

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

DATE: August 11, 2025

TO: Agricultural Advisory Committee

FROM: Camille Leung, Planning Staff, 650/363-1826

SUBJECT: UPDATED REPORT: Consideration of a Planned Agricultural District Permit, Coastal Development Permit, and Grading Permit, to address facility and operational violations (VIO2023-00035) at Terra Gardens, including grading of 14,050 cubic yards (c.y.) associated with site clean-up, drainage/access improvements, and permitting existing work, located at 12761 San Mateo Road (Highway 92) within the unincorporated Half Moon Bay area of San Mateo County.

County File Number: VIO2023-00035, PLN2023-00334 (Smith/Guan)

PROPOSAL

Terra Gardens, an approximately 103-acre mushroom farm property, with a western portion located in the City of Half Moon Bay, but a majority of the site within the Unincorporated County, proposes the following actions, including grading of 14,050 c.y. associated with site clean-up, drainage/access improvements, restoration, and permitting of site improvements, including 54 hoop houses and a cold storage building.

PHASE 1 - CLEAN UP

- a. Completed removal of Farm Labor Housing Units (R-1 and R2) and associated utilities (City of Half Moon Bay).
- b. Completed removal of spent mushroom logs and wood debris located within riparian setback and buffer zone areas.
- c. Completed removal of diversion structure and appurtenances from Pilarcitos Creek.
- d. Remove failing greenhouses: 12,980 sq. ft greenhouse (G6) and 16,760 sq. ft. greenhouse (G7) and adjacent debris pile and concrete pad.
- e. Remove 7,260 sq. ft. greenhouse (G5; City of Half Moon Bay)

- f. Remove one substandard farm labor housing dwelling unit (R3) and removing associated utilities.

PHASE 2 – PERMITTING

- a. Legalization of fifty-four (54) existing unpermitted hoopouses, existing cold storage buildings, replace a greenhouse, and associated site improvements, including access roads and drainage channels.
- b. Minor road widening to improve fire access.
- c. New Work:
 - (1) Construction of a new Bioretention basin to treat flow from green houses and compost area before entering into Pilarcitos creek and associated vegetated swales.
 - (2) Proposed 5.3-acre restoration area (located in the western portion of the property located in the City of Half Moon Bay).
 - (3) New permanent wildlife exclusion fence to be installed between the proposed bioretention facility and compost facility to deter special status species.
 - (4) Onsite 4,389 sq. ft. Composting Facility and Waste Management Plan for spent mushroom logs.
- d. Address California Department of Fish and Wildlife (CDFW) Violations:
 - (1) Proposed three (3) new 5,000-gallon lift station storage tanks on compacted class 2 aggregate pad near bioretention area.
 - (2) Building and electrical improvements to address permit violations at existing dam pumphouse and treatment facilities (P1, P2, and P3).
 - (3) Improvements to address creek and streambed violations noted by CDFW including new diversion location, including riparian restoration at the former diversion location on Pilarcitos Creek.
 - (4) Grading and Drainage improvements to repair existing emergency outfall at reservoir to the south of hoopouses
 - (5) Close existing, unpermitted rail car bridge

DECISION MAKER

Planning Commission

QUESTIONS FOR THE AGRICULTURAL ADVISORY COMMITTEE

1. Will the development, specifically work proposed within the unincorporated County area, have any negative effect on surrounding agricultural uses? If so, can any conditions of approval be recommended to minimize any such impact?
2. What position do you recommend that Planning staff take with respect to the application for this project?

BACKGROUND

Report Prepared By: Camille Leung, Senior Planner

Applicant: Jim Guan

Owner: Half Moon Bay Properties LLC

Location: 12761 San Mateo Road (Highway 92)

APN(s): 056-270-010, -030, -060, -090, and -100 (Also involves work on parcels located in the City of Half Moon Bay)

Approximate Parcel Sizes: 056-270-010 (50.53 acres), - 030 (12.5 acres), - 060 (1 acre), - 090 (7 acres), and - 100 (31.67 acres)

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

General Plan Designation: Agriculture

Williamson Act: N/A; The subject properties are not under a Williamson Act contract.

Existing Land Use: Agriculture (Mushroom production)

Water Supply: Reservoir, Creek Diversion, and Well System

Sewage Disposal: Septic system

Flood Zone: Flood Zone X; Flood Zone A in areas adjoining Pilarcitos Creek

Environmental Evaluation: Exempt from California Environmental Quality Act (CEQA) under these sections:

- Section 15301 (*Class 1: Repair and Alteration of Existing Facilities, involving negligible or no expansion of existing or former use*): Building and electrical improvements, access road widening, new diversion location
- Section 15303 (*Class 3: New Construction of Small Structures*): Legalization of hoopouses; lift station storage tanks
- Section 15330 (*Class 30: Minor Actions to Prevent, Minimize, Stabilize, Mitigate or Eliminate the Release or Threat of Release of Hazardous Waste or Hazardous Substances*): Minor clean-up activities; new bioretention basin; onsite composting facility

Setting: The subject site and larger Terra Garden property is bordered by Highway 92 (San Mateo Road) to the northwest, rural and agricultural parcels to the north and south, open space (consisting of a relatively steep hillslope dominated by coastal scrub habitat and eucalyptus woodland to the east), and the city limits of Half Moon Bay to the southwest. Pilarcitos Creek and its associated riparian corridor intersect the north and western boundary of the subject site. The subject site includes agricultural facilities surrounded by ruderal vegetation, eucalyptus groves, segments of Pilarcitos Creek and its associated riparian corridor, and an onstream reservoir. Agricultural facilities include glass greenhouses and newer hoopouses, the pump station, and related appurtenances; the former labor housing was primarily in the northernmost extent of the subject site.

Chronology:

<u>Date</u>	<u>Action</u>
2014-2023	- Per aerial maps, the 54 hoopouses were built in stages overtime between 2014 and 2022.
April 10, 2023	- Code Compliance Section staff issues Notice of Violation to property owner, based on violations observed during joint inspections. The NOV identified violations of building code (electrical, plumbing, fire) associated with the pump house/filtration room and unpermitted development; stormwater violations associated with the used mushroom compost storage and site erosion; and nuisance and hazardous conditions associated with general site maintenance.

- May 18, 2023 - CDFW staff issue a Notice of Violation of Fish and Game Code to property owner, based on violations observed during joint County-CDFW inspections. The California Department of Fish and Wildlife violations involved an unpermitted structure for water diversion from Pilarcitos Creek and storage of hazardous materials within proximity of Pilarcitos Creek.
- October 26, 2023 - Applicant applies for subject permit. Subsequently, application is deemed incomplete for the applicant to address Planning and review agency comments.
- January 27, 2025 - Application deemed complete, with submittal of revised civil plans and biological report.
- April 14, 2025 - Agricultural Advisory Committee continued its review to May 2025 AAC meeting, requesting an analysis of impact of hoop houses/mushroom operation to underlying prime soil (productivity, cleanliness) for the purpose of determining whether a condition should be added to require removal of hoop houses and remediation of soil after use has ended; and 2) a presentation of project by Owner. Public comments re: use of grading spoils on-site, use of composting facility, extent of wildlife exclusion fencing, and monitoring of remediation work, were received.
- June 20, 2025 - Applicant submits revised project documents, including plans and biological report. Documents submitted describe minor changes to exclusion fencing and clarifications to status of buildings proposed for demolition.
- August 11, 2025 - Agricultural Advisory Committee meeting.

Will the project be visible from a public road?

Yes, the project includes permitted the hoop houses constructed on the northeast side of the property, of which a portion are visible from Highway 92, others are located in an area that is screened by eucalyptus trees which line the south side of the highway. Views of the hoop houses from Highway 92 are included in Attachment E.

Will any habitat or vegetation need to be removed for the project?

Yes, approximately 0.22 acres of riparian habitat, and an additional 1.15 acre of riparian buffer area were impacted by project operations. The proposed habitat restoration area, approximately 5.3 acres located on the west side of the processing areas as shown in Attachment 4 (Figure 6 Proposed Restoration Plan Area) in the City of Half Moon Bay, is proposed in this area to offset the impacted areas.

Is there prime soil on the project site?

Yes, as shown in Attachment F, the areas of mapped prime soils on the property are largely developed with existing and proposed greenhouses and hoop houses. The hoop houses are not soil dependent (dependent on imported mushroom compost), but do not have building foundations.

DISCUSSION UPDATE FOR AUGUST 11, 2025 AAC MEETING

Analysis of Impacts of Mushroom Operation on Prime Soils

At its meeting of April 14, 2025, the AAC requested an analysis of the impact of hoop houses/mushroom operation to underlying prime soil (productivity, cleanliness) for the purpose of determining whether the condition should be added.

The applicant took one sample at 6-12" depth from each of 4 hoop houses and then an additional sample outside of the hoop houses. All samples were taken within the prime agricultural land as shown on the County maps. Staff referred the test results to staff at the County's San Mateo County Groundwater Protection Program and the County's Agriculture Ombudsman for review.

After review focused on the presence of hazardous chemicals or heavy metals, staff at the County's San Mateo County Groundwater Protection Program did not have any concerns based on the information provided.

After review, the Agriculture Ombudsman determined that the concentration of certain nutrients in the greenhouses and fields is likely related to the mushroom growing substrate, specifically from substrate either falling onto the ground, leaching when irrigated, or possibly from discarded mushroom remnants. While the owner mentioned that only water is used on the substrate, the substrate itself comes preloaded with nutrients, so that can affect soil quality. That said, the Agriculture Ombudsman concluded that none of the nutrient levels are particularly concerning and can be remediated if there is a specific crop goal in mind.

While concerns of soil contamination or damage from mushroom production may be put aside, Planning staff still recommends the removal of most if not all of the hoop houses upon a significant lapse in use (one year or more) to encourage and enable the use of prime soils land for soil dependent agriculture in the future. This requirement would run with the land (apply to this owner or future owners), to be in better compliance with specific PAD criteria which requires encroachment by development onto agricultural lands to be minimized and to locate structural uses away from prime agricultural soils, where possible.

Discussion of Other Issues Identified at the April AAC Meeting

In response to public comments and AAC discussion, the applicant clarified that, as proposed and to be conditioned by staff, proposed grading would largely be balanced on-site with 1,900 c.y. of remaining cut spoils to be off-hauled, use of the composting facility would compost waste generated from on-site only, installation of wildlife exclusion fencing would be limited to between the proposed bioretention facility and the compost facility to deter entry by special status species, and, that remediation work would be monitored by the County and CDFW staff.

DISCUSSION FROM APRIL 14, 2025, AAC MEETING

A. KEY ISSUES

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

1. Compliance with Planned Agricultural District (PAD) Regulations:

The project complies with the applicable development standards and requirements, discussed below:

a. Development Standards

As shown in the table below, the project conforms to Section 8.106 (PAD Regulations) of the San Mateo County Zoning Regulations, which regulate the height and setbacks of structures. The buildings to be permitted include:

- (1) 54 Hoophouses (H1-H54)
- (2) Cold storage buildings (G3, G4, and G4A)
- (3) Replace a greenhouse (G8)

	PAD Development Standard	Proposed Buildings
Minimum Front Setback	50 feet	487 feet
Minimum Side Setbacks	20 feet	525 feet
Minimum Rear Setback	20 feet	450 feet
Maximum Building Height	36 feet	12 feet-6 inches (G3) 18 feet (G4) 12 feet (G4A) 13 feet-8-inches (Hoop houses)

b. PAD Permit Requirements

The project conforms to the substantive criteria for the issuance of a PAD Permit, as applicable and outlined in Section 6355 of the Zoning Regulations. As proposed and conditioned, the project conforms to the following applicable policies.

(1) General Criteria

- (a) *The encroachment of all development upon land which is suitable for agricultural uses shall be minimized.*

While the 54 new hoopouses, cold storage, and greenhouse buildings to be permitted were built in an undeveloped area of mapped prime soils, the hoopouses follow the pattern of development of the site, aligning with existing greenhouses (which are also on prime soils) and immediately abutting large undeveloped, sloped areas of the property to the east. Its location clusters development with existing development and natural obstacles (topography; heavy vegetation) to farming and preserves a large area of agricultural land to the north (between hoop houses and Pilarcitos Creek).

The hoopouses are not soil dependent (dependent on imported mushroom compost), but do not have building foundations, and can, therefore, be removed easily from the site. Planning staff had recommended a condition of approval that would require the owner, when the hoopouses are no longer being used, remove the hoopouses and that the land be restored for agricultural production. While the current owner operates a mushroom farm that is not soil dependent, this would allow the use of the converted prime soils land for soil dependent agriculture in the future.

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

The 54 new hoopouses follow the pattern of development of the site, aligning and clustering with existing greenhouses and abutting large undeveloped, sloped areas of the property to the east.

- (c) *Where possible, structural uses shall be located away from prime agricultural soils.*

As discussed in section (a) above, while hoopouses are on prime soils, Planning staff recommends a condition that, when the hoopouses are no longer being used, that the buildings be removed and that the land restored for agricultural production.

(2) Water Supply Criteria

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

The project involves removal of an unpermitted diversion structure, and improvements to address creek and streambed violations noted by CDFW, including a new diversion location at Pilarcitos Creek. At the point of diversion, once creek flow rates exceed the minimum requirements per the water rights license (State Water Board Division of Water Rights Permit 17849; a Compliance and Effectiveness Monitoring Plan will be implemented in accordance with Section 1600), water will overtop the weir plate located within the screen riser and then flow into the pipe buried in the bank. Other sources of water to support agricultural operations include an existing well and reservoir.

Per the Project Biologist, water from the reservoir drainage feature will be redirected to the Restoration Area, consistent with historical conditions, via the Southern Vegetated Swale; water from the swale will be allowed to fan out into the restoration area where it can percolate into the ground to provide recharge to Pilarcitos Creek and its surrounding riparian and wetland habitats, and to increase soil moisture within the riparian setback and nearby upland refugia for sensitive wildlife.

2. Compliance with Local Coastal Program (LCP) Policies:

The project complies with the following applicable LCP Policies:

a. Agricultural Component

Policy 5.5.b (*Permitted Uses on Prime Agricultural Lands Designated as Agriculture*) allows for conditional permitting of non-soil-dependent greenhouses and nurseries and uses ancillary to agriculture.

Policy 5.8 (*Conversion of Prime Agricultural Land Designated as Agriculture*) prohibits conversion of prime agricultural land within a

parcel to a conditionally permitted use unless compliance with the following criteria can be demonstrated (Staff discussion follows each criteria):

- (1) That no alternative site exists for the use: The hoophouses, cold storage, and greenhouse buildings to be permitted have already been constructed and are clustered with existing development and immediately abut large undeveloped, sloped areas of the property to the east, preserving as much flat agricultural land as possible to the northwest along Pilarcitos Creek/Highway 92.
- (2) Clearly defined buffer areas are provided between agricultural and non-agricultural uses: All proposed and existing uses at the site are agricultural or accessory to agriculture.
- (3) The productivity of any adjacent agricultural land will not be diminished: No uses are proposed on adjacent agricultural land. Used mushroom compost logs that were once stored on agricultural lands will be stored and processed into compost at a new onsite Compost Waste Management Facility. The new enclosed composting and storage facility onsite would accommodate 200 tons of spent mushroom and other green compost materials. Operational procedures and general guidelines are also included in the plan details (Sheet 6.0, Detail 4 of Attachment B), and serves as the "Waste Management and Soil Management Plan" requested by regulatory agencies. This facility is located outside riparian and wetland buffers.
- (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. The project does not involve a public service and facility expansion.

b. Biological Component

LCP Policy 7.8 (*Designation of Riparian Corridors*) establishes riparian corridors for all perennial and intermittent streams and lakes and other bodies of freshwater in the Coastal Zone. The following existing structures would be permitted within the riparian corridor for Pilarcitos Creek, where removal of the structures would be more damaging to habitat than retaining the structures:

- (1) Maintenance of a small section of a cold storage building (G3)
- (2) Maintenance of an existing rail car bridge to be closed.

LCP Policy 7.11 (*Establishment of Riparian Buffer Zones*) establishes on both sides of riparian corridors, from the “limit of riparian vegetation” extend buffer zones 50 feet outward for perennial streams, such as Pilarcitos Creek. The following work is proposed within the riparian buffer zone, where removal of the structures would be more damaging to habitat than retaining the structures:

- (1) Maintenance of a cold storage building (G3)
- (2) Removal of an unpermitted fire access road located in the western portion of the property in the City of Half Moon Bay.

LCP Policies 7.13 and 7.17 (*Performance Standards in Wetland and Wetland Buffer Zones*) requires that development permitted in wetlands minimize adverse impacts during and after construction, such as elevating paths so as not to impede movement of water, limiting construction to daylight hours, minimizing outdoor lighting, and replacing removed vegetation. These performance standards will be added as conditions of approval. The following work is proposed within the wetland buffer zone:

- (1) Approximately 160 linear feet of the vegetated swale (necessary to treat runoff from the south side of the hoopouses) is located within the wetland buffers; of that, 40 feet is located within the existing wetland.

c. Visual Component

Policy 8.31 (*Regulation of Scenic Corridors in Rural Areas*) applies Primary Scenic Resources Areas Criteria of the Resource Management (RM) Zoning District as specific regulations protecting scenic corridors in the Coastal Zone, including those listed below:

- (1) Public views within and from Scenic Corridors shall be protected and enhanced, and development shall not be allowed to significantly obscure, detract from, or negatively affect the quality of these views. Policy 8.31 requires a minimum setback of 100 feet from the right-of-way line, and greater where possible; however, a 50-foot setback may be permitted when sufficient screening is provided to shield the structure(s) from public view. The project includes permitting the hoopouses constructed on the northeast side of the property, located approximately 600 feet from Highway 92, of which a portion are visible from Highway 92, others are located in an area that is screened by eucalyptus trees which line the highway. Views of the hoopouses from Highway 92 are included in Attachment E.

No mitigation or screening is necessary due to the distance of the buildings from Highway 92, that views of these agricultural buildings are consistent with existing agricultural views along Highway 92, and due to the presence of intervening, screening trees along Highway 92.

ATTACHMENTS

- A. Vicinity Map
- B. Project Plans, revised June 20, 2025
- C. County and CDFW Notices of Violation
- D. Biological Report Addendum with Stormwater Management Plan and Habitat Restoration and Mitigation Monitoring and Reporting Plan, revised June 20, 2025
- E. Views of the hoopouses from Highway 92
- F. Prime soil map for subject property

ATTACHMENT A: VICINITY MAP (AERIAL MAP SHOWS COUNTY/CITY LIMITS)





COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

NOTICE OF VIOLATION

Issue Date: 04/10/2023
Case Number: VIO2023-00035
Issued By: John Bologna/Senior Code Compliance Officer
Phone: (650) 363-4825
Email: jbologna@smcgov.org

Issued to Property Owner:
Half Moon Bay Properties LLC aka California Terra Gardens
12950 San Mateo Rd.
Half Moon Bay, CA 94019

Assessor's Parcel Number: 056270010, 056321010
Zone: PAD/CD

RE: 12950 San Mateo Rd., Half Moon Bay, CA 94019
12761 Highway 92, Half Moon Bay, CA 94019

The staff members of City of Half Moon Bay (Joe Butcher, John Doughty, Jill Ekas, Maziar Bozorginia); 4Leaf, Inc. (Farris Hix, Mike Leontiades); California Dept. of Fish and Wildlife (Gabrielle Stauffer, Amanda Culpepper, Will Kanz); Cal Fire (John Riddell, Austin Seely); County of San Mateo Environmental Health Services or EHS (Aris Veloso, Ed Diaz, Emily Pfeifer, Dirk Jensen, Allen Chiu), Building Division (Fred Lustenberger), District Attorney's Office (Kevin Raffaelli, James Haggerty), and Code Compliance Division (Tim Sullivan, John Bologna, Eleonor Hilario, Kevin Thorpe, Glenn Morton) conducted joint inspections on January 31, 2023, February 9, 2023, and February 16, 2023, and observed/noted the following violations:

1. Violation: Pump House/Filtration Room/Pond

- Corroded 3-phase electrical panel in pump house needs to be upgraded/corrected immediately
- Chlorine treatment of pond water
- New pipes added without a permit
- Filtration Room – not permitted

Code: CA Electrical Code 89.108.4, et al., ART.90.2 et al.

Code: CA Plumbing Code Sections 1.8.3-1.8.5

Code: SMC Ordinance No. 4873 Building Regulations Section 9006

- **Further directions concerning water treatment are forthcoming from CA Department of Fish and Wildlife.**

2. Violation: Mushroom Compost Storage

- Per Planning Division, compost needs to be properly disposed of
- Per Cal Fire, piles need to be turned over occasionally and cannot be more than 4' high

Code: 2019 CA Fire Code

Code: Chapter 4.100 Stormwater Ordinance of County Code

Code: SMC Ordinance No. 4273 Building Regulations Section 9281 *et al.*

3. Violation: Hazardous/Unsafe Conditions

- Piles of wood construction debris need to be removed
- Remove metal debris
- Hole in the ground close to dilapidated, single-family house needs to be covered
- Plastic/wood bridge connectors/walkways to greenhouses need to be building code standard
- Trash/junk/debris need to be removed
- Four containers (next to the greenhouses) need safety lock mechanisms and egress
- Dilapidated, abandoned, single-family house needs to be securely boarded. A building permit is needed to legalize or demolish the structure
- Derelict greenhouse structures need to be demolished or restored
- Hoop house greenhouses must have approved egress
- Diesel fuel tank installed inside building structure (work with CalFire in correcting this violation)

Code: SMC Sec. 1.12.010 (4) Nuisance

Code: SMC Ordinance No. 4873 Building Regulations Section 9006

Code: CA Building Code Section 1006.2 *et al.*

Code: CA Building Code Section 1008 *et al.*

Code: CA Building Code Section 1009 *et al.*

Code: CA Building Code Section 1010 *et al.*

Code: CA Building Code Section 11B-401.1 *et al.*

Code: CA Building Code Section 116 *et al.*

Code: CA Fire Code Section 5704

4. Violation: Trailers

- Three vacant, not connected, abandoned fifth wheel trailers will be removed - located on the east side of the property near the dilapidated house

Code: SMC Sec. 1.12.010 (4) Nuisance

Code: SMC Sec. 2.60.040 – IPMC 302.8 Motor Vehicles

5. Violation: New Construction Without Permits

- New refrigeration unit with new electrical panels

Code: CA Building Code Section 1.8.4.1 *et al.*

Code: CA Building Code Section 105 *et al.*

Code: SMC Ordinance No. 4873 Building Regulations Section 9006

6. Violation: Erosion

- Qualified engineer needs to assess soil erosion behind pump house

Code: CA Building Code Section 116 et al.

7. Violation: Miscellaneous

- Electric meter not in use needs to be disconnected (meter #1NG10064560281009; 00135002009FA92D) - located on the east side of the property near the dilapidated house

Code: SMC Ordinance No. 4873 Building Regulations Section 9006

NOTE: Reports/Violations from CalFire and San Mateo County Environmental Health Services Department **MUST** be corrected by indicated compliance due dates. Please work with each department/agency individually.

Required Corrections:

Please contact me no later than **04/24/2023** so we can set up a meeting to discuss the required corrections with Terra Gardens property owners and the Terra Gardens Licensed Design Professional (Architect/Engineer).

Provide **Building Division** the following:

- A Site and Floor Plan of the complex from a Licensed Design Professional (Architect/Engineer)
- Include in the plan how you are going to address the above violations
- All violations related to structural/building, mechanical, plumbing, electrical **MUST** be corrected and done with permits

Submit digital plans to the Building Division at buildingcounter@smcgov.org.
If you have any questions, the Building Division can be reached at 650-599-7311.

Violations MUST be corrected by 10/10/2023. The County may conduct a reinspection after that date. If the violations are not corrected by the date shown above, Administrative Citations ranging from \$100 to \$500 per violation per day or more severe enforcement remedies may be implemented.

This Notice of Violation may be recorded against the property with the San Mateo County Recorder's Office.

All building permits are to be applied for online at aca-prod.accela.com/smcgov/Welcome.aspx

The main business operation of California Terra Garden is located within the jurisdiction of San Mateo County, which has adopted a “Red Tag” ordinance. See SMC Code of Ordinances Chapter 3.108 (Property Owner Obligations With Respect to Tenants Displaced from Unsafe or Substandard Units). Under the County’s ordinance, you have liability and obligations for relocation expenses for having allowed illegal and unsafe housing for these individuals. The conditions and relocation expenses will be provided at a later date.

Thank you for your cooperation,

John Bologna

Senior Code Compliance Officer
County of San Mateo

Planning & Building Department
455 County Center, 2nd Floor

(650) 363-4825

Email: jbologna@smcgov.org

www.smcgov.org/planning



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



May 18, 2023

Mr. Jim Guan
California Terra Garden, Inc.
12761 San Mateo Road
Half Moon Bay, California 94019
Jim.Guan@ca-terragarden.com

Subject: Notice of Violation of Fish and Game Code Section 1602, 5650, 5652, and 5937

Dear Mr. Guan:

On February 16, 2023, California Department of Fish and Wildlife (CDFW) environmental scientific staff and a wildlife officer, along with San Mateo County staff, conducted a site inspection with your permission at the property at Assessor's Parcel Numbers (APN) 056-270-100, 056-270-060, and 056-270-010, managed by California Terra Garden, Inc. (Property). The Property is associated with the address 12761 San Mateo Road in unincorporated San Mateo County. During that visit, CDFW staff observed activities that are in violation of Fish and Game Code sections 1602, 5650, 5652, and 5937.

CDFW Observations at the Property

During the site inspection, CDFW staff observed evidence of water diversion from Pilarcitos Creek, associated with State Water Resources Control Board (SWRCB) statement of use S022526. Reported water diversion associated with statement of use S022526 includes diversion during summer month low flow periods in 2021, 2019, 2015, 2014, 2013, and 2012. Water diversion occurred near the southwest side of the Property where broken water diversion and other equipment along Pilarcitos Creek was observed (Figure 1). Mr. Guan stated this diversion was active prior to the large storm events in December 2022 and January 2023 when it is believed the diversion system broke. CDFW staff viewed a pump station, electrical panel, as well as a green pipe entering Pilarcitos Creek (Figure 2). Alongside the pump station was a steep-walled open pit lined with wooden boards (Figure 3) and a container with old pump hoses that matched the diameter and color of the pipe that entered Pilarcitos Creek (Figure 4). Other hoses, pipes, trash, and debris were observed within the stream banks of Pilarcitos Creek. Some of those pipes and debris were buried under sand and woody debris.

CDFW staff observed a large pile of organic mushroom waste piled approximately 150 feet from Pilarcitos Creek (Figure 5). Stormwater runoff appeared to have flowed from the organic waste down the earthen path to Pilarcitos Creek.

Mr. Jim Guan
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Mr. Guan informed CDFW staff that diverted water from Pilarcitos Creek was pumped to a reservoir at the southeastern end of the property, associated with SWRCB appropriative water right application A025407. CDFW staff visited the reservoir and associated pump house and 5,000-gallon water storage tank (Figure 6). CDFW staff walked the perimeter of the reservoir and observed an unnamed tributary that was draining into the reservoir (Figure 7). The reservoir is acting as an on-stream reservoir with an earthen dam, typically preventing the unnamed tributary from entering Pilarcitos Creek. However, when the reservoir reaches a certain elevation, it begins flowing into a metal culvert on the embankment of the earthen dam (Figure 8). From the metal culvert the water travels into a concrete-lined modified tributary with plastic filter fabric for approximately 350 feet, adjacent to buildings where mushrooms are grown (Figure 9). The water flows through various plastic culverts in the modified concrete tributary until it passes through a final 26-inch corrugated metal pipe road crossing and exits into an earthen channel, a modified tributary, for another approximately 400 feet before entering Pilarcitos Creek (Figure 10). All irrigation run-off from mushroom-growing activities appears to eventually enter the earthen channel. CDFW staff observed a three-spined stickleback (*Gasterosteus aculeatus aculeatus*) (Figure 11) in the earthen channel approximately 250 feet upstream of Pilarcitos Creek. No flow measurements were taken during our site visit on February 16, 2023. CDFW staff observed inflow into the on-stream reservoir, but did not observe any streamflow below the reservoir.

CDFW staff walked to the northern end of the Property where, according to Mr. Guan, an old slaughterhouse used to be. CDFW staff observed large piles of wood, including some pressure-treated lumber from the recently demolished building approximately 75 feet from Pilarcitos Creek (Figure 12). CDFW staff also observed trash and debris in Pilarcitos Creek, as well as an existing railroad flatcar bridge over the stream.

Violations observed by CDFW are further summarized in Table 1 and the map in Figure 13.

Fish and Game Code Section 1602

Fish and Game Code section 1602 requires a person to notify CDFW before: 1) substantially diverting or obstructing the natural flow of a river, stream, or lake; 2) substantially changing the bed, channel, or bank of a river, stream, or lake; 3) using any material from the bed, channel, or bank of a river, stream, or lake; and/or 4) depositing or disposing of debris, waste, or material containing crumbled, flaked, or ground pavement where it may pass into a river, stream, or lake. Hence, any person who engages in an activity subject to section 1602 without first notifying CDFW violates section 1602.

In CDFW's view, notification under Fish and Game Code section 1602 was required for the water diversion, installation and maintenance of the on-stream reservoir, placement

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of waste and debris along the banks of Pilarcitos Creek, as well as the installation of a railroad flatcar bridge. However, CDFW was unable to locate a Lake and Streambed Alteration (LSA) Notification or LSA Agreement for those activities. The location and brief description of the items listed above are provided in Table 1.

Fish and Game Code Section 5937

Fish and Game Code section 5937 requires the owner of any dam to allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish¹ that may be planted or exist below the dam.

The Property's on-stream reservoir that dams the unnamed tributary to Pilarcitos Creek must ensure sufficient water downstream to keep fish in good condition.

Fish and Game Code Sections 5650 and 5652

Fish and Game Code sections 5650 and 5652 make it unlawful to pollute waters of the state². Section 5650 makes it unlawful to deposit in, permit to pass into, or place where it can pass into waters of the state any substance or material deleterious to fish, plant life, mammals, or bird life, including, but not limited to gasoline, oil, petroleum products, and sediment. Section 5652 makes it unlawful to deposit in, permit to pass into, or place where it can pass into waters of the state, or to abandon, dispose of, or throw away, within 150 feet of the high water mark of the waters of the state, any garbage, refuse, or waste, among other materials.

The Property contains waters of the state, including the streamflow in the unnamed tributary to Pilarcitos Creek and within Pilarcitos Creek. CDFW staff observed placement of trash and debris along the banks of Pilarcitos Creek, which violates section 5650 and/or 5652, as further described in Table 1.

¹ Fish, as defined in Fish and Game Code section 45, means a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals.

² Pursuant to Fish and Game Code section 89.1 and Water Code section 13050 subdivision (e), "Waters of the state," means any surface water or groundwater, including saline waters, within the boundary of the state."

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TABLE 1 Fish and Game Code Section Violations at the Property				
Site ID	Approximate coordinates	Description of Activity	Fish and Game Code Section	Description of Violation
WS-1	37.4707, -122.4206	Water diversion from Pilarcitos Creek.	1602(a)	Substantial diversion of streamflow.
PP-1	37.4708, -122.4709	Piles of hoses, PVC, and plastic pipes.	5652(a)	Trash and debris placed within 150 feet of the high water mark of Pilarcitos Creek.
PP-2	37.4710, -122.4201	Mushroom waste found within the Pilarcitos Creek channel.	5650(a)(6)	Deleterious nutrient pollution from organic matter placed where it has/can pass into waters of the state.
WSt-2	37.4711, -122.4170	Earthen dam used to impound streamflow from an unnamed tributary and to store diverted water from Pilarcitos Creek.	1602(a)	Substantial obstruction of streamflow; Substantial alteration of a stream channel.
		Water diversion located within the on-stream reservoir	1602(a)	Substantial diversion of streamflow.
		On-stream reservoir operated without any infrastructure to release water downstream.	5937	Insufficient flow to keep fish in good condition.
PL-1	37.4716, -122.4189	Modified unnamed tributary to Pilarcitos Creek, including concrete, geotextile lining, multiple culverts, and channelization	1602(a)	Substantial alteration of a stream bed, bank, and channel.

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TABLE 1 Fish and Game Code Section Violations at the Property				
Site ID	Approximate coordinates	Description of Activity	Fish and Game Code Section	Description of Violation
PL-1	37.4716, -122.4189	Hoop-houses containing mushroom growing infrastructure built along the top of a streambank and along a stream. Concrete pad built along a stream. Porta potty placed over a stream.	1602(a)	Substantial stream channel alterations.
			5650(a)(6)	Deleterious organic materials placed where they can pass into waters of the state.
PP-3	37.4739, -122.4168	Wood waste including pressure treated lumber, as well as metal and trash piled and strewn on the ground.	5650(a)(6)	Deleterious substances/materials placed where it can pass into waters of the state.
			5652(a)	Wood and debris placed within 150 feet of the high water mark of waters of the state.
PP-3	37.4741, -122.4169	Railroad flatcar bridge installed over Pilarcitos Creek	1602(a)	Substantial stream channel alteration.
Violation Summary				
Fish and Game Code Section			Count	
1602			6	
5650			3	
5652			2	
5937			1	
Total			12	

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Impacts to Fish and Wildlife Resources

The Property is located in the San Gregorio Creek-Frontal Pacific Ocean watershed (Hydrologic Unit Code 10) and consists of both developed and undeveloped land, including vegetative communities such as red alder (*Alnus rubra*) forests, coyote brush (*Baccharis pilularis*) scrub, and eucalyptus (*Eucalyptus* spp.) groves. Pilarcitos Creek and the unnamed tributary to Pilarcitos Creek on the Property are fish-bearing streams that provide habitat for a variety of aquatic and terrestrial species. Pilarcitos Creek supports the Central California Coast Distinct Population Segment of steelhead (*Oncorhynchus mykiss irideus* pop. 8), federally listed as threatened pursuant to the Endangered Species Act (ESA). In addition, the Property is within the range of the San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), federally and state listed as endangered pursuant to the ESA and the California Endangered Species Act (CESA) and a state Fully Protected species, and the federally threatened California red-legged frog (*Rana draytonii*) is likely to occur on or near the Property. These are just some of the species that are likely to be present on or near the Property and must be considered and appropriately avoided during any activities at the site.

The violations of Fish and Game Code identified above have adversely affected fish and wildlife resources on and near the Property by altering and reducing streamflow through diversions, obstructing streamflow, degrading riparian habitat through placement of trash and debris, and polluting streams with organic and inorganic waste.

Steps to Address the Violations

Immediate Actions

In order to avoid the potential for incurring additional Fish and Game Code violations, you will need to immediately:

- 1) Stop all diversions from Pilarcitos Creek if you have not done so already.
- 2) Remove all loose trash and debris that exists within 150 feet from the ordinary high water mark of Pilarcitos Creek.
- 3) Prevent mushroom waste runoff from entering Pilarcitos Creek.
- 4) Provide CDFW with evidence these immediate actions have been completed within **15 days** of receipt of this letter by submitting via email to Will.Kanz@wildlife.ca.gov or mailing to the CDFW Fairfield regional office.

Additional Actions and LSA Notification

CDFW requests you seek LSA permit compliance by submitting a complete 1602

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notification package via EPIMS: <https://epims.wildlife.ca.gov/index.doc> with correct notification fees for activities discussed below. CDFW requests the complete 1602 notification be submitted by **July 1, 2023**, unless otherwise approved in writing by CDFW. This notification should include itemized project activities by location, with corresponding fees.

- 1) Water diversion infrastructure built without a prior 1602 notification used to divert Pilarcitos streamflow under riparian basis of right S022526, (37.4707, - 122.4206). As part of a complete LSA notification for this activity, include if any actions will be needed to repair the damaged water diversion equipment at Pilarcitos Creek. If the damaged water diversion equipment will not be repaired, it should be completely removed. Any future water diversion activities from Pilarcitos Creek must obtain 1602 authorization prior to diverting streamflow. In order for CDFW to evaluate potential adverse impacts to fish and wildlife resources, supporting information regarding water diversion, timing, rates and volumes will be needed.
- 2) On-stream reservoir built and operated without a prior 1602 notification. The reservoir should be evaluated by a qualified professional to determine any modifications or upgrades necessary to protect fish and wildlife including downstream resources. Examples could include installation of plumbing infrastructure to bypass streamflow, spillway repairs, and/or development of an invasive species management plan.
- 3) Water diversion infrastructure built without a prior 1602 notification used to divert out of the reservoir.
- 4) Rail car bridge built without a prior 1602 notification. As part of a complete LSA notification for this activity, include an assessment of the bridge by a licensed engineer and any actions needed to meet engineering standards.
- 5) Hoop-houses and a concrete pad placed on-top of an unnamed stream without a prior 1602 notification.
- 6) Multiple culverts placed within a concrete channelized unnamed stream without a prior 1602 notification. As part of complete LSA notification, these culverts shall be assessed by a qualified professional who can determine if the culverts are properly sized to meet the 100-year flood flow and debris. The qualified professional should be evaluated for placement and function.

In addition, as part of the complete LSA notification package, CDFW requests a property remediation plan be included for more long-term actions needed beyond the immediate actions listed above. The remediation plan should include the following:

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- 1) Completely cover any steep-walled holes or pits such as those identified in Figure 3. Prior to covering the holes or pits, they must be thoroughly inspected for trapped wildlife. Wildlife shall not be able to enter the hole or pit once covering is completed.
- 2) Removal of all remaining trash and debris that exists within 150 feet from the ordinary high water mark of Pilarcitos Creek. This shall include any buried trash and debris (i.e., buried pipes that are no longer being used), as well as treated wood, and all other waste, debris, etc.
- 3) Removal of mushroom waste that is within 150 feet of the ordinary high water mark of Pilarcitos Creek and any actions needed to prevent mushroom waste runoff from entering Pilarcitos Creek.


If you have not already done so, CDFW recommends you seek assistance from a qualified professional to assist with immediate actions and the LSA notification, as well as potentially other permits from agencies with permitting authority. Additional environmental review and permitting may include, but are not limited to, the California Environmental Quality Act environmental review process, County of San Mateo, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, SWRCB, and the San Francisco Bay Regional Water Quality Control Board. Depending on specific project infrastructure and needs, various professional disciplines may be needed to assist such as a restoration specialist, consulting biologist, engineering geologist and/or hydrologist. A qualified professional can assist with appropriate project designs for both long-term and short-term actions needed to address the violations identified in Table 1.

Please submit the notification and fee by **July 1, 2023**.

Conclusion

CDFW appreciates your cooperation. If you have any questions regarding this letter, please contact Will Kanz, Environmental Scientist, via email at Will.Kanz@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:

B77E9A6211EF486...
Erin Chappell
Regional Manager
Bay Delta Region

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ec: **California Department of Fish and Wildlife**

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State Water Resources Control Board

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Regional Water Quality Control Board

Tahsa Sturgis, Tahsa.Sturgis@waterboards.ca.gov

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FIGURES



Figure 1. Broken equipment at the bank of Pilarcitos Creek, associated with water diversion and pumping, at WS-1.

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Figure 2. View of debris located at WS-1 includes an electrical panel within 150 feet of

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Pilarcitos Creek (top). A green pipe (circled in red) is visible in Pilarcitos Creek partially buried in sediment and debris (bottom). The pipe was previously associated with a diversion from Pilarcitos Creek.



Figure 3. Steep-walled hole or pit next to the water diversion system (WS-1).

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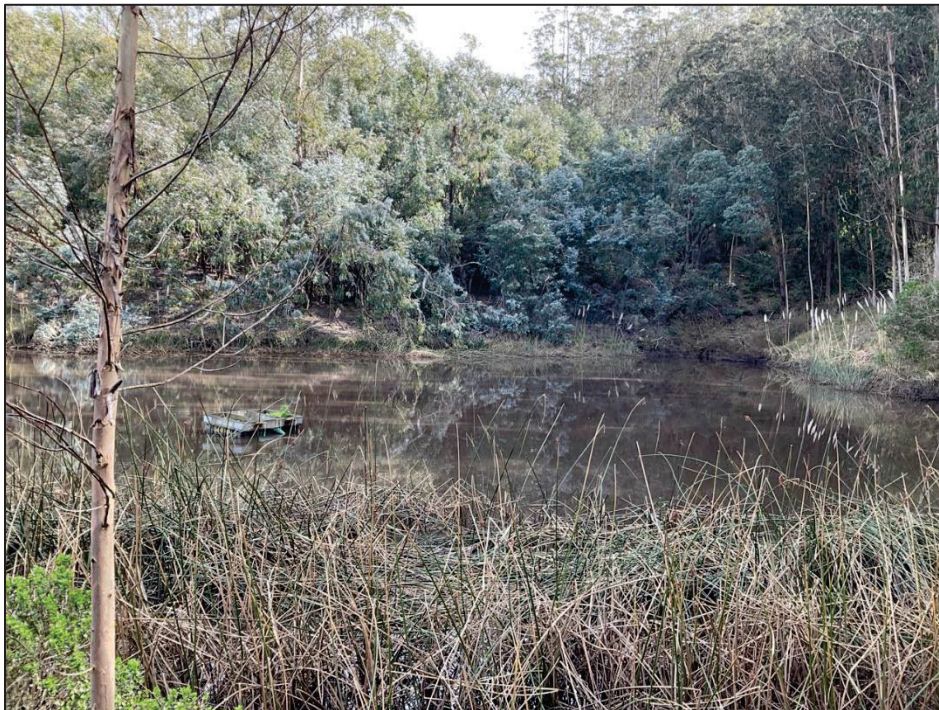
Figure 4. Old pipes and debris within 150 feet of Pilarcitos Creek located at PP-1.

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Figure 5. View of a portion of the mushroom waste pile in the foreground at PP-2 (on the right of the red line). Pilarcitos Creek flows in the background along the tree line, within 150 feet.

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Figure 6. Site WSt-1 includes a 5,000-gallon storage tank next to a shed (top). The storage tank is situated below the on-stream reservoir at WSt-2 (bottom).



Figure 7. An unnamed stream in the foreground flows to the on-site reservoir (WSt-2) in the background.

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Figure 8. An existing earthen dam built on-top of an unnamed tributary prevents water from flowing downstream until the water surface level in the reservoir (WSt-2) reaches the culvert spillway (circled in red).

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Figure 9. A concrete and geotextile-lined modified tributary adjacent to a mushroom building (left and right picture, PL-1). The reservoir embankment is visible in the background (red arrow in left picture).

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Figure 10. A 26-inch corrugated metal pipe (red circle, SC-1) marks the transition to a modified tributary that flows to Pilarcitos Creek.

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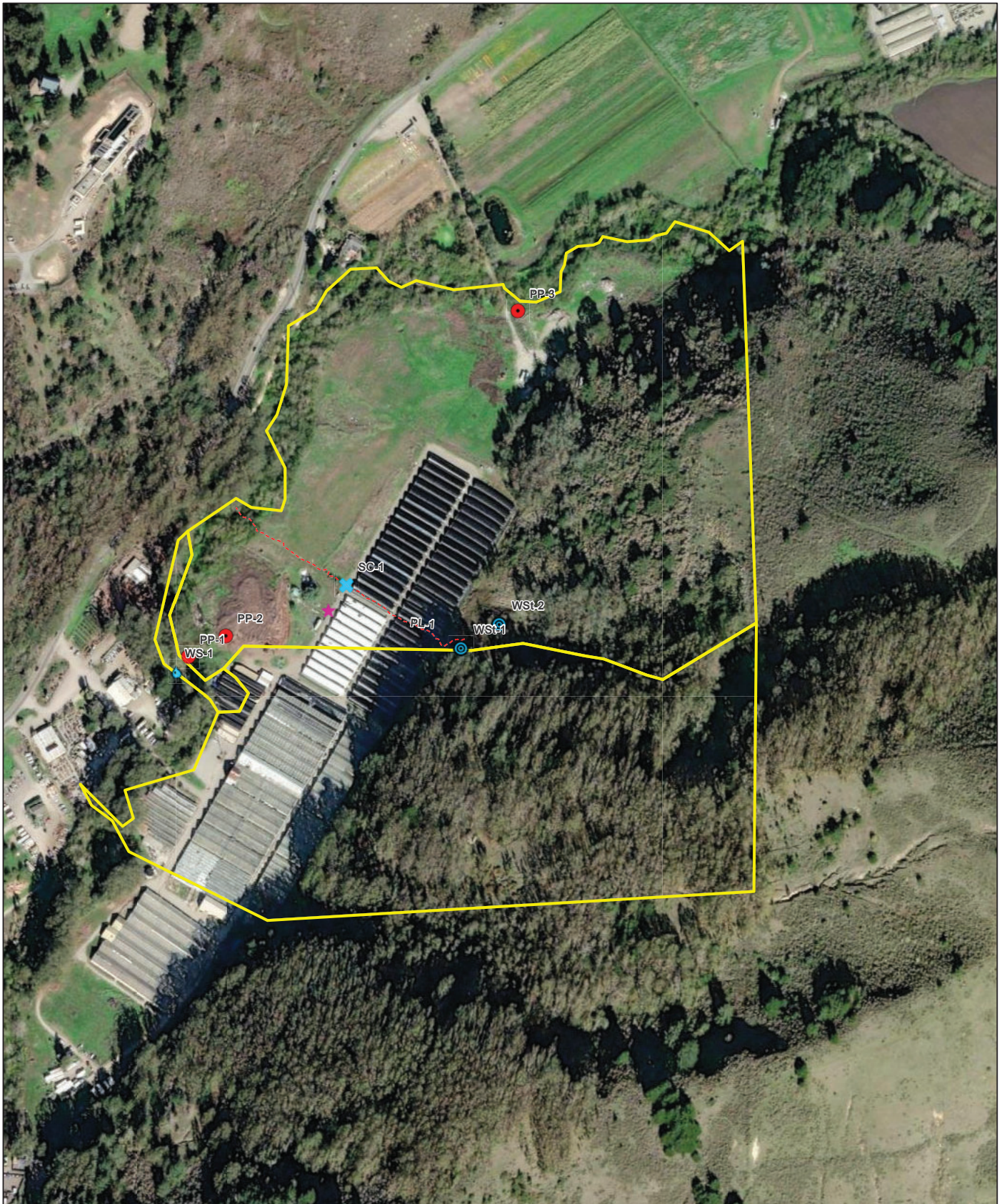
Figure 11. A three-spined stickleback (*Gasterosteus aculeatus aculeatus*) was located within an isolated drying pool located in the same modified tributary as Figure 9.

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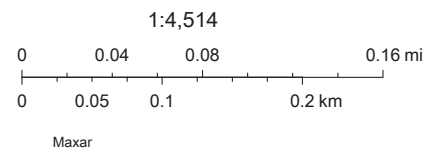
Figure 12. Wooden debris from a demolished building at PP-3 within 150 feet of Pilarcitos Creek.

Figure 13. Map of Observations at the Property



3/2/2023, 9:39:05 AM

- ★ Site Visit
- ✦ Stream Crossing
- 💧 Water Source
- Pollution Point
- 🕒 Water Storage
- Pollution Line
- ▭ Associated Parcels





COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT D

MEMORANDUM

TO: Camille Leung, San Mateo County Planning and Building Department

FROM: Dana Riggs, Sol Ecology, Inc.

SUBJECT: California Terra Garden Biological Resources Report Addendum and Remedial Action Plan

DATE: June 20, 2025

CC: Jim Guan, property owner
Craig Smith, BKF Engineers

The following information is provided as an Addendum to the California Terra Garden Biological Resources Report prepared by Sol Ecology and submitted to the San Mateo County (County) in July 2024 (Biology Report)) to reflect additions and revisions in the plan set submitted to permitting agencies, and to address requested changes by San Mateo County Planning Staff (County staff). Initially, the Biology Report was prepared to document biological resource impacts described in the notice of violation issued by the California Department of Fish and Wildlife (CDFW) on May 18, 2023 (CDFW NOV). This Addendum describes the remedial actions that have been completed and identifies additional proposed remedial actions to correct the remaining outstanding violations identified by the County, City of Half Moon Bay, and CDFW. This report also includes an analysis of potential biological impacts associated with implementing the proposed Remedial Action Plan and provides recommendations for ensuring future operations minimize impacts to surrounding sensitive habitats and special status species.

The Project Description in this addendum includes all of the completed and proposed remedial actions provided with the revised Cycle 2 Improvement Plans updated in June 2025 and submitted with this addendum report.

This Addendum includes the following sections:

- 1.3 Updated Project Description and Remedial Action Plan (**new**)
- 3.2 Sensitive Communities (**revised**)
- 5.0 Impact Discussion (**revised**)

- 6.1 Recommended Avoidance and Minimization Measures (**revised**)

In addition, the following additional information is also provided as attachments to this report:

- **Attachment 1.** Photographs Documenting Completed Project Actions (January 2025)
- **Attachment 2.** Figure 6 - Proposed Restoration Plan Area (On-Site)
- **Attachment 3.** Habitat Restoration and Mitigation Monitoring and Reporting Plan (HRMMP)

1.3 Remedial Action Plan

Completed and proposed actions within each agency’s jurisdiction are indicated in Table 1. If the project action addresses a specific CDFW violation, it is indicated in the table. These actions are described in greater detail in the following sections.

Table 1. Remedial Action Plan Summary

Action No.	Action Description	Plan Sheet No.	County	City	CDFW
COMPLETED					
1	Demolition of two existing permitted mobile homes (R1, R2) and a group of unpermitted residential trailer hookups and associated utilities, including water, septic, and electrical systems as part of the habitat restoration improvements.	C1.1		X	
3	Removal of existing hazardous materials within proximity of Pilarcitos Creek, namely wood debris and agricultural waste outside of applicable creek setbacks	C1.1 C1.2 C1.3	X		DFW-1, Section 5650/5652
4	Diversion structure removal	N/A			DFW-1
PROPOSED					
2	Demolition of greenhouse G5 and removal of adjacent debris pile and concrete pad	C1.1		X	
5	Demolition of existing permitted, but failing, greenhouses G6 and G7	C1.1		X	
6	Proposed grading to create a new vegetated swale to divert upland flows around development and agricultural operations	C2.1 C2.2 C6.0/6	X	X	DFW- 2
7	Grading and drainage improvements to route stormwater from existing hoopouses and new compost facility to a new bioretention planters for treatment	C2.2 C6.0/5, 6, 7		X	DFW-5
8	Demolition, grading, planting to develop habitat restoration areas (Attachment 2, Figure 6). Existing septic tanks to be filled with concrete and abandoned in place along with drainfields per San Mateo County Environmental Health Standards.	C1.1 C2.1		X	DFW-1 DFW-5 DFW-6
9	Building and electrical permits to legalize modifications to existing heating and cooling building B1 and G4A (deferred)	C2.1		X	

Action No.	Action Description	Plan Sheet No.	County	City	CDFW
10	Improvements and permitting to address creek and streambed violations noted by CDFW including new permanent and temporary diversion structures	C2.1 C2.2	X	X	DFW-1 DFW-3
11	Grading and drainage improvements to repair existing emergency outfall at reservoir to the south of hoopouses	C2.2 C6.0/2, 3	X		DFW-2
12	Legalization of existing unpermitted hoopouses and associated site improvements, including stormwater treatment	C2.2 C6.0/5,7	X		DFW-5
13	Improvements to address ingress/egress safety at existing hoopouses to remain	C4.0	X		
14	Improvements to create a dedicated composting and storage facility onsite for processing agricultural waste outside of applicable creek setbacks	C2.2 C6.0/4, 5, 6, 7	X		Section 5650/5652
15	Demolition of existing permitted but condemned single family home R3 and removal of unpermitted trailer hookups and associated utilities	C1.3	X		
16	Building and electrical improvements to address permit violations at existing dam pumphouse and treatment facilities P1, P2, and P3	C2.2	X		
17	Structural assessment at the existing rail car bridge. Existing signage to be replaced and barricade to be installed at a future date.	C2.3	X		DFW-4
18	Wildlife exclusion fence installation between planned detention basin and processing areas.	C2.2			

Source: Improvement Plans (June 2025), Sheet C0.0: Project Description

Completed Actions

Actions completed to date address the “immediate actions” and “remedial plan” items requested in the CDFW NOV and include structure demolition and debris piles removal (Actions 1 and 3). Structure demolition also includes removal of existing water diversion structure (Action 4). Photographic documentation of completed actions is provided in Attachment 1.

Action 1: Structure Demolition. Demolition of two existing permitted mobile homes (R1, R2) and removing unpermitted residential trailer hookups and associated utilities, including water, septic, and electrical systems have occurred, and this is part of the site preparation for the habitat restoration improvements. This includes abandonment of two septic system drainfields that are located within the 50’ riparian setback zone and within the 50’ wetland setback zone; these drainfields will be abandoned per Environmental Health Department Standards as indicated via the Existing Septic System Removal Notes on Sheet C1.1, which generally include cleaning and disposing of septic system materials appropriately and backfilling leach trenches with native fill. Photos 1 and 2 provide documentation of removal.

Action 3: Debris Pile Removal. consists of removal of debris piles that were located within the 50-foot riparian setback; this includes the mushroom compost stockpile located near greenhouse G3 (sheet C1.2) and the wood construction debris (sheet 1.3). Mushroom compost stockpile

removal addresses CDFW NOV Immediate Action 3 and Remediation Plan 3. Wood construction debris removal addresses CDFW NOV Immediate Action 2 and Remediation Plan 2. Photos 3 and 4 provide documentation of removal.

Action 4: Removal of Diversion Structure. Water diversion ceased upon receipt of the CDFW NOV and diversion structure, and appurtenances were removed. This was not depicted in the plan set. This addresses Immediate Action 1 and Remediation Plan 1. Documentation is shown via Photos 5 and 6. Riparian restoration at the former diversion location on Pilarcitos Creek is proposed (Action No. 8).

Proposed Actions

The proposed actions (Action 2, and 5 through 18) collectively address remaining violation items identified by the CDFW NOV as “additional action and LSA notification,” or as shown in Table 1 as DFW-1 through DFW-6. The goals of the proposed actions are to address all of the biological impacts identified in the July 2024 Biological Resources Report. Specifically, proposed actions described below will ensure avoidance of direct and indirect effects to sensitive habitats and special status species by moving existing facilities out of sensitive habitats, as appropriate; providing appropriate and adequate solid waste and water processing systems; and ensuring that all new and existing structures are up to code. Actions that require additional detail beyond what is described in Table 1 are discussed below; potential permanent and temporary impacts to biological resources that may occur during implementation of proposed remedial actions are described in Section 5.0. Implementation of the Remedial Action Plan will be subject to the review and approval of respective agencies, including the County and CDFW.

Action 6: Southern Vegetated Swale. Grading will occur to create a new vegetated swale that is approximately 2,000 linear feet, ranging from 21-30 inches in depth. The vegetated swale will intercept water from both the reservoir overflow and upland flows around development/agricultural operations and direct water westwards towards Pilarcitos Creek where it is expected to terminate at a level channel spreader within the restoration area (see additional details under Action 8: Restoration). The new vegetated swale will be located along the southern length of the greenhouses and hoophouses and will be graded to drain in a westerly direction. The siting of this feature is consistent with historical conditions present from 1943 up until 1968 when hoophouses were first constructed on the property (refer to Appendix B of the Biology Report). The capacity of the vegetated swale is designed to accommodate flows from the reservoir and site operations. See Sheet 6.0: Detail 6, Cross Sections A, B, and C for additional specifications. Approximately 160 linear feet of the vegetated swale is located within the wetland buffers; of that, 40 feet are located within the existing wetland (refer to Section 5.0 regarding this temporary impact). Planting plan specifications for this feature are addressed in the accompanying HRMMP (Attachment 3.)

Action 7: Bioretention Facility. The earthen drainage ditch, previously constructed to direct water from the reservoir overflow pipe along with stormwater flows originating from the hoophouses into a historic ditch that drains to Pilarcitos Creek, will be redirected to flow into a newly constructed bioretention basin (note, flows from the reservoir will be captured in the

Southern Vegetated Swale and redirected to the Restoration Area). The ditch will then be reconstructed to follow vegetated swale designs as detailed on Sheet 6.0: Detail 6, Cross Section D. The new swale will be lined with grass species and will be designed such that it does not pond water to avoid attracting aquatic species to the processing area. The majority of the flow that enters the bioretention basin is designed to infiltrate into the ground, where the vegetation and abiotic substrate would capture organic materials like nitrogen from the grow operations. Overflows that occur during periods of intense and/or prolonged rain events would be directed out via the northern outlet, dissipated over the upland area, and into Pilarcitos Creek. Overflow water quality is not expected to be compromised due to high quantities of freshwater input from precipitation, and ongoing filtration during the dry season or times of low rain. The bioretention facility is in upland areas, outside of the riparian and wetland buffer zones. The bioretention area will encompass 12,560 square feet, or roughly $\frac{1}{4}$ acre, with the cross-section shown on Sheet 6.0: Detail 5. The rock outfall specifications are shown on Sheet 6.0: Detail 7.

Action 8: Restoration. Habitat restoration is proposed to offset temporal losses associated with areas of impact throughout the property. The proposed habitat restoration area is approximately 5.8 acres and is located on the west side of the processing areas as shown in Attachment 2 (Figure 6 Restoration Plan Area) and fully described within the accompanying HRMMP (Attachment 3). Habitat restoration is proposed in this area to offset 0.22 acres of impacts to riparian habitat, and an additional 1.10 acres of impacts to riparian buffers from activities as identified in the Biology Report; the proposed vegetated swale described under Action 6 will offset impacts to approximately 730 linear feet of drainage impacts.

The goal of the restoration plan is to create high quality habitat within an existing wildlife corridor to avoid or reduce potential future effects from agricultural operations on the site, and to enhance and restore riparian functions to historic conditions prior to development of the site. Site preparation includes Action 1 (removing existing structures and septic systems) and invasive species removal. The area would then be revegetated with native species that are appropriate for riparian, wetland, and upland areas and supportive of target species breeding, foraging, estivation, and dispersal needs. The primary objectives will be to increase riparian function and values for native species, improve the buffer areas to provide refugia for target species, and lengthen an existing wildlife corridor. Additionally, water from the reservoir drainage feature will be redirected to the Restoration Area, consistent with historical conditions, via the Southern Vegetated Swale; water from the swale will be allowed to fan out into the restoration area where it can percolate into the ground to provide recharge to Pilarcitos Creek and its surrounding riparian and wetland habitats, and to increase soil moisture within the riparian setback and nearby upland refugia for sensitive wildlife. Maintenance and monitoring would follow to ensure successful establishment of planted species. The full restoration plan includes a planting palette, planting plan, performance criteria, monitoring and reporting requirements, and guidance for adaptive management.

Action 10: New Water Diversion Facilities. The new water diversion facilities include a new diversion weir/intake basin, a settling basin, a diversion sump pump, diversion flow meter, and storage tanks, all connected to the reservoir via buried piping. The general configuration of this

equipment is shown on Sheet C2.2. The diversion weir/intake basin, settling basin, diversion sump pump, and diversion flow meter will be at the same location as the previously removed system, below top of bank on the east side of Pilarcitos Creek and south of the existing well. Appurtenances will be installed outside the active floodplain and only the diversion pipe and bypass will be placed in the wetted channel (subject to federal/state permitting). The instream portion of the water diversion system will consist of a 36-inch circular HDPE pipe (riser) embedded vertically into the stream bed and bank. The open end of the riser will be covered with a secured lid and act to encase the intake pipe and allow for incorporation of an appropriately sized fish screen that meets National Marine Fisheries Service (NMFS) and CDFW screening criteria and limits entrainment of fish into the diversion system. The riser will be cut and fitted with the screen, leaving no gaps. An adjustable rectangular weir plate will be secured inside the riser to allow for adjustment of the intake system, as necessary to meet permit requirements. At the point of diversion, once creek flow rates exceed the minimum requirements per the water rights license¹, water will overtop the weir plate located within the screen riser and then flow into the pipe buried in the bank.

Moving upslope, there will be approximately 120 feet of buried piping below the top of bank, and an additional 120 feet within the riparian buffer zone. The diverted water will be piped to three 5,000-gallon lift station storage tanks set on a pad consisting of class 2 aggregate material; these tanks are located outside of riparian and wetland buffer zones. From there, the pipes lead to the reservoir, where approximately 200 feet of buried piping will be in the wetland buffer zone. All pipes would be buried approximately 18" to 24" deep. A ditch approximately 12" wide and 18"-24" deep would be dug to accommodate the pipes, then backfilled with native fill.

A new streambed alteration agreement will be obtained prior to re-installing new diversion facilities (including interim temporary facilities); information including the maximum rate of diversion rates, timing of diversion, maximum volume diverted per year, and the minimum rate of flow at the point of diversion will be provided with notification to CDFW. A flow meter will be installed at the in-stream diversion array and a Compliance and Effectiveness Monitoring Plan will be prepared and implemented to ensure diversion operations, including bypass flow monitoring are performed in accordance with the respective water rights licenses for the property.

Action 11: Reservoir Improvements. The structural integrity of the reservoir will be improved via geotechnical engineering as detailed on Sheet 6.0, Detail 2. Existing grade is to remain after excavation, compacting, and fill is completed. Existing pumphouses (P1, P2) located within the wetland buffer zone are to be left in place to minimize potential impacts. The emergency outfall will be relocated to direct water away from existing wetland via a 24" HDPE culvert outfitted with a riprap dissipater at the end, as shown on Sheet 6.0, Detail 3. Reservoir overflow will be directed into the Southern Vegetated Swale as described in Action 6. The reservoir outfall will be relocated

¹ State Water Board Division of Water Rights Permit 17849; a Compliance and Effectiveness Monitoring Plan will be implemented in accordance with Section 1600.

to be outside of the wetland buffer. A floating pond ladder and/or ramp will be installed to allow any trapped wildlife to escape, as water levels drop.

Action 14: Compost Waste Management Facility. A new enclosed composting and storage facility onsite will accommodate 200 tons of spent mushroom and other green compost materials. Materials will be transported to this facility by tractor and trailer via dedicated asphalt concrete roads as shown on Sheet 2.2. The composting facility will be enclosed via a 6-inch-thick concrete slab on the ground, with an 8-inch-thick poured concrete or concrete masonry unit as surrounding walls, per Sheet 6.0, Detail 4. Operational procedures and general guidelines are also included in the plan details on Sheet 6.0, Detail 4 and serves as the “Waste Management and Soil Management Plan” requested by regulatory agencies. Any incidental drainage from the composting facility would be directed towards the gravel apron located in front of the facility. The gravel apron would consist of 3 inches of decomposed granite over 6 inches of Caltrans class 2 aggregate base, for a total of 9 inches in depth. Further drainage would flow into the bioretention area as described in Action 7. A roof will also be constructed over the composting facility to minimize runoff generated from rain events. This facility is located outside riparian and wetland buffers. Wildlife exclusion fencing will be placed between the new facility and the nearby bioretention facility.

Action 17: Rail Car Bridge. The rail car bridge will be abandoned in place; permanent barricades and signage to prevent vehicular use will be installed at either end of the bridge.

Action 18: Permanent Wildlife Exclusion Fence. Permanent WEF is proposed between the riparian setback and places that contain movement of machinery and other processes that may be harmful to wildlife as shown on the accompanying plan set. Design and installation requirements are further described in Section 6.1.

3.2 Sensitive Communities

Seasonal Wetland

In addition to the coastal wetland described in the Biology Report, a 0.26-acre coastal wetland feature (2-parameter) has been identified within the planned Restoration Area, as shown in Attachment 2, Figure 6. This feature appears to be formed as the result of a perched water table, with additional hydrological inputs from the former septic leach field, and an upstream drainage feature located adjacent to the southern property boundary. A slight depression is present at the southern end of the property. Wetland composition is predominantly herbaceous, with several small arroyo willow (*Salix lasiolepis*) shrubs established along the southern portions of the feature. Common rush (*Juncus effusus*) is the dominant species, occurring in relatively patchy clusters, interspersed with non-native grasses and forbs including harding grass (*Phalaris aquatica*), velvet grass (*Holcus lanatus*), bristly ox-tongue (*Helminthotheca echioides*) and poison hemlock (*Conium maculatum*). The native California blackberry (*Rubus ursinus*) is also present on the upper margins of the wetland feature. This feature may meet the definition of Waters of the U.S. and/or State.

5.0 Impact Discussion

The following actions would not have any direct or indirect impacts to water quality, sensitive habitats, or special status species either due to the nature of the work or its location outside of sensitive habitats and/or respective buffer zones:

Action 2: Demolition of Greenhouse G2

Action 5: Demolition of Greenhouses G6 and G7

Action 9: Building and Electrical Permits for Structures B1 and G4A

Action 12: Legalization of Hoophouses and Stormwater Treatment (see Action 7 for Stormwater Treatment)

Action 13: Circulation Improvements

Action 15: Demolition of Structure R3 and Associated Facilities

Action 16: Building and Electrical Permits at Structures P1, P2, and P3

The remaining actions and their respective potential biological impacts are discussed below.

Action 1: Housing Demolition and Septic System Removal. The removed structures and related appurtenances (with the exception of septic systems) are outside of the riparian and wetland buffer zone and therefore did not have an impact on sensitive areas. Removal of the drainfields that are located within the riparian and wetland buffer zones would be done in accordance with Environmental Health Department Standards and is not expected to result in any impacts to riparian and wetland habitats. Earth disturbance in this area could potentially impact special status amphibians and/or nesting birds if present. Pre-construction surveys are recommended prior to work to ensure mortality does not occur, as described AAM [AMM] 1 and 2 of the Biology Report. No additional avoidance or minimization measures are needed for this action.

Action 3: Debris Pile Removal. Removal of debris piles located within the riparian buffer zone has a net positive effect on water quality and wildlife. Implementation of this action complies with Section 5650/5652 of the Fish and Game Code.

Action 4: Diversion Structure Removal. The removal of the old diversion structure was performed prior to the initial site assessment by the biologist. Based on existing conditions noted during the June 7, 2023, site walk, little cover was observed that would offer refugia to sensitive aquatic wildlife within the area where the diversion facility was located. This area was largely denuded as described in the Biology Report. Additional appurtenances on the bank were removed at a later date. Restoration of habitat at the diversion point is proposed as described in the HRMMP (Attachment 3); additional mitigation for temporal impacts to riparian habitat and 1.10 acres of riparian setback areas will also be accomplished.

Action 6: Southern Vegetated Swale. Construction of the new Southern Vegetated Swale within the coastal wetland and wetland buffer would result in a small amount of permanent impact to

the coastal wetland. Minor impacts to the coastal wetland will occur but such impacts will enhance the biological productivity of the wetland, consistent with permitted uses described in the LCP (LCP 2021). See LCP Policy 7.16 (7): “diking, dredging, and filling in any other wetland only if such activity serves to restore or enhance the biological productivity of the wetland.”

Action 7: Bioretention Facility. Implementation of the bioretention facility would not result in impacts to water quality or sensitive habitats since it is located outside of sensitive habitats and/or setbacks. The location of the facility is designed to be away from processing areas, separated by a permanent WEF (AMM 2). The facility is designed to infiltrate into the ground and as such would not likely hold water long enough to support California red-legged frog (CRLF) breeding but may provide aquatic non-breeding foraging habitat for CRLF, which would result in a net beneficial effect. The pond will be designed with sloped sides to allow CRLF (and other wildlife species) to move freely in and out of the facility. Construction of the facility could potentially impact CRLF, and/or nesting birds if present in uplands at the time of construction. Implementation of AAM [AMM] 1 and 2 will ensure no adverse effects during construction of the facility. No additional avoidance or minimization measures are proposed.

Action 8: Restoration. Implementation of the restoration plan may result in temporary impacts during the site preparation/construction stage, as septic fields are being removed. However, following Environmental Health Department standards and the implementation of AAM [AMM] 1, 2, and 5 would ensure no impacts to sensitive habitats and/or species occur. Planned restoration at the diversion point will replace lost riparian habitat in this area, reduce potential sedimentation to downstream habitats in Pilarcitos Creek, improve habitat for fish and wildlife, and reduce cover and dispersal of invasive species to downstream habitats. Additional planned restoration within the Restoration Area depicted in Attachment 2, Figure 6 will offset impacts described in the Biology Report including temporal effects, provide a net increase in riparian habitat and buffers, and will provide greater refugia for dispersing wildlife including CRLF, within an existing wildlife corridor, resulting in a net benefit for target wildlife species. Impacts to the seasonal wetland are not proposed, other than minor enhancements to remove invasive species and re-vegetate those areas with native wetland species. Targeted maintenance of this area is expected to improve wetland functions and values and mitigate any minor temporal effects to wetlands located near the reservoir.

Action 10: New Water Diversion Facilities. Implementation of the new water diversion facilities may result in temporary impacts to water quality and wildlife during the installation and construction. AAM [AMM] 1, 2, and 5 will ensure effects associated with construction of the new facilities do not result in any new deleterious effects to Pilarcitos Creek or its associated riparian habitat, and/or aquatic wildlife. Regulatory permits including a new Section 1600 Notification, Section 404 permit, and Section 401 Water Quality Certification are required prior to installation of the new permanent diversion facilities within the stream channel; temporary diversion facilities are proposed in the interim, under a new Section 1600 Notification. Adherence to permit standards is also required. Planned restoration activities described under Action 8 will offset impacts to riparian habitat and setback areas associated with new diversion facilities in Pilarcitos

Creek, and minor impacts to the wetland buffer associated with new water diversion facilities at the reservoir, as described in the Biology Report.

Action 11: Reservoir Improvements. The existing pumphouses do not currently have any adverse impacts on the adjacent wetland feature based on analysis provided in the Biology Report; leaving the pumphouses in place would avoid potential impacts associated with removal. Implementation of the reservoir outfall within the wetland buffer would not result in impacts to the adjacent wetland feature; the plan was designed to avoid the wetland feature. Implementation of AMM 2, including a new pond ladder will ensure the reservoir improvements, including the outfall repair and relocation, do not result in mortality to listed species or other sensitive wildlife that may be present.

Action 14: Compost Waste Management Facility. The new facility will be located away from all sensitive habitats and all potential runoff would be contained within appropriate treatment facilities. Implementation of the compost waste management facility would not result in impacts to water quality, sensitive habitats, wildlife, or any special status species. AMM 2, including a new permanent WEF between riparian setback areas and the new facility will prevent potential adverse effects to CRLF (and other wildlife) that may forage in the nearby uplands and/or bioretention facility.

Action 17: Rail Car Bridge. Leaving the rail car bridge in place is the least environmentally damaging option, is consistent with the recommendation in the 2024 biology report, and would not result in impacts to water quality, sensitive habitats, wildlife, or any special status species. The completion of a structural engineering analysis and a plan to safely abandon the bridge in place fully addresses DFW-4.

Action 18: Permanent Wildlife Exclusion Fence (WEF). Implementation of a permanent WEF is intended to deter wildlife from active work areas to prevent direct impacts to wildlife. This action is further described under AMM-2 below.

6.1 Recommended Avoidance and Minimization Measures

The following additional avoidance and minimization measures (AMMs) are proposed to ensure remedial actions do not result in any new adverse effects to sensitive habitats and/or special status species. Additional regulatory permits including a new Lake and Streambed Alteration Agreement (and other permits as outlined above) shall be obtained prior to implementation of the Remedial Action Plan.

AMM-2. CRLF (AND OTHER SENSITIVE AQUATIC WILDLIFE)

- **Permanent wildlife exclusion fencing** is recommended to be installed between the proposed bioretention facility and compost facility to deter special status species, including CRLF from accessing active processing areas where they may be subject to mortality. A permanent WEF fence plan shall be submitted to CDFW with the Section 1600 Notification, for review and approval prior to installation. The fence should be

constructed of durable materials (such as wire fencing with hardware cloth with a mesh size of one quarter inch or smaller) that will not leach into ground water (e.g., no pressure-treated wood, nor degradable plastic may be used) and be maintained in good repair for the life of the project. Installation of the WEF should be performed under the supervision of a CDFW-approved biologist; field fitting may be appropriate subject to site conditions following construction of the bioretention facility under the direction of the biologist. An annual inspection of the permanent wildlife exclusion fencing is recommended to occur in October, prior to the start of the rainy season to ensure fencing is in good working order.

- **A pond ladder, ramp, or similar structure** shall be constructed and maintained in the on-site reservoir to allow trapped wildlife to escape. The design and placement of the ladder should be performed under the supervision of a CDFW-approved biologist and shall be constructed from durable materials which will not leach chemicals nor discharge any material into the waterbody. An annual inspection of the ladder is recommended during the pond draw-down period (summer) to ensure that the structure is intact and serves the intended purpose.
- **Diversion structure inspections.** An annual inspection of the diversion facility, including fish screens, shall be performed prior to the start of pumping each year. Periodic inspections are recommended during the winter season following any major storm events for the first 1-3 years to monitor performance, subject to the requirements set forth in the LSAA and/or the Compliance and Effectiveness Monitoring Plan

AMM-5. CONSTRUCTION BEST MANAGEMENT PRACTICES FOR WORKING IN WATERWAYS

Work Period and Erosion Control

- No work shall occur during periods of wet weather or where saturated ground conditions exist; if a 60% chance of a one-half inch of rain or more within a 24-hour period is forecasted, then the site shall be treated with erosion control measures and construction operations will cease until 24 hours after rain has ceased.
- In areas expected or forecasted to get rainfall during the construction season, effective erosion control measures should be in place at all times during construction activities. Construction within the 5-year floodplain may not begin until all temporary erosion controls (e.g., straw bales, silt fences that are effectively keyed in) are in place, downslope of project activities within the riparian area. Erosion control structures shall be maintained throughout, and possibly after, construction activities. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground 12 centimeters (cm). Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.
- Adequate erosion control supplies (gravel, straw bales, shovels, etc.) should be stored on site.

Hazardous Waste

- A Spill Prevention and Control Plan shall be created, and the Plan and all materials necessary to implement shall be accessible on site
- All construction equipment will be maintained to prevent leaks of fuel, lubricants, or other fluids by checking heavy equipment daily for leaks. Do not use equipment until any leaks are repaired.
- Refuel outside of active stream channel, more than 100 feet away from top of bank.
- Petroleum products, chemicals, fresh cement, or water contaminated by the aforementioned shall not be allowed to enter flowing waters.
- Stationary equipment such as motors, pumps, generators, and compressors, located within the dewatered portion of the stream channel or adjacent to the stream, will be positioned over drip pans.

General

- Where available, use existing ingress or egress points, or perform work from the top of the stream banks.
- All food scraps, paper wrappers, food containers, cans, bottles, and other trash will be deposited in securely covered containers to prevent wildlife from accessing.

Attachments:

Attachment 1. Photographs Documenting Completed Project Actions (January 2025)

Attachment 2. Figure 6 - Proposed Restoration Plan Area (On-Site)

Attachment 3. Habitat Restoration and Mitigation Monitoring and Reporting Plan (HRMMP)

Attachment 1. Photographs Documenting Completed Project Actions



Photo index map. Aerial imagery basemap from September 2020 (Google Earth).



15Jan25 13:46 Ad-hoc
Half Moon Bay CA 94019, United States © 15-Jan-25 13:46:16

Photo 1. Action 1 – mobile home (R1, R2) removal



15Jan25 15:46 Ad-hoc
Half Moon Bay CA 94019, United States © 15-Jan-25 15:46:28

Photo 2. Action 1 – mobile home (R1, R2) removal)

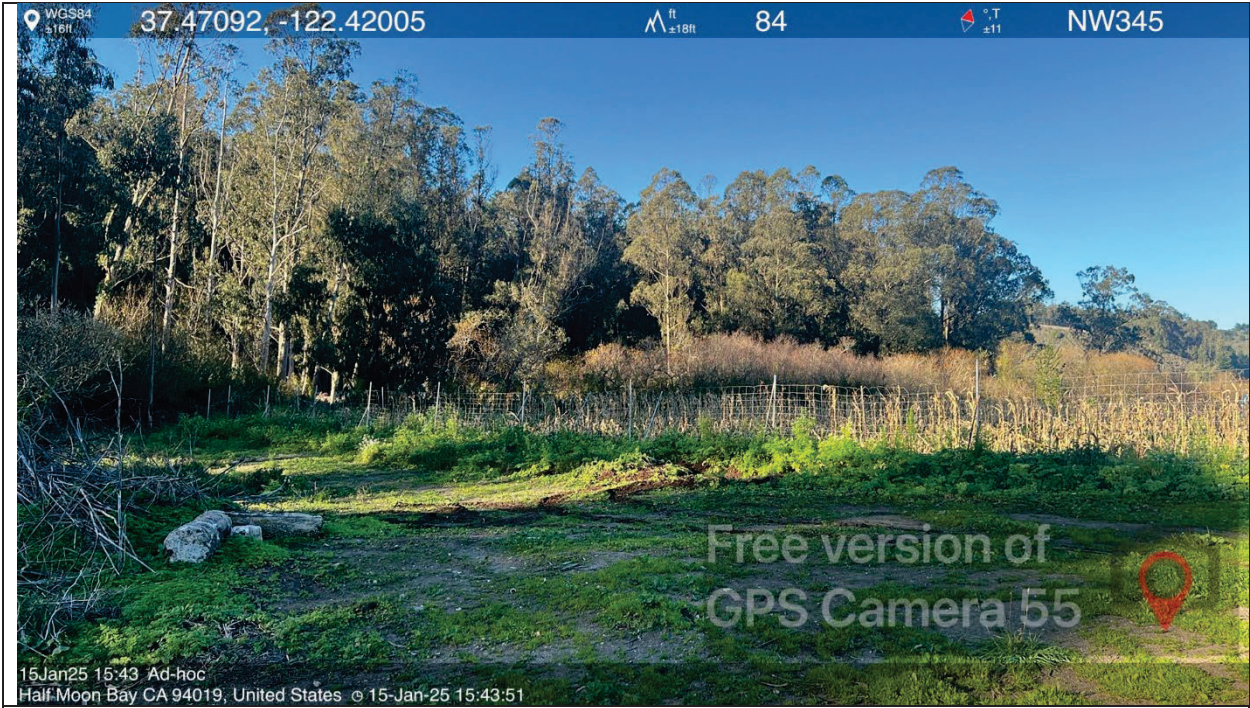


Photo 3. Action 3 - mushroom waste removal



Photo 4. Action 3 – wood debris removal



15Jan25 15:42 Ad-hoc
Half Moon Bay CA 94019, United States © 15-Jan-25 15:42:59

Photo 5. Action 4 – diversion structure removal location.



Photo 6. Action 4 – Diversion structure removed as of June 7, 2023

Attachment 2 Figure 6. Restoration Plan Area
 California Terra Garden, Half Moon Bay, CA



- Restoration Area
- City of Half Moon Bay Wildlife Corridor Conservation Area
- Streets
- Seasonal Wetland
- Riparian Habitat
- Pilarcitos Creek



HABITAT RESTORATION AND MITIGATION MONITORING AND REPORTING PLAN

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1.0 INTRODUCTION

1.1 Purpose

The primary purpose of the restoration plan is to implement compensatory mitigation for the temporary loss of habitat associated with Pilarcitos Creek and adjacent upland and aquatic habitats resulting from unlawful activities on the site, as required by California Department of Fish and Wildlife (CDFW).

This habitat restoration and mitigation monitoring and reporting plan (Plan) has been prepared to accompany the Biological Resources Report (July 1, 2024) and subsequent Addendum (June 19, 2025), as required to offset permanent and temporal impacts to aquatic and riparian habitat associated with violations identified by CDFW, San Mateo County, and City of Half Moon Bay.

This Plan provides the details for **Action 8: Restoration** as described in the Addendum and includes the restoration goals and objectives; basis for design; implementation details; maintenance activities, monitoring methods, performance success criteria, and reporting requirements to ensure the long-term success of this restoration effort.

1.2 Background

Restoration activities are proposed to offset 0.22 acres of impacts to riparian habitat and 1.10 acres of impacts to riparian and wetland buffers from activities as identified in the Biological Resources Report and Addendum. Impacts considered and mitigated within the scope of this restoration plan are inclusive of actions from the initial violation and actions taken to correct the violations. A full discussion of impacts is included in the Biological Resources Report and Addendum, in Section 5.0.

2.0 PROJECT DESCRIPTION

2.1 Restoration Goals and Objectives

The goal of the restoration plan is to provide ecological function and value uplift and improve native wildlife habitat within an existing wildlife corridor (Appendix A: Figure 1). These goals would be accomplished by fulfilling the following objectives:

- Add or enhance habitat elements for target species like basking substrate, foraging habitat, and refugia;
- Increase hydrologic input to Pilarcitos Creek via groundwater recharge along the vegetated swale (connected to bypass flow from the reservoir);
- Improve dispersal corridors and increase soil moisture levels within nearby upland refugia for sensitive wildlife by planting and maintaining shorter grass heights; and
- Improve native plant species richness and diversity by removing invasive species and replacing with habitat-appropriate species local to the watershed.

2.2 Basis for Design

Restoration goals and objectives described in this report are based on the need for further corrective actions and/or mitigation to restore or offset the function and habitat value to areas that remain affected as a result of unauthorized activities.

Site Selection

The restoration areas have been selected as a result of the violation activities, in areas that complement existing and planned uses within the property, and connect adjacent suitable habitats. Generally, there are two areas proposed for improvements – the first is located within the southwestern portion of the property and consist of multiple habitat types (southwestern restoration area) and the second is located within Pilarcitos Creek and its adjacent riparian habitat where the diversion facilities are located (diversion restoration area). The restoration areas and their respective habitat types/zones and sizes are summarized in the table below and are also shown in Appendix A: Figure 2.

Table 1. Restoration Area Overview

Zone No.	Habitat Zone	Area (Acres)
Southwestern Restoration Area		
1	Riparian Setback Mitigation	0.80
2	Upland Habitat Mitigation	4.54
3	Seasonal Wetland Enhancement	0.26
4	Vegetated Swale	0.20
Diversion Restoration Area		
5	Riparian Habitat Restoration	0.22
	Total	6.02

The southwestern restoration area previously contained living quarters and ancillary structures. This area was selected for restoration activities and habitat improvements since it is within an existing wildlife movement pathway between Pilarcitos Creek and the City of Half Moon Bay Corporation Yard Wildlife Overpass to the north, and upland habitats and Arroyo Leon Creek (and its tributaries) to the south. Existing agricultural facilities are located to the east and west of the site, which otherwise restrict movement. Water spilling from the on-site reservoir and upstream bypass (to be constructed) will be routed into a vegetated swale and directed away from existing processing and transport areas to the proposed upland habitat restoration area, to avoid encouraging wildlife to access portions of the site where they may be injured or harmed. The upland habitat will be designed to provide enhanced upland and dispersal habitat for two targeted wildlife species documented in Pilarcitos Creek, California red-legged frog (*Rana draytonii*; CRLF), and San Francisco garter snake (*Thamnophis sirtalis tetrataenia*; SFGS).

The southwestern restoration complex consists of an open field dominated by ruderal vegetation, including poison hemlock and invasive grasses. The riparian corridor features some native trees and shrubs such as red elderberry and arroyo willow, but is dominated by invasives such as vinca,

cape ivy, Himalayan blackberry, and English ivy in the understory. A coastal wetland at the southwestern end of complex includes mesic vegetation such as rushes (*Juncus* sp.) and arroyo willow. Upland slopes along the southeastern border include Monterey pine and eucalyptus forest with an understory of weedy species.

The diversion restoration area consists of the active channel for Pilarcitos Creek and the creek banks. Riparian restoration will be designed to provide enhanced aquatic habitat for fish and wildlife, including both common and special status species described in the Biological Resources Report.

Target Species Habitat Requirements

Habitat enhancement for target species is based on the results of the July 2024 Biological Resources Report, to restore impacted functions and values associated with Pilarcitos Creek and its associated riparian corridor. Target listed species identified in the report include California red-legged frog (CRLF; *Rana draytonii*, San Francisco garter snake (SFGS; *Thamnophis sirtalis*) southwestern pond turtle (SWPT; *Actinemys pallida*), and central California coastal steelhead distinct population segment (steelhead; *Oncorhynchus mykiss irideus*), along with other native fish and wildlife species that rely on these habitats. The location for proposed restoration activities was selected based on its proximity to existing wildlife corridors, nearby occupied habitats, and proximity to existing agricultural activities to avoid attracting wildlife to processing areas. Target species habitat goals include increasing riparian habitat stratification, diversity, and shade for fish and aquatic wildlife, and improving upland terrestrial habitats for CRLF and SFGS hibernacula, basking, foraging, and dispersal.

Ideal upland habitat for CRLF includes natural terrestrial habitats within approximately 100 meters of occupied aquatic habitat with sufficient cover features such as dense vegetation, rocks, logs, and small mammal burrows (USFWS 2022). CRLF spend most of their time in upland habitats hidden from view, mostly under live plants (Bulger 2003). Small mammal burrows are an important source of cover and estivation habitat for frogs foraging and dispersing in uplands. Additionally, grassland habitats with generally low vegetation or short grasses are more suitable for dispersal to ease movement, retain soil moisture, and promote rodent activity (Ford et al 2013).

Ideal upland habitat for SFGS is open grassland with small mammal burrows and scattered shrubs. Small mammal burrows serve as important hibernacula for SFGS during winter months when temperatures would otherwise be lethal. Additionally, during spring, summer, and fall months, SFGS often bask at the entrances to mammal burrows which they can quickly enter to evade predators. Shrubs are also important as sources of cover from predators but can crowd out exposed ground surfaces which are important for snake thermoregulation. SFGS prefer a shrub concentration of 1 medium sized bush every 20 square meters to 1 large sized bush every 30 square meters (USFWS 2006). SFGS seem to tolerate nonnative grasses well, including wild oat (*Avena fatua*), wild barley (*Hordeum* spp.), and bromes (*Bromus* spp.), though these species are

not crucial to upland habitats. In fact, SFGS abundance has been shown to correlate with habitat diversity (e.g. woody vegetation, herbaceous vegetation, litter, rock, bare ground, etc.) and with species diversity (Kim *et al.* 2018). And since the presence of nonnative grasses tend to lower species diversity in grasslands, replacing these with a diverse array of native herbs and grasses may increase upland habitat value for SFGS.

Currently, the upland restoration plan area is composed almost entirely of nonnative grassland with a few trees and shrubs. Habitat diversity and vegetation species diversity are both relatively low. Weedy colonizers including poison hemlock, eucalyptus, and other taller weeds restrict amphibian and reptile movement and prevent small rodents (e.g. gophers and voles) from creating burrow refugia. The current concentration of shrubs is much lower than the 1 per 20-30 square meter concentration preferred by SFGS. However, a high density of small mammal burrows is present throughout the site which may potentially serve as shelter or hibernacula for frogs and snakes. Nearby eucalyptus trees provide nesting substrate for raptor species, which can lead to increased predation on CRLF and SFGS, given the lack of other available refugia.

Plant Palette Selection and Cover Targets

Plant palettes were designed to (a) be compatible with existing environmental conditions including soil type, shade, moisture level, and overstory vegetation; (b) compete with invasive vegetation; and (c) create optimal wildlife conditions for target species as described previously. Generally, species selection was also determined by commercial availability and hardiness (e.g., browse resistant, drought tolerance). Plant forms (seed vs. container) were selected to balance ease of installation with survival likelihood. A unique plant palette was developed for each zone based on the desired ecological objectives and environmental conditions.

Zone 1: Riparian Setback. Species selection focuses on developing the shrub stratum to increase habitat structure and function. The species selected tolerate a wide range of light availability and seasonal hydrological conditions, in addition to relatively rapid growth rates to keep the currently dense and extensive network of non-native, invasive species at bay. Fendler’s meadow rue (*Thalictrum fendleri*) is recommended as an understory plant to be utilized along upper/outer margins of riparian habitat, in between and/or adjacent to woody shrubs or trees. It is a shade-tolerant perennial herb whose foliage senesces entirely in late summer/early fall. Vegetative growth resumes during the early to mid-spring months, with flowers produced in spring to early summer. Plant species that would enhance CRLF habitat include winter deciduous species; reduced vegetative matter during the wet season would facilitate ease of dispersal during periods when frogs would be active and moving out into upland areas, and increased foliage during the dry season to provide structure and shade during the more vulnerable portion of the target species’ life cycle. Target of 75% absolute cover shrub stratum is planned to provide sufficient refugia within the riparian setback, and add stratification for optimal nesting substrate, and foraging habitat.

Zone 2: Upland. Species selection, spacing, and total cover for the upland terrestrial habitat was done to promote shorter grass heights, replace weedy colonizers with plants that support healthy rodent populations, and a create a mosaic of open grassland with non-spreading shrub islands that can provide refugia from predators. Target of 16% absolute cover within the shrub stratum and 50% relative cover of native forbs will provide sufficient open space for dispersal pathways, without introducing new platforms for predators.

Zone 3: Seasonal Wetland. Mesic perennial herbs and graminoids were selected to complement the coastal seasonal wetland habitat (depressional feature) found in the southern extent of the Project Study Area, immediately south of the more extensive non-native grassland. These species were also selected based on the ability quickly spread via seed and/or rhizome to more effectively compete with nonnative and invasive species like harding grass (*Phalaris aquatica*), velvet grass (*Holcus lanatus*), bristly ox-tongue (*Helminthotheca echioides*) and poison hemlock (*Conium maculatum*). Species selection to favor shade-tolerant species and species that tolerate a relatively wide spectrum of hydrological conditions, from perennially wet to ephemerally mesic. Use of perennial species selected that exhibit a wide range of sizes, growth patterns, and life history dynamics to provide localized structural heterogeneity and simultaneously enhance habitat function. Target of establishing native forbs at 60% relative cover.

Zone 4: Vegetated Swale. Same species selection and cover criteria as Zone 3. California grey rush (*Juncus patens*) is a perennial species that would establish and spread via rhizome to ensure soil retention. This is included as an optional species to provide additional soil structural integrity in a system that is anticipated to convey lateral flow (with potential scour).

Zone 5. Riparian Habitat. Similar to other zones, the species selected for revegetating the riparian habitat is intended to create greater overhead and understory habitat structure via the use of tree and shrub stratum species. Species are also selected for their ability to quickly establish and spread to increase slope stabilization and compete with existing nonnative species. Target absolute cover of 25% within the shrub stratum to account for open water and unvegetated portions of the active channel.

2.3 Implementation

Site Preparation and Plant Installation

Revegetation with native species will enhance habitat quality and diversity on this segment of the creek as well as associated wetland and upland habitat. This will include planting of native grasses, herbs, and shrubs consistent with species found currently growing within Pilarcitos Creek. Non-native and invasive species ranked as having medium and high threats to California's natural areas by the Cal-IPC inventory will be targeted for removal. Native shrubs and trees will be retained since they will continue to provide shade and wildlife habitat. Plants and plant materials will be obtained from California sources, locally sourced where possible.

Prior to planting, the restoration area will be cleared of invasive species and other weeds that may threaten native plant establishment. Mulch or other weed and erosion control materials are highly recommended; a layer of compost is recommended. Following plant installation, cages to prevent deer browsing will be installed. Plants will be watered for the first year to ensure establishment in the event of dry conditions or drought.

Planting Plan

The plant palette, or plant species selected for each zone based on hydrology, light availability, topography, and habitat goals, and planting specifications in are included in **Table 2**, with zone location shown in Appendix A: Figure 2.

Table 2. Planting Palette by Zone

Zone No.	Scientific Name	Common Name	Size	OC Spacing (ft)	Qty.	Plant Protection	% Cover
1	<i>Alnus rubra</i>	Red alder	TP4	25	5	cage	10%
1	<i>Frangula californica</i>	Coffeeberry	DP40	6	43	cage	5%
1	<i>Heteromeles arbutifolia</i>	Toyon	DP40	8	39	none	8%
1	<i>Holodiscus discolor</i>	Ocean spray	DP40	6	43	none	5%
1	<i>Lonicera involucrata</i>	Twinberry	TB4	8	39	cage	8%
1	<i>Morella californica</i>	Wax myrtle	TP4	12	11	none	5%
1	<i>Rubus parviflorus</i>	Thimbleberry	1 gal	6	51	none	6%
1	<i>Rubus spectabilis</i>	Salmonberry	TB5	6	34	none	4%
1	<i>Rubus ursinus</i>	California blackberry	1 gal	5	62	cage	5%
1	<i>Sambucus racemosa</i>	Red elderberry	D40	8	29	none	6%
1	<i>Symphoricarpus mollis</i>	Snowberry	D16	6	43	none	5%
1	<i>Salix lasiolepis</i>	Arroyo willow	stake	8	39	none	8%
1	Subtotal				438 containers 75% cover		
2	<i>Frangula californica</i>	Coffeeberry	DP40	8	117	cage	4%
2	<i>Heteromeles arbutifolia</i>	Toyon	DP40	10	56	cage	3%
2	<i>Rubus ursinus</i>	California blackberry	1 gal	6	156	cage	3%
2	<i>Eriophyllum staechadifolium</i>	Lizard tail	1 gal	6	156	cage	3%
2	<i>Festuca idahoensis</i>	Idaho fescue	plug	3	623	cage	3%
2	<i>Calamagrostis nutkaensis</i>	Pacific reedgrass	seed mix	N/A	1	none	N/A
2	<i>Danthonia californica</i>	California oat grass	seed mix	N/A	5.5	none	N/A
2	<i>Stipa pulchra</i>	Purple needle grass	seed mix	N/A	5	none	N/A
2	<i>Festuca idahoensis</i>	Idaho fescue	seed mix	N/A	4	none	N/A
2	<i>Eschscholzia californica</i>	California poppy	seed mix	N/A	3	none	N/A
2	<i>Gilia capitata</i>	Globe gilia	seed mix	N/A	1.5	none	N/A
2	Subtotal				1,108 containers and 20 PLS lb/acre; 16% cover		
3/4	<i>Artemisia douglasiana</i>	Mugwort	seed mix	N/A	0.25	none	N/A

Zone No.	Scientific Name	Common Name	Size	OC Spacing (ft)	Qty.	Plant Protection	% Cover
3/4	<i>Bromus carinatus</i>	California brome	seed mix	N/A	8	none	N/A
3/4	<i>Danthonia californica</i>	California oat grass	seed mix	N/A	5.5	none	N/A
3/4	<i>Deschampsia cespitosa</i>	Tufted hairgrass	seed mix	N/A	0.75	none	N/A
3/4	<i>Elymus glaucus</i>	Blue wild rye	seed mix	N/A	8	none	N/A
3/4	<i>Elymus triticoides</i>	Creeping wildrye	seed mix	N/A	8	none	N/A
3/4	<i>Festuca californica</i>	California fescue	seed mix	N/A	3	none	N/A
3/4	<i>Luzula comosa</i> *	Pacific woodrush	seed mix	N/A	3	none	N/A
4	<i>Juncus patens (optional)</i>	California gray rush	plugs	3	135	none	15%
4	<i>Hordeum brachyantherum (optional)**</i>	Meadow barley	seed mix	N/A	10	none	N/A
3/4	Subtotal				15% cover; 36.5 PLS lb/acre		
5	<i>Rubus parviflorus</i>	Thimbleberry	1 gal	6	51	none	6%
5	<i>Sambucus racemosa</i>	Red elderberry	D40	8	29	none	6%
5	<i>Symphoricarpus mollis</i>	Snowberry	D16	6	43	none	5%
5	<i>Salix lasiolepis</i>	Arroyo willow	stake	8	39	none	8%
5	Subtotal				162 containers 25% cover		

* There may be limited availability in plants or seed for *Luzula comosa*, may need to collect and contract grow.

** This is a suitable substitute for *Juncus patens*, at the rate specified.

Following temporary ground disturbance and/or removal of invasive species, upland habitats will also be reseeded using a native seed mix provided in Table 2.

Depending on nursery stock availability, substitutes may be necessary for the plants listed above. Where possible, plant substitutions should have the same life form, consist of the same quantity, have similar habitat/water requirements, and should be native to the area. Deviations to the planting plan (e.g., spacing) in the attached Plan Sheets may also be necessary as part of the field-fitting process. All plant substitutes shall be approved by the biologist prior to purchase to ensure substitutions are appropriate.

Non-native plants shall not be planted in the Restoration Areas. Invasive plants or any aggressive non-native species that can easily spread into the restoration area shall not be installed anywhere on the property as it would pose a risk to the native plantings.

The optimal time to plant native species is during the late fall after rains have begun and when more rain is predicted in the coming weeks and months. This allows the plants to establish sufficient root systems and reduces the need for supplemental irrigation. Irrigation is still recommended immediately after planting, during any dry spells during the first few months, and weekly during the first dry season. Native shrubs and herbs will benefit from occasional (approximately bi-weekly) and deep dry season watering in the subsequent two to three years, and do not need to be continually irrigated once they appear to be established. Excessive watering of these drought-resistant species may encourage root rot, excessive above ground

growth without deep roots, or competition from weeds near the irrigation source. The Applicant shall be responsible for ensuring plants are irrigated during the first year.

3.0 MAINTENANCE, MONITORING, AND REPORTING

For a minimum of five years following installation, a consulting biologist or restoration ecologist will perform annual monitoring of the restoration area. The purpose of the monitoring will be to verify that the specifications included within this report and success criteria summarized below have been completed. The restoration area will be examined for signs of damage from foot traffic, natural causes (herbivory), or any other uses beyond the necessary management and monitoring outlined in this Plan. Photographs will be taken from at least one permanent photo point to document riparian habitat development during each monitoring year.

Monitoring will be conducted in the early summer of each year before leaf drop of early deciduous trees/shrubs and at peak growth for planted species – roughly around June, no later than July. Monitoring during this period ensures accurate representation and assessment of the planted species survival and health within the restoration area. General health and vigor of each planted species should be noted and may guide any changes in the planting plan if replanting is necessary. The primary goal of this monitoring program is to ensure establishment of healthy native species throughout the restoration area, and their spacing will eventually create a dense canopy of shrubs that will improve the treeless or exotic-dominated areas currently lining the creek, in line with the Plan’s goals as stated in Section 2.1.

3.1 Maintenance

Maintenance activities should include scheduled inspections of once per quarter for plant protection, irrigation, plant health, and invasive species, followed by adaptive management actions including, but not limited to:

- 1) repair, replacement, or removal of malfunctioning items, of plant protection devices,
- 2) irrigation adjustments and repairs
- 3) replacement planting for dead individuals and/or species substitution
- 4) invasive species control

Plant protection devices should be inspected once per year. Bent or fallen support structures, cages, and/or fencing will be repaired as necessary by landscaping staff. Cages may need to be adjusted to accommodate the growth of plant installations to prevent crowding. Cages may be removed once the protected plants have attained heights where they are not significantly suppressed by deer browsing. Removal of temporary fencing and individual plant flagging or other identification should only occur when plants are sufficiently established to withstand foot

traffic in the vicinity, and the difference between native plantings and weeds can be easily determined.

Observations of plant health and vigor during the dry season should inform irrigation adjustments (frequency and water levels). Regular tests of the irrigation to check for leaks or blockages should be performed to ensure irrigation system is in working order.

If any year's survival goals are not achieved, the appropriate number of plants species will be replanted as part of a remedial planting during the subsequent fall or winter. The number and species to be replanted will be determined by the consulting biologist based upon available space, appropriate locations, and potential for competition with existing plantings. If growth of native plantings and canopy coverage is rapid and replacement planting is not deemed necessary towards the end of the monitoring period, the total numbers required in the success criteria may be modified accordingly.

Invasive plant species identified as either moderate or highly invasive on the California Invasive Plant Control (IPC) List will be removed prior to planting. Mechanical controls will be implemented following re-colonization to either eliminate or to control any invasive species so that it will not have a significant impact on the survival of installed plantings or the ecological function of the restored habitat.

3.2 Monitoring

Methods

At the start of the monitoring period, two permanent points will be established in each planting zone to collect releve data. The permanent points will be selected based on best representation of each zone, according to the discretion of the monitoring biologist. The data collection protocols will follow methods outlined CNPS Releve Protocol (CNPS 2007). Data collected from the releve allow for progress tracking.

Success Criteria

Success of the riparian habitat restoration and establishment of creek vegetation requires the prevention of human disturbance and control of invasive species in planting areas. Therefore, the following criteria listed in Table 3 will be evaluated to ensure that protective measures and maintenance are being performed, and that native plants are established and likely to persist beyond the monitoring period. Invasive plants on the Cal-IPC High or Moderate lists will not exceed 5 percent relative cover in any year following mechanical controls.

Table 3. Restoration Success Criteria by Year and Zone

Year	Zone 1	Zone 2	Zone 3/4	Zone 5
1	Native shrub species 25% absolute cover; invasive species less than 15% relative cover	Native shrub absolute cover at 5%; native forb relative cover of 50%; invasive species less than 15% relative cover.	Native forb species at 20% relative cover; invasive species less than 15% relative cover	Shrub stratum at absolute cover of 10%; invasive species less than 15% relative cover.
3	Native shrub species 50% absolute cover; invasive species less than 10% relative cover	Native shrub absolute cover at 10%; native forb relative cover of 50%; invasive species less than 10% relative cover.	Native forb species at 30% relative cover; invasive species less than 10% relative cover	Shrub stratum at absolute cover of 15%; invasive species less than 10% relative cover.
5	Native shrub species 75% absolute cover; invasive species less than 5% relative cover	Native shrub absolute cover at 18%; native forb relative cover of 50%; invasive species less than 5% relative cover.	Native forb species at 60% relative cover; invasive species less than 5% relative cover	Shrub stratum at absolute cover of 25%; invasive species less than 5% relative cover.

If performance criteria have been met by the end of the monitoring period, annual monitoring may be discontinued. If not, remedial actions and additional monitoring may need to be implemented.

3.3 Reporting

Monitoring reports shall include a general description of work performed over the previous year (including any maintenance or weed control) and an evaluation of the restoration area according to the success criteria. The numbers and condition of planted shrubs and native herbaceous species should be described, as well as any observed threats to these plants or to native habitats. New invasions of non-native species and plans for their removal or control should be detailed, as necessary.

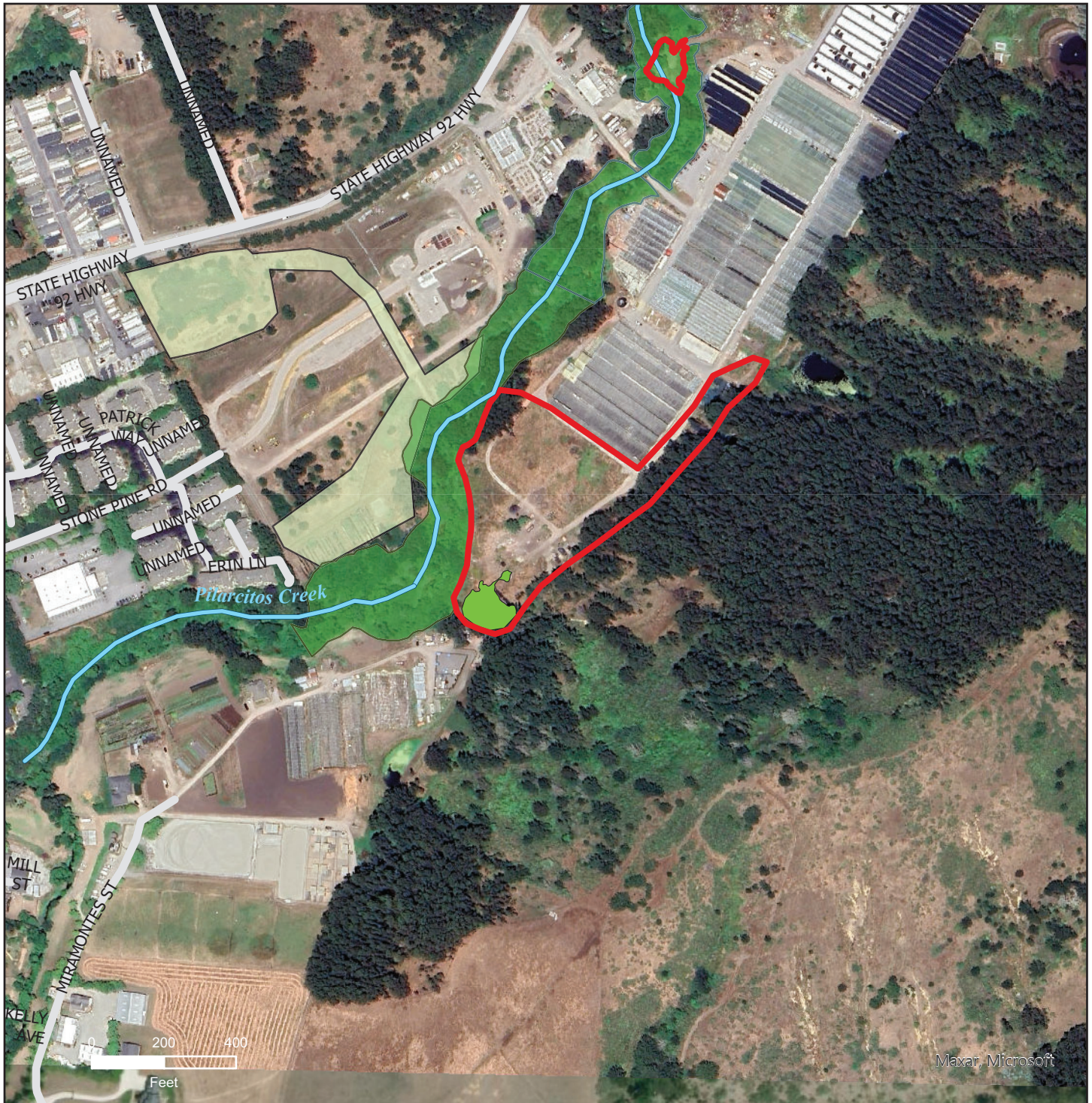
The final monitoring report should also evaluate whether the restoration area has become sufficiently self-sustaining or whether additional invasive species control work or other conservation activities or monitoring should be performed. Annual reports will be prepared by January 31 following the end of each monitoring year.

4.0 REFERENCES

- Bulger, J. B., N. J. Scott, Jr., and R. B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs (*Rana aurora draytonii*) in coastal forests and grasslands. *Biological Conservation* 110:85–95.
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- Kim, R., B. J. Halstead, G. D. Wylie, and M. L. Casazza. 2018, Distribution and demography of San Francisco gartersnakes (*Thamnophis sirtalis tetrataenia*) at Mindego Ranch, Russian Ridge Open Space Preserve, San Mateo County, California: U.S. Geological Survey Open-File Report 2018-1063.
- Reed, P. B., Jr. 1988. National list of plant species that occur in wetlands: California (Region 0). U.S. Fish and Wildlife Service Biological Report 88 (26.10).
- U.S. Army Corps of Engineers. 2016. Arid West 2016 Regional Wetland Plant List.
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2005. Official List of US Hydric Soils.
- USFWS. 2006. San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*) 5-Year Review: Summary and Evaluation. September. Sacramento Fish and Wildlife Office, California.
- USFWS. 2020. Species Status Assessment for the San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*), Version 1.0. May 2020. Sacramento, California.
- USFWS. 2022. California Red-legged Frog (*Rana draytonii*) 5-Year Review: Summary and Evaluation. December. Sacramento Fish and Wildlife Office, California.

APPENDIX A – PROJECT FIGURES

Figure 1. Restoration Area Location Map
 California Terra Garden, Half Moon Bay, CA









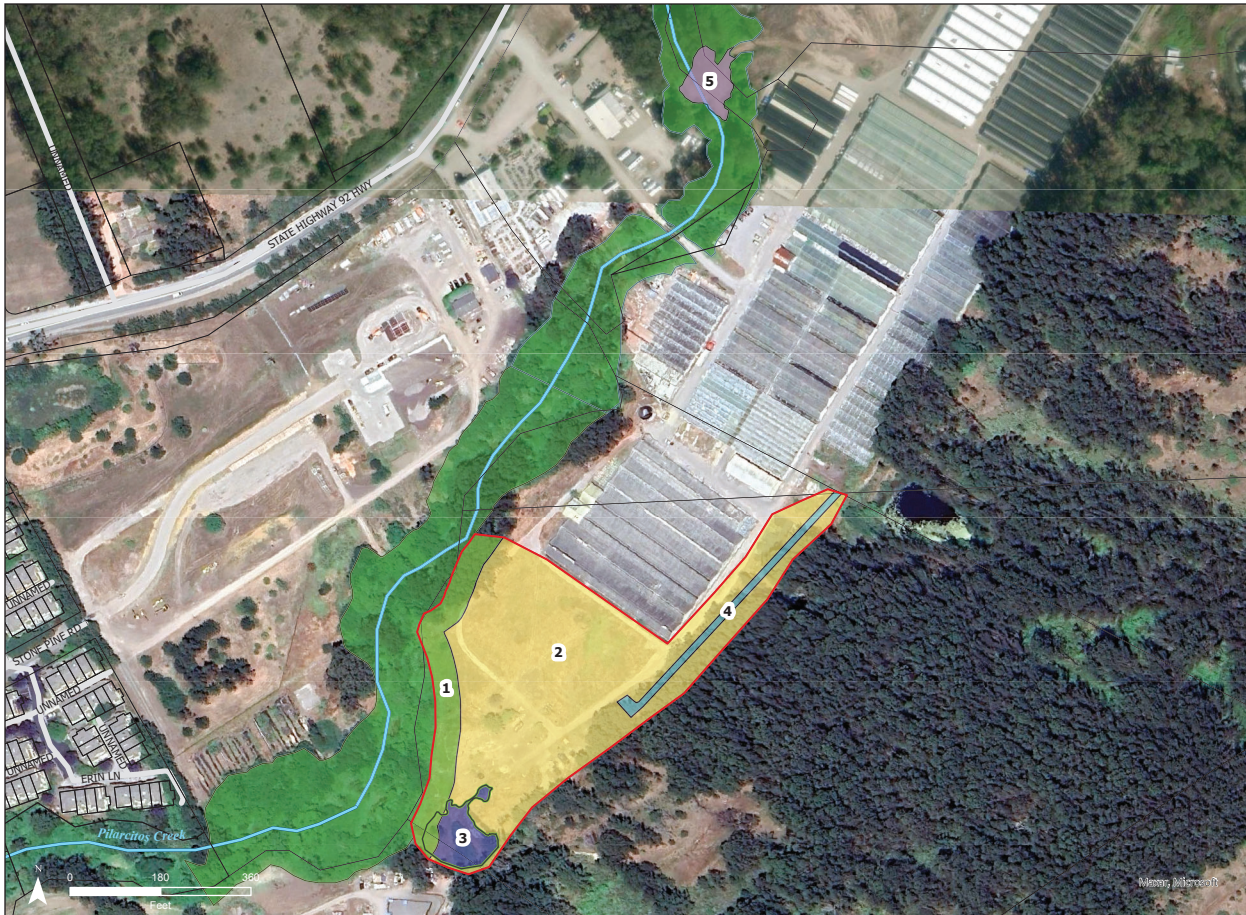
- | | |
|---|--|
|  Restoration Area |  Pilarcitos Creek |
|  City of Half Moon Bay Wildlife Corridor Conservation Area |  Seasonal Wetland |
|  Streets |  Riparian Habitat |

Figure 2. Vegetation Restoration Zones
 California Terra Garden, Half Moon Bay, CA



Vegetation Restoration Zones

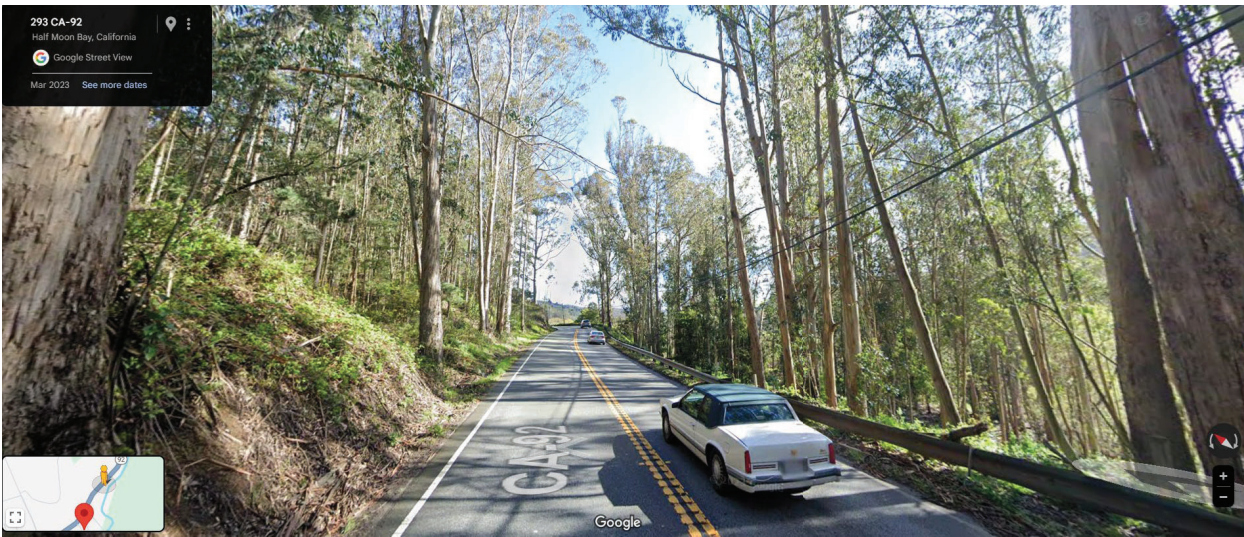
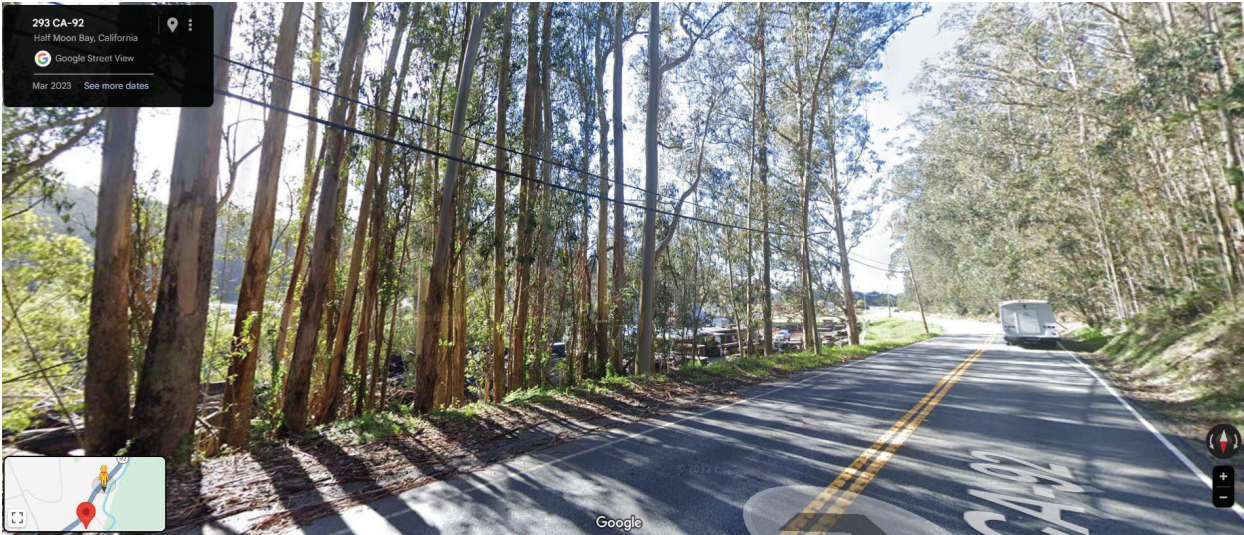
- Restoration Zones**
- 1-Riparian Setback Mitigation (0.80 ac)
 - 2-Upland Habitat Mitigation (4.54 ac)
 - 3-Seasonal Wetland Enhancement (0.26 ac)
 - 4-Vegetated Swale (0.20 ac)
 - 5-Riparian Habitat Restoration (0.22 ac)

- Riparian Habitat
- Seasonal Wetland
- Streams
- Restoration Area
- Parcel Boundary
- Streets

Projected Coordinate System: NAD 1983 (2011)
 StatePlane California III FIPS 0402 (US Feet)
 Projection: Universal Transverse Mercator
 Datum: North American 1983
 Base: Google 6/2025, ESRI
 Data: San Mateo Co., Sol Ecology Inc.
 Date: 6-19-2025
 GIS: AG2326.5 terra restoration 2



ATTACHMENT E: Views of the hoophouses from Highway 92





ATTACHMENT F: PRIME SOILS MAP

