implication of the inefficient use of such resources. As such, the proposed project would not result in wasteful, inefficient, or

| | | | | |
|---|---|---|---|---|
| unnecessary consumption of energy resources.<br>**Source:** Project Plans, Project Location. | | | | |
| 6.b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency. | | | X | |
| **Discussion:** The proposed project is not expected to conflict with or obstruct any state or local plan for renewable energy or energy efficiency and the development is not expected to cause inefficient, wasteful, and/or unnecessary energy consumption. Furthermore, the project would be required to comply with all State and local building energy efficiency standards, appliance efficiency regulations, and green building standards.<br><br>**Source:** Project Plans | | | | |

| **7. GEOLOGY AND SOILS**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 7.a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other significant evidence of a known fault?<br>*Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.* | | | X | |
| **Discussion:** The project site is located in the coastal Pescadero area, an area of high seismicity. The closest active fault is the San Gregorio Fault located 4 kilometers east of the parcel. According to county GIS, the site is not located in an Alquist-Priolo special studies area or zone where fault rupture is considered likely (California Division of Mines and Geology, 1974). Therefore, active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is low.<br>**Source:** Project Location; County GIS, Association of Bay Area Governments Resilience Program Map | | | | |
| ii. Strong seismic ground shaking? | | | | X |

**Discussion:** The project site is subject to violent shaking as it is in an active seismic area given its location with the San Francisco Bay Area. The project is limited to the drilling of test wells that will not be impacted by ground shaking. Therefore, no mitigation is necessary.

**Source:** San Mateo County Earthquake Shaking Fault Maps (San Andreas Fault)

| | | | | |
|---|---|---|---|---|
| iii. Seismic-related ground failure, including liquefaction and differential settling? | | | X | |

**Discussion:** Liquefaction susceptibility mapping estimates the amount of shaking needed to trigger liquefaction. USGS mapping places the project site within a mapped Low Susceptibility for liquefaction. Construction of the well will be in accordance with Environmental Health Services requirements.

**Source:** Association of Bay Area Governments Resilience Program Liquefaction Susceptibility, USGS Liquefaction Susceptibility Maps

| | | | | |
|---|---|---|---|---|
| iv. Landslides? | | | | X |

**Discussion:** A review of the project for location within mapped landslide areas included the following sources: Association of Bay Area Governments (ABAG) Resilience Program Landslide GIS, San Mateo County General Plan Natural Hazards Map, and the United States Geological Survey Landslide Susceptibility in San Mateo County (1972).

*ABAG*. The project site is not located in a mapped Existing Landslide Distribution, Earthquake Induced Landslide Study Zone, or Rainfall Induced Landslide Area. ABAG defines the landslide areas as: (1) Existing Landslide Distribution – the distribution of landslides evident in the landscape (e.g., slumps, translational slides) that have occurred in the past, (2) Rainfall induced landslides – are principal areas that are likely to produce debris flows (mudslides), and (3) Earthquake induced landslides – areas where site specific studies are required prior to new construction.

*San Mateo County General Plan*. The project site is not located in a mapped Area of High Landslide Susceptibility as identified on the General Plan Natural Hazards Map.

*United States Geological Survey (USGS)*. The project site is located in Map Unit I, which is defined as areas least susceptible to landslide.

Construction of a well within the project will not be located in mapped landslide areas nor will the well itself expose people or structures to landslides.

**Source:** Association of Bay Area Governments Resilience Program Landslide Geographic Information System, General Plan Natural Hazards Map, USGS Landslide Susceptibility in San Mateo County Map (1972)

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|---|---|---|---|---|
| v. Coastal cliff/bluff instability or erosion?<br>*Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).* | | | | X |

**Discussion:** The project is located approximately 150 feet from the cliff or bluff. No development is proposed beyond a well; therefore, the project does not increase occupancy at the site. Future development of the site will require bluff erosion analyses to determine functional life of any

proposed structures on site.

**Source:** Project Location

| | | | | | |
|---|---|---|---|---|---|
| 7.b. | Result in significant soil erosion or the loss of topsoil? | | X | | |

**Discussion:** Well drilling is anticipated outside of the wet season, October 1st through April 30th. The following mitigation measures are recommended to reduce potential impacts to less than significant levels.

**Mitigation Measure 23:** Pursuant to San Mateo County Ordinance Code 4.68.050 *Mitigation of Disturbance at Well Site*, disturbance at a well site for the purposes of construction shall be limited to the minimum amount of disturbance necessary to gain access to drill the well. Drilling fluids and other drilling materials produced or used in connection with well construction shall not be allowed to discharge onto or into streets, waterways, sensitive habitats, or storm drains. Drilling fluids shall be properly managed and disposed of in accordance with applicable local, regional, and state requirements. Upon completion of the construction, the site shall be restored as near as possible to its original condition, and appropriate erosion control measures shall be implemented. Wells constructed during a period where winterization requirements are in effect, between October 1 and May 1, shall comply with County stormwater pollution prevention measures.

**Mitigation Measure 24:** During project construction, the applicant shall, pursuant to Chapter 4.100 of the San Mateo County Ordinance Code, minimize the transport and discharge of stormwater runoff from the construction site:

a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30. Stabilizing shall include both proactive measures, such as the placement of coir netting, and passive measures, such as revegetating disturbed areas with plants propagated from seed collected in the immediate area.

b. Storing, handling, and disposing of construction materials and wastes properly, so as to prevent their contact with stormwater.

c. Controlling and preventing the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges, to storm drains and watercourses.

d. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

e. Delineating with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.

f. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

g. Performing clearing and earth-moving activities only during dry weather.

h. Limiting and timing application of pesticides and fertilizers to prevent polluted runoff.

i. Limiting construction access routes and stabilizing designated access points.

j. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.

k. The contractor shall train and provide instruction to all employees and subcontractors regarding the construction Best Management Practices.

| | | | | | |
|---|---|---|---|---|---|
| **Source:** Project Scope | | | | | |
| 7.c. | Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse? | | | | X |
| **Discussion:** Due to the small size of a well, 4-square-feet, and that there are no known fault traces or liquefaction on the project site, it is not expected that this project would result in unstable soils, both on- and off-site.<br>**Source:** United States Geological Survey Geologic Maps National Geologic Database Map Viewer | | | | | |
| 7.d. | Be located on expansive soil, as noted in the 2010 California Building Code, creating significant risks to life or property? | | | | X |
| **Discussion:** Construction of the well is subject to the issuance of a well drilling permit by Environmental Health Services. This project scope is limited to the well only and does not include construction of habitable structures.<br>**Source:** Project Scope | | | | | |
| 7.e. | Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | X |
| **Discussion:** The project does not include construction or use of a septic or other disposal system.<br>**Source:** Project Scope | | | | | |
| **7.f.** | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature**?** | | | | X |
| **Discussion:** The site does not contain known paleontological resources and no geologic features will be impacted with the installation of test wells.<br><br>Source: Project scope, Project plans | | | | | |

| 8. **CLIMATE CHANGE**. Would the project: | | | | | |
|---|---|---|---|---|---|
| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 8.a. | Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment? | | X | | |
| **Discussion:** The San Mateo County Energy Efficiency Climate Action Plan Development Checklist identifies measures for construction equipment for new development to comply with best management practices from Bay Area Air Quality Management District guidance. Implementation of Mitigation Measure 1 will ensure GHG emissions are reduced to less than significant levels.<br>**Source:** San Mateo County Energy Efficiency Climate Action Plan | | | | | |
| 8.b. | Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | X | | |
| **Discussion:** The San Mateo County Energy Efficiency Climate Action Plan Development Checklist identifies measures for construction equipment for new development to comply with best management practices from Bay Area Air Quality Management District guidance. Implementation of Mitigation Measure 1 will reduce GHG emissions to less than significant levels.<br>**Source:** San Mateo County Energy Efficiency Climate Action Plan | | | | | |
| 8.c. | Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release signifi-cant amounts of GHG emissions, or significantly reduce GHG sequestering? | | | | X |
| **Discussion:** The Project does not include the removal of any trees.<br>**Source:** Project Location and Scope | | | | | |
| 8.d. | Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels? | | | | X |
| **Discussion:** The well sites are located approximately 150 feet from a coastal cliff or bluff. No other structures, leach fields, septic systems, or other infrastructure has been installed or is proposed.<br>**Source:** Project Location | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 8.e. | Expose people or structures to a significant risk of loss, injury or death involving sea level rise? | | | | X |
| **Discussion:** The project sites are located over 150 feet from the bluff. The project does not involve habitable space and will therefore not expose people or structures to significant risk of loss, injury, or death resulting from sea level rise.<br>**Source:** Project Scope | | | | | |
| 8.f. | Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| **Discussion:** The well sites are located in Flood Zone X (area of minimal flooding) as identified on FEMA Flood Insurance Rate Maps.<br>**Source:** FEMA FIRM Panel 06081C0434F, effective August 2, 2017 | | | | | |
| 8.g. | Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows? | | | | X |
| **Discussion:** The project site is located in Flood Zone X (area of minimal flooding) as identified on FEMA Flood Insurance Rate Maps.<br>**Source:** FEMA FIRM Panel 06081C0434F, effective August 2, 2017 | | | | | |

| **9.** | **HAZARDS AND HAZARDOUS MATERIALS**. Would the project: | | | | |
|---|---|---|---|---|---|
| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 9.a. | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)? | | | | X |
| **Discussion:** No use or transport of such materials is proposed.<br>**Source:** Project Scope | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 9.b. | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | | X |
| **Discussion:** No use of hazardous materials proposed.<br>**Source:** Project Scope | | | | | |
| 9.c. | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| **Discussion:** The project sites are located approximately 5 miles from the closest school. No hazardous emissions, materials, substances, or waste is proposed.<br>**Source:** Project Scope | | | | | |
| 9.d. | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | X |
| **Discussion:** No hazardous sites or facilities were identified within the parcel vicinity.<br>**Source:** California Department of Toxic Substances Control EnvironStar | | | | | |
| 9.e. | For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area? | | | | X |
| **Discussion:** The parcel is not located within an airport land use plan area or within 2 miles of a public airport.<br>**Source:** Project Location | | | | | |
| 9.f. | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| **Discussion:** The site is not designated or part of an emergency response plan. Construction of the well will not interfere with any regional response plans nor impede access to a tsunami evacuation route.<br>**Source:** Project Location | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 9.g. | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X |
| **Discussion:** The parcel is not located in a moderate, high, or very high fire severity area.<br>**Source:** Planning GIS Planning Map Viewer SRA-LRA Layer | | | | | |
| 9.h. | Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| **Discussion:** No housing is proposed.<br>**Source:** Project Scope | | | | | |
| 9.i. | Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows? | | | | X |
| **Discussion:** The well sites are located in Flood Zone X (area of minimal flooding) as identified on FEMA Flood Insurance Rate Maps.<br>**Source:** FEMA FIRM Panel 06081C0434F, effective August 2, 2017 | | | | | |
| 9.j. | Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | X |
| **Discussion:** The proposed project is a non-habitatable structure and is not located within a mapped dam failure inundation area.<br>**Source:** Project Location and Scope, San Mateo County General Plan Natural Hazards Map | | | | | |
| 9.k. | Inundation by seiche, tsunami, or mudflow? | | | | X |
| **Discussion:** The parcel is not located in such mapped areas.<br>**Source:** San Mateo County Geotechnical Hazard Synthesis Map, San Mateo County General Plan Natural Hazards Map | | | | | |

| **10. HYDROLOGY AND WATER QUALITY**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 10.a. Violate any water quality standards or waste discharge requirements (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))? | | X | | |
| **Discussion:** No work will be carried out within a watercourse; however, there is the potential for wastewater as part of the drilling. Implementation of Mitigation Measure 24 will reduce potential impacts to less than significant levels.<br>**Source:** Project Scope, Project Location. | | | | |
| 10.b. Significantly deplete groundwater supplies or interfere significantly with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | | X |
| **Discussion:** The project scope is limited to the construction of a domestic well to determine available water quantity and quality to serve a potential future single family residence on the site. Connection of the well for use is not included in this project scope.<br>**Source:** Project Scope | | | | |
| 10.c. Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in significant erosion or siltation on- or off-site? | | | X | |
| **Discussion:** Minor alteration of the project site area is expected for construction of the well and 4 sq. ft. pad. No watercourses are adjacent to the project site. No significant alteration of the existing drainage is anticipated.<br>**Source:** Project Location and Scope | | | | |
| 10.d. Significantly alter the existing drainage | | | | X |

| | | | | | |
|---|---|---|---|---|---|
| | pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? | | | | |
| **Discussion:** Construction of a small concrete pad associated with the well will not significantly alter drainage patterns such that flooding would result on- or off-site.<br>**Source:** Project Scope | | | | | |
| 10.e. | Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide significant additional sources of polluted runoff? | | | | X |
| **Discussion:** The surrounding rural area is not improved with storm drainage systems. Construction of the well and concrete pad will not significantly increase stormwater runoff.<br>**Source:** Project Scope | | | | | |
| 10.f. | Significantly degrade surface or ground-water water quality? | | | | X |
| **Discussion:** Well construction is regulated by the County's Environmental Health Services. The County's Well Ordinance identifies requirements for the design and construction of wells in order to exclude contamination (e.g., sanitary seal). A well permit granted by Environmental Health Services is required prior to well drilling and will ensure that well construction and operation will not degrade ground water quality.<br>**Source:** Project scope, San Mateo County Ordinance Code Chapter 4.68 *Wells* | | | | | |
| 10.g. | Result in increased impervious surfaces and associated increased runoff? | | | X | |
| **Discussion:** Minor increase in impervious surface is proposed as part of the well construction. A small 4 sq. ft. concrete pad will be installed to surround the well. This minimal concrete pad will not significantly increase runoff.<br>**Source:** Project scope, San Mateo County Ordinance Code Chapter 4.68 *Wells* | | | | | |

| **11. LAND USE AND PLANNING**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 11.a. Physically divide an established community? | | | | X |
| **Discussion:** The Project will not physically divide an established community.<br>**Source:** Project Scope | | | | |
| 11.b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| **Discussion:** Domestic wells are allowed uses subject to permitting.<br>**Source:** San Mateo County General Plan, Local Coastal Program, and Zoning Regulations | | | | |
| 11.c. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, | | | X | |
| **Discussion:** Well construction is limited to determining the quality and quantity of available water. No ongoing use of the well is proposed with this project.<br>**Source:** Project Scope | | | | |

| **12. MINERAL RESOURCES**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 12.a. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State? | | | | X |
| **Discussion:** No known mineral resources are located on the parcel.<br>**Source:** Project location, General Plan Mineral Resources Map | | | | |
| 12.b. Result in the loss of availability of a locally important mineral resource | | | | X |

| | | | | | |
|---|---|---|---|---|---|
| | recovery site delineated on a local general plan, specific plan or other land use plan? | | | | |
| **Discussion:** No mapped mineral resource recovery sites are located on the parcel.<br>**Source:** Project location, General Plan Mineral Resources Map | | | | | |

| **13.** | **NOISE**. Would the project result in: | | | | |
|---|---|---|---|---|---|
| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 13.a. | Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | X | |
| **Discussion:** Some construction-related noise is anticipated during well drilling. Due to the size of the parcel and its isolated rural location well drilling is not anticipated to generate significant noise levels to the area. All noise generating activities will be temporary in nature.<br>**Source:** Project Scope | | | | | |
| 13.b. | Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels? | | | X | |
| **Discussion:** Some construction-related vibration is anticipated during well drilling. However, due to the size of the parcel and its isolated rural location persons will not be exposed to excessive vibration.<br>**Source:** Project Scope | | | | | |
| 13.c. | For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels? | | | | X |
| **Discussion:** The project area is located over 30 miles south of Half Moon Bay Airport.<br>**Source:** Project location, Google Earth | | | | | |

| **14. POPULATION AND HOUSING**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 14.a. Induce significant population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | X |
| **Discussion:** No new homes or businesses are proposed with this project. Connection of the well to any uses is not included in this project scope.<br>**Source:** Project Scope | | | | |
| 14.b. Displace existing housing **(including low- or moderate-income housing)**, in an area that is substantially deficient in housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| **Discussion:** No housing is located on the parcel.<br>**Source:** Project Location | | | | |

| **15. PUBLIC SERVICES**. Would the project result in significant adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 15.a. Fire protection? | | | | X |
| 15.b. Police protection? | | | | X |
| 15.c. Schools? | | | | X |
| 15.d. Parks? | | | | X |
| 15.e. Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)? | | | | X |
| **Discussion:** There will be no adverse impacts to the above public services resulting from the proposed well construction. | | | | |

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| **Source:** Project Scope |

| **16. RECREATION**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 16.a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility would occur or be accelerated? | | | | X |
| **Discussion:** No neighborhood or regional parks are located in the parcel vicinity. The drilling of a well will not impact population growth or increase utilization of existing parks.<br>**Source:** Project Location | | | | |
| 16.b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | X |
| **Discussion:** No new recreational facilities are proposed nor are existing recreational facilities proposed for expansion.<br>**Source:** Project Scope | | | | |

| **17. TRANSPORTATION**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 17.a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking? | | | | X |
| **Discussion:** As discussed in Section 3.b, minor vehicle trips are expected.<br>**Source:** Project Scope | | | | |
| 17.b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) *Criteria for Analyzing Transportation Impacts*? | | | | X |

| | | | | |
|---|---|---|---|---|
| | | | | |
| **Discussion:** According to the 2021 Congestion Management Program, Highway 1 is a monitored route. Minor vehicle trips consisting of four well drilling related vehicles (e.g., dump truck, water truck, drilling rig, and mini excavator) arriving on day 1 and to remain on-site in addition to four pickup trucks arriving and leaving once per day are anticipated over the course of the well drilling operation. Given the number of vehicles and trips, the project will conflict with the 2021 Congestion Management Program.<br>**Source:** City/County Association of Governments of San Mateo County 2021 Congestion Management Program for San Mateo County, Project Scope | | | | |
| 17.c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | |
| **Discussion:** The well locations are on a vacant lot which is not a typical path of travel for vehicles or pedestrians.<br>**Source:** Project Plans | | | | |
| 17.d. Result in inadequate emergency access? | | | | X |
| **Discussion:** This project will not result in inadequate emergency access.<br>**Source:** Project Scope | | | | |

| **18. TRIBAL CULTURAL RESOURCES**. Would the project: | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 18.a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section | | | | X |

| | | | | |
|---|---|---|---|---|
| 5020.1(k) | | | | |
| **Discussion:** The project site is not listed or eligible for listing in the California Register of Historical Resources. Furthermore, the project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k).<br>**Source**: Project Location; State Parks, Office of Historic Preservation, Listed California Historical Resources; County General Plan, Background, Historical and Archaeological Resources Appendices | | | | |
| ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. (In applying the criteria set forth in Subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.) | | X | | |

**Discussion:** A Sacred Lands File and Native American Contacts List Request was sent to the Native American Heritage Commission (NAHC). A record search of the Native American Heritage Commission Sacred Lands File was completed and the results were negative. A request for a search of the California Historic Resources Information System (CHRIS) was made to the Northwest Information Center and a response was provide. The Northwest Information Center found a record of a previous study that covered a portion of the subject property. The report concluded that there were no cultural resources present in the study area.

This project is subject to California Public Resources Code 21080.3.1 which requires a tribal consultation request be sent within 14 days of determining that an application has been deemed complete or a public agency decides to undertake a project. The County of San Mateo has received a request for formal notification from the Tamien Nation of the greater Santa Clara County. A notice for consultation was sent to the Tamien Nation on January 1, 2023. The notice for consultation was received by the Tamien Nation on March 3, 2023. California Native American Tribes have 30 days from the date the tribal consultation notice was received to request consultation. As of the date of this report, formal consultation on this project has not been requested. However, in following the NAHC's recommended best practices, the following mitigation measures 25 and 26 are recommended to minimize any potential significant impacts to unknown tribal cultural resources.

**Mitigation Measure 25:** In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

**Mitigation Measure 26:** In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

**Source:** Plans; Project Location; Native American Heritage Commission, California Assembly Bill 52, California Historical Resources Information System

**19. UTILITIES AND SERVICE SYSTEMS**. Would the project:

| | | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
|---|---|---|---|---|---|
| 19.a. | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X |
| **Discussion:** The Project does not include nor necessitate wastewater treatment.<br>**Source:** Project Scope | | | | | |
| 19.b. | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing | | | X | |

| | | | | | |
|---|---|---|---|---|---|
| | facilities, the construction of which could cause significant environmental effects? | | | | |
| **Discussion:** The proposed domestic well will determine water quality and quantity to serve a future development. This project does not include installation of a water treatment facility as no development is proposed at this time. If raw water quality testing reveals a need for water treatment for future development, separate environmental review and permitting will be required at the time of such future development.<br>**Source:** Project Scope | | | | | |
| 19.c. | Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| **Discussion:** No new stormwater drainage facilities are required or proposed.<br>**Source:** Project Scope | | | | | |
| 19.d. | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | X |
| **Discussion:** Apart from the test wells no development is proposed under this project.<br>**Source:** Project Scope | | | | | |
| 19.e. | Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | X |
| **Discussion:** No wastewater treatment providers exist in the area. This project does not require wastewater treatment.<br>**Source:** Project Scope | | | | | |
| 19.f. | Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | X |
| **Discussion:** No solid waste will be generated by this project.<br>**Source:** Project Scope | | | | | |
| 19.g. | Comply with Federal, State, and local statutes and regulations related to solid waste? | | | | X |

| | | | | |
|---|---|---|---|---|
| **Discussion:** No solid waste will be generated by this project.<br>**Source:** Project Scope | | | | |
| 19.h. Be sited, oriented, and/or designed to minimize energy consumption, including transportation energy; incorporate water conservation and solid waste reduction measures; and incorporate solar or other alternative energy sources? | | | | X |
| **Discussion:** This project does not include permanent energizing of the well. Well construction is to determine water quality and quantity viability only.<br>**Source:** Project Scope | | | | |
| 19.i. Generate any demands that will cause a public facility or utility to reach or exceed its capacity? | | | | X |
| **Discussion:** No public utilities serve the parcel. The well construction will not impact existing public facilities.<br>**Source:** Project Location | | | | |

| **20. WILDFIRE**. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
|---|---|---|---|---|
| 20.a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | X | |
| **Discussion:** No revisions to the County adopted Emergency Operations Plan would be required as a result of the proposed project. The nearest public fire service is the Central County Fire Department Station 59 located approximately 4.8 miles southwest of the project site and would not be impacted because primary access to all major roads would be maintained during grading and construction of the well. The project therefore would not impair or physically interfere with an adopted emergency response or evacuation plan. The impacts would be less than significant, and no mitigation is required.<br>**Source:** Project Plans; Project Location | | | | |
| 20.b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | X | |

| | | | | |
|---|---|---|---|---|
| **Discussion:** The project is not located in a Very High/Fire Hazard State Responsibility Area as identified by the County's GIS maps, but it is located in a wildland urban interface. Any future residential development would include fire detection and extinguishing systems, water tanks, hydrants, and other fire control measures as required by the San Mateo County Fire Department. Due to the proximity of the project site to San Mateo County Fire Station 59 and the very short response time to reported fires, the likelihood of injuries or pollutant emissions due to a wildfire is minimal. Therefore, the proposed project would not exacerbate wildfire risks or expose occupants to pollutant concentrations from a wildfire, or to the uncontrolled spread of wildfire.<br>**Source:** Project Plans; Project Location; San Mateo County GIS | | | | |
| 20.c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | X | |
| **Discussion:** The project site adjoins other single-family rural residential development and does not require the installation of new roads, fuel breaks, or power lines.<br>**Source:** Project Plans | | | | |
| 20.d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | X |
| **Discussion:** Overall the parcel is relatively flat. No impervious surfaces are on site as the parcel has not been developed. The project would not introduce any structures rated for occupancy or expose the structure to significant risk from flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.<br>**Source:** Project Plans | | | | |

| 21. MANDATORY FINDINGS OF SIGNIFICANCE. | | | | |
|---|---|---|---|---|
| | ***Potentially Significant Impacts*** | ***Significant Unless Mitigated*** | ***Less Than Significant Impact*** | ***No Impact*** |
| 21.a. Does the project have the potential to degrade the quality of the environment, significantly reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | X | | |
| **Discussion:** Without implementation of the identified mitigation measures, the project could generate impacts on air quality, biological resources, cultural resources, and climate. Implementation of the recommended mitigation measures will ensure that potential adverse impacts are reduced to less than significant levels.<br>**Source:** Project Scope; Subject Document | | | | |
| 19.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | | | | X |
| **Discussion:** Staff is unaware of any approved or pending projects on this parcel or near the project site; therefore, the project is not expected to generate cumulative impacts. .<br>**Source:** Project Scope | | | | |
| 19.c. Does the project have environmental effects which will cause significant adverse effects on human beings, either directly or indirectly? | | X | | |
| **Discussion:** Given the limited project scope, timing of well drilling, and implementation of mitigation measures, the project will not result in significant impacts.<br>**Source:** Project Scope | | | | |

**RESPONSIBLE AGENCIES**. Check what agency has permit authority or other approval for the project.

| AGENCY | YES | NO | TYPE OF APPROVAL |
|---|---|---|---|
| U.S. Army Corps of Engineers (CE) | | | |
| State Water Resources Control Board | | | |
| Regional Water Quality Control Board | | | |
| State Department of Public Health | | | |
| San Francisco Bay Conservation and Development Commission (BCDC) | | | |
| U.S. Environmental Protection Agency (EPA) | | | |
| County Airport Land Use Commission (ALUC) | | | |
| Caltrans | | | |
| Bay Area Air Quality Management District | | | |
| U.S. Fish and Wildlife Service | | | |
| Coastal Commission | X | | Appeals jurisdiction |
| City | | | |
| Sewer/Water District: | | | |
| Other: County Environmental Health Services | X | | Well Drilling Permit |

**MITIGATION MEASURES**

| | Yes | No |
|---|---|---|
| Mitigation measures have been proposed in project application. | X | |
| Other mitigation measures are needed. | X | |

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

**Mitigation Measure 1:** The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

**Mitigation Measure 2:** All ground disturbance activities shall be restricted to the dry season (May 1 through September 30 ) when all habitats have dried to reduce potential for CRLF and SFGS to disperse through the Study Area.

**Mitigation Measure 3:** A qualified biologist shall survey the work site immediately before the onset of vegetation clearing or ground disturbance activities to verify if species are present and if all habitats are dry. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move the species from the work site before work activities begin. Any SFGS shall be allowed to leave the work area on their own and shall be monitored by the biologist to ensure they do not reenter the work area.

**Mitigation Measure 4:** Prior to the start of groundbreaking activities, all construction personnel will receive training on listed species and their habitats by a qualified biologist. The importance of these species and their habitat will be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the project. An educational brochure containing color photographs of all listed species in the work area will be distributed to all employees working within the Study Area. The original list of employees who attend the training sessions will be maintained by the contractor and be made available for review by the USFWS and the CDFW upon request.

**Mitigation Measure 5:** The contractor shall designate a person or employee to monitor on-site compliance with all minimization measures. The on-site monitor(s) will be on-site daily for the duration of the Project, including vegetation removal, grading and clean-up activities.

**Mitigation Measure 6:** All vehicles and equipment associated with work-activities will be parked or staged only within designated staging areas at the end of each workday or when not in use to minimize habitat disturbance and water quality degradation.

**Mitigation Measure 7:** No work shall occur within 48 hours of a rain event (over 0.25 inches in a 24-hour period). Following a rain event, a qualified biologist shall survey the work site immediately before reinitiating ground disturbance activities to verify if species are present. If CRLF or SFGS are observed, then the steps previously described for the initial pre-construction survey shall be followed.

**Mitigation Measure 8:** Any erosion control materials used shall be made of tightly woven fiber netting or similar material to ensure that CRLF and SFGS do not get trapped. This limitation shall be communicated to the contractor. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material shall not be used at the Study Area because CRLF, SFGS, and other species may become entangled or trapped in it.

**Mitigation Measure 9:** No trash shall be deposited on the site during construction activities. All trash shall be placed in trash receptacles with secure lids stored in vehicles and removed nightly from the Study Area.

**Mitigation Measure 10:** Any fueling and maintenance of equipment shall be conducted off-site and at least 50 feet from any wetland or designated Environmentally Sensitive Habitat Areas (ESHA).

**Mitigation Measure 11:** California Red-Legged Frog (CRLF) and San Francisco Garter Snake (SFGS) may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped. Therefore, all construction pipes, culverts, or similar structures that are stored at the site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the on-site monitor and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. It is also recommended these structures, if stored, are kept off the ground by being placed on pallets within the staging areas either in developed areas or within wildlife exclusion fencing. If CRLF are found and do not move out of the work area on their own, USFWS shall be contacted to determine if relocation is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, a USFWS-approved biologist will be allowed sufficient time to move them from the work site before work activities begin. If SFGS is found, it shall be allowed to passively leave the work area on its own, as determined by the on-site monitor, unless in circumstances where the animal is determined to be trapped as discussed in Mitigation Measure 12.

**Mitigation Measure 12:** To prevent inadvertent entrapment of CRLF or SFGS during construction, the on-site monitor and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one-foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the on-site biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-site biologist and/or construction foreman/manager.

**Mitigation Measure 13:** If at any time a trapped CRLF or SFGS is discovered by the on-site biologist or anyone else, the animal shall be allowed to passively leave the work area on its own, as determined by the onsite biologist. If a CRLF or SFGS is trapped, only a USFWS-approved biologist shall move the individual under the direction of USFWS and CDFW. The biologist shall also report these findings, as required, to the appropriate agencies.

**Mitigation Measure 14:** Pre-construction surveys for avian species are required for Project activities that must occur during the nesting bird season (March 1 through July 31). If active nests (containing eggs, chicks or young) are discovered during pre-construction surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Project activities may be postponed until the conclusion of the nesting season, or the biologist may perform follow-up checks to determine whether the nest is still active. Based on the findings from the survey the biologist will determine if a nesting bird management plan is required to establish a programmatic approach to nest surveys, buffer size, duration, and may include other abatement or attenuation recommendations that might allow for size reductions in the exclusion buffers, or other such measures satisfactory to the lead agency to reduce the impacts to a less than significant level.

**Mitigation Measure 15:** Any development shall avoid the Choris' popcorn flower population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, Choris' popcorn flower seeds shall be collected from the planned limit of disturbance and planted in

other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

**Mitigation Measure 16:** Any development shall avoid the harlequin lotus population within the Study Area. If avoidance is not feasible, prior to any construction activity within the Study Area, harlequin lotus seeds shall be collected from the planned limit of disturbance and planted in other suitable habitat areas as determined by the project biologist. This mitigation program would be coordinated with and commenced to the satisfaction of the County prior to the initiation of construction.

**Mitigation Measure 17:** Sea cliffs shall be avoided as part of the project. The applicant shall submit to the County for review and approval engineered drawings demonstrating that the project avoids Coastal Commission and Local Coastal Program regulated sensitive habitat areas . Based on local geology and erosion rates, a setback of at least 50 feet from the bluff edge shall be provided to protect public land and to ensure loss of sea cliffs due to Project activities will be reduced to a *less than significant* level.

**Mitigation Measure 18:** Wildlife exclusion fencing shall be placed around the perimeter of the project footprint and any staging areas to prevent animals including California Red-Legged Frog and/or San Francisco Garter Snake from entering the work area. Fencing should be a minimum of 36 inches high, with a minimum of 4 inches trenched into the ground. Fencing shall be installed under the guidance of a qualified biologist and maintained throughout the duration of ground-disturbing activities. Installation of fencing will be performed under the supervision of a qualified biologist

**Mitigation Measure 19:** In the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 50 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 50-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and are satisfactorily implemented.

**Mitigation Measure 20:** Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner shall be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98 for the naming of a Most Likely Descendant and the recommendations for disposition. Additionally, the State Native American Heritage Commission may need to be notified to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed.

**Mitigation Measure 21:** Pursuant to San Mateo County Ordinance Code 4.68.050 *Mitigation of Disturbance at Well Site*, disturbance at a well site for the purposes of construction shall be limited to the minimum amount of disturbance necessary to gain access to drill the well. Drilling fluids and other drilling materials produced or used in connection with well construction shall not be allowed to discharge onto or into streets, waterways, sensitive habitats, or storm drains. Drilling fluids shall be properly managed and disposed of in accordance with applicable local, regional, and state requirements. Upon completion of the construction, the site shall be restored as near as possible to its original condition, and appropriate erosion control measures shall be implemented. Wells

constructed during a period where winterization requirements are in effect, between October 1 and May 1, shall comply with County stormwater pollution prevention measures.

**Mitigation Measure 22:** During project construction, the applicant shall, pursuant to Chapter 4.100 of the San Mateo County Ordinance Code, minimize the transport and discharge of stormwater runoff from the construction site:

a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30. Stabilizing shall include both proactive measures, such as the placement of coir netting, and passive measures, such as revegetating disturbed areas with plants propagated from seed collected in the immediate area.

b. Storing, handling, and disposing of construction materials and wastes properly, so as to prevent their contact with stormwater.

c. Controlling and preventing the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges, to storm drains and watercourses.

d. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

e. Delineating with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.

f. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

g. Performing clearing and earth-moving activities only during dry weather.

h. Limiting and timing application of pesticides and fertilizers to prevent polluted runoff.

i. Limiting construction access routes and stabilizing designated access points.

j. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.

k. The contractor shall train and provide instruction to all employees and subcontractors regarding the construction Best Management Practices.

**Mitigation Measure 23:** In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

**Mitigation Measure 24:** In the event that tribal cultural resources are inadvertently discovered during project implementation, consultation with the affiliated Native American tribe shall be made prior to continuing any work associated with the project to ensure the resource is treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

**DETERMINATION** (to be completed by the Lead Agency).

On the basis of this initial evaluation:

| | |
|---|---|
| | I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Planning Department. |
| X | I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared. |
| | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. |

(Signature)

04/25/2023 — Date

Project Planner — (Title)