

Site Management Plan

For

Larabee Farm LLC

APN 210-250-020

WDID #1_12CC412048

Tier 2, Low Risk



PREPARED FOR

State Water Resources Control Board

PREPARED BY

Elevated Solutions LLC

3943 Walnut Dr STE E

Eureka, CA 95503

Suggested citation:

Elevated Solutions. 2019. Site Management Plan for APN 210-250-020. Prepared by Elevated Solutions, Eureka, California for the North Coast Regional Water Quality Control Board, Santa Rosa, California and Larabee Farm LLC.

Table of Contents

1	SEDIMENT DISCHARGE BEST PRACTICAL TREATMENT OR CONTROL (BPTC)	1
1.1	Site Characteristics	1
1.1.1	Site Overview	1
1.1.2	Access Road Conditions	1
1.1.3	Legacy Waste Discharge Issues	1
1.1.4	Vehicle stream crossing	1
1.1.5	Hydrologic and Hydraulic (H&H) Analyses for Crossing Structure Sizing	1
1.2	Sediment Erosion Prevention and Sediment Capture	1
1.2.1	Roads – Sediment and Erosion Prevention	1
1.2.2	Cultivation Areas – Sediment and Erosion Prevention	1
1.2.3	Other Areas – Sediment and Erosion Prevention	1
1.2.4	Maintenance – Sediment and Erosion Prevention	1
2	FERTILIZER, PESTICIDE, HERBICIDE, AND RODENTICIDE BPTC MEASURES	2
2.1	Summary of Products Used	2
2.1.1	Fertilizer	2
2.1.2	Pesticide, Herbicide, and Rodenticide	3
2.2	Procedures for Storage, Mixing, and Application	3
2.2.1	Irrigation Runoff	3
2.2.2	Spoils Management	3
2.3	Procedures for Spill Prevention and Cleanup	3
3	PETROLEUM PRODUCT BPTC MEASURES	4
3.1	Summary of Products Used	4
3.2	Procedures for Storage, Mixing, and Application	4
3.3	Procedures for Spill Prevention and Cleanup	4
4	TRASH/REFUSE AND DOMESTIC WASTEWATER BPTC MEASURES	5
4.1	Trash/Refuse	5
4.2	Number of Employees, Visitors, or Residents at Site	5
4.2.1	Human Waste	5
5	WINTERIZATION BPTC MEASURES & SCHEDULE	5
6	OTHER CULTIVATION SITE INFORMATION	5
6.1	Biological Resources	7
6.2	Estimated Water Storage and Use	8
6.2.1	Water Sources	8
6.2.2	Water Storage	8
6.2.3	Water Use	8
6.3	Construction Cost Estimates for Sites Requiring CDFW LSAA	9
6.4	Remediation Fee Discussion	9
6.5	Site Location Table	9
7	REFERENCES	9
8	CERTIFICATION	6

Figures

Figure 1.	210-250-020 overview map	2
-----------	--------------------------	---

Purpose:

This document serves as the Site Management Plan on behalf of the discharger, Larabee Farm LLC, pursuant to Order No. WQ 2019-001-DWQ (General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for discharges of Waste Associated with Cannabis Cultivation Activities) of the California Water Code Section 13260(a).

Tier Designation

This property has been classified as a Tier 2, Low Risk designation.

1 SEDIMENT DISCHARGE BEST PRACTICAL TREATMENT OR CONTROL (BPTC)

1.1 Site Characteristics

1.1.1 Site Overview

Elevated Solutions has been contracted by the owners of APN 210-250-020 to perform a site assessment and develop a Water Resource Protection and Site Management Plan to decrease existing and potential future sediment delivery to tributaries of the Van Duzen River and reduce other threats to water quality. The site plan for the property is shown on Figure 1.

In August 2019, a site visit was conducted by Elevated Solutions in which a road inventory and assessment of cultivation areas were evaluated. All site locations are shown in Appendix B and each site is described below.

- Permitted Groundwater Well (Humboldt County Permit #01/02-921) is the domestic and agricultural source of water and is also used for topping of tanks during the non-forbearance period.
- Larabee Farms currently has 56,750 gallons of hard plastic tank storage that is used during the forbearance period due to the well has been deemed hydrologically connected. Larabee Farms will upgrade an additional 20,000 gallons of hard plastic tank storage for the 2020 season.
- Larabee Farm currently has an interim permit with Humboldt County and a Provisional License with the State of California for 9,460 SF of Mixed Light Cultivation for the 2020 season.

The subject property is located off Hwy 36 in Larabee Valley, situated in a valley that drains into the Butte Creek water shed which is a tributary to the Little Van Duzen, tributary to the Van Duzen River, tributary to the Eel River. The property and surrounding vicinity is composed of Franciscan Complex geology consisting of Cretaceous and Jurassic sandstone with smaller amounts of shale, chert, limestone, and conglomerate as well as Franciscan mélange¹. Based on NRCS soils map for the region², the cultivation areas and proposed project components are in Yorknorth-Devilshole complex.

¹ California Department of Conservation, Geologic Map of California (2010), accessed online at: <http://maps.conservation.ca.gov/cgs/gmc>

² NRCS Watershed Boundary Dataset, Sub-region level, 2012.

Figure 1. APN 210-250-020 overview map.

PROJECT INFORMATION:

APPLICANT:
LARABEE FARM, LLC
1008 FOX MEADOW WAY
CONCORD, CA 94518

PROPERTY OWNER:
KRASIMIRA KAKAROVA
382 LAKE PARK TR
DUNEDIN, FL 32765

APPLICANTS AGENT:
Humble Servants of the Mattole
738 7th Street, Ste. C
Eureka, CA 95501
(707) 842-6886
HSC016@hotmail.com
SITE ADDRESS:
APN: 210-250-020
552 LARABEE VALLEY RD
BRIDGEVILLE, CA 95526

Larabee Farm, LLC Special Permit APN# 210-250-020 Application # 11889



NOT TO SCALE PROJECT SITE

DIRECTIONS TO SITE:

FROM EUREKA, CA
-SOUTHBOUND ON US-101
(APPROX. 19.9 MILES)
-TAKE EXIT 68S FOR CA-36E
-TURN LEFT ONTO CA-36E
(APPROX. 33.4 MILES)
-TURN LEFT ONTO LARABEE VALLEY RD
(APPROX. 3 MILES)
SITE INDICATED BY RED DOT
LARABEE Farm, LLC is proposing to permit existing Cannabis Cultivation activities in accordance with the County of Humboldt Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The Project requires a Special Permit (SP) for a total of 9,460 Square Feet. The project includes the permitting of Pre-Existing Mixed-Light Cultivation in the following: GH#1 30'x100' 3,000 SF, GH#2 34'x95' 3,230 SF, GH#3 34'x95' 3,230 SF for a total cultivation area of 9,460 Square Feet. The project has a 1,500 SF processing shed that is used for drying, curing and trimming of cannabis. There is a 600 SF shed that is also used for drying and curing cannabis. There is a 10'x14' storage shed with secondary containment located on parcel that is used for storage of petroleum products. There are (2) 8'x20' Conex Boxes that are used for storage of pesticides, nutrients and other cultivation related supplies. The applicant proposes a 1,500 SF ancillary nursery to facilitate immature plants. The applicant was issued a provisional license from CDFA in July 2019. The applicant aims to become fully compliant with Local and State Cultivation Regulations.

Existing Mixed Light Cultivation: 9,460 SF
Cultivation Facilities: 2,560 SF
Water: Permitted Well
Sewer: Permitted Septic System
Earthwork: None
Parcel Size: 20 Acres
Zoning: AE
General Plan Designation: AL40 (FRWK)

Backing Set Backs:
AE: SRA:
Front: 30' 30'
Side: 20' 30'
Rear: 10' 30'

SRA Area: Yes
In Coast Zone: No
In 100 yr Flood: No

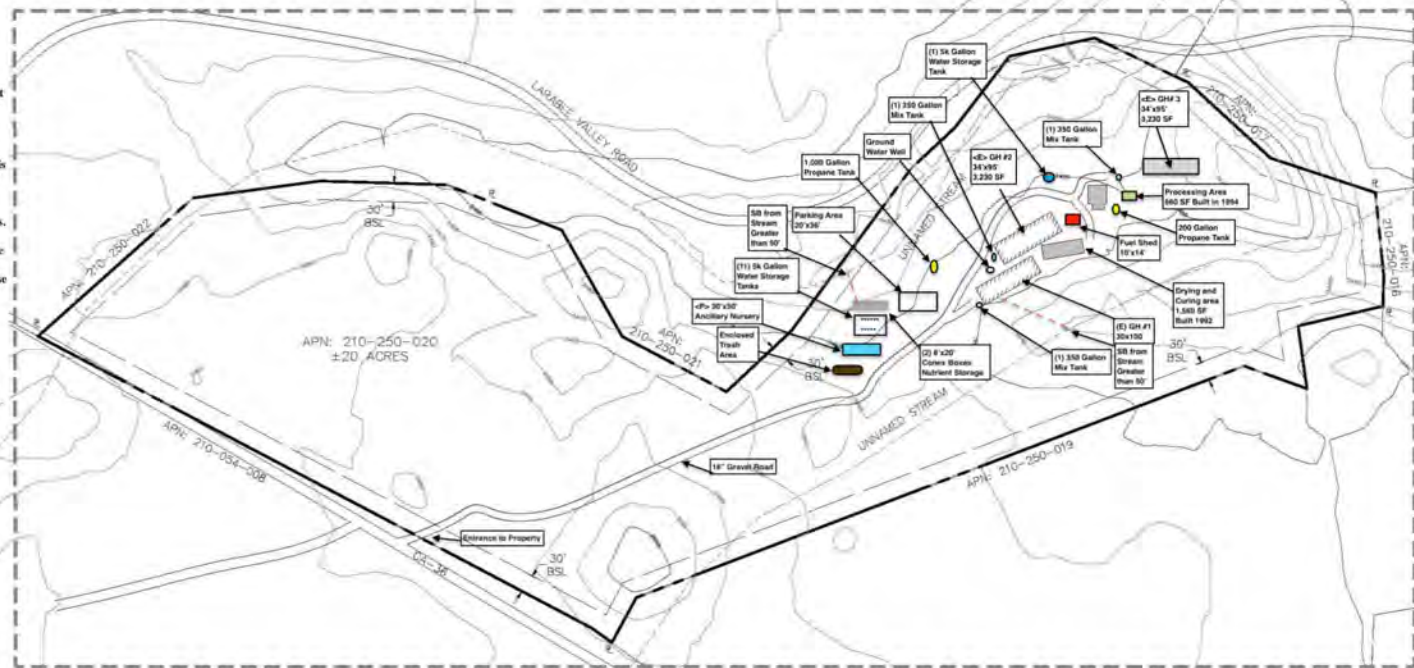
General Notes:

1. Drawings scale as noted. Written dimensions shall take precedence over scale.
2. This is not a boundary information depicted has been obtained from 2015 Web GIS. Kolstads Surveying has completed the boundary survey to confirm property boundary.
3. There are no near by schools, school bus stops, places of worship, public parks or tribal resources.

4. There are not residence on adjoining parcels within 300' of the cultivation area
5. Any existing development constructed without the benefit of Humboldt County Building Department review will be subject to the Humboldt County Building Department upon approval of the Special Permit.

PLOT PLAN

11x17 SHEET: 1"=200'



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
C0	PLOT PLAN, VICINITY MAP, & PROJECT NOTES
C1	AREA 1 MAP

Revised 7/2019

NOTE: LOCATIONS OF PROPERTY BOUNDARY LINES ARE APPROXIMATE.

LARABEE FARM, LLC / APN: 210-250-020

552 LARABEE VALLEY RD, BRIDGEVILLE, CA 95526

WRPP PLOT PLAN, VICINITY MAP AND PROJECT NOTES

SHEET
C0
LBF BRCA02
8/10/2019 10:00 AM

1.1.2 Access Road Conditions

Overall, the primary access roads on the property are in good condition. The roads were surfaced in 2018 by a licensed contractor with gravel and either out sloped and/or have rolling dips to reduce runoff concentration. The roads are maintained yearly by regrading if necessary or adding additional gravel to avoid sediment delivery. The approach off of Hwy 36 will need to be paved per Humboldt County Planning Department pending approval of Larabee Farm.

1.1.3 Legacy Waste Discharge Issues

Legacy disturbance from historic timber harvest on the property prior to current ownership has been assessed and is generally limited to the currently utilized access roads. The road network and cultivation areas are inspected regularly for signs of erosion that could exacerbated the legacy waste discharge issues.

1.1.4 Vehicle stream crossing

There is one road/stream crossing on the property that will be upgraded from a Double-barreled 36-inch diameter and a 48-inch diameter culvert crossing on a class II watercourse. The crossing will be upgraded to an 84-inch diameter by 50-foot culvert during the 2020 season.

1.2 Sediment Erosion Prevention and Sediment Capture

1.2.1 Roads - Sediment and Erosion Prevention

All roads on the property are in good condition. No significant road maintenance is needed except for standard annual maintenance such as graveling and reshaping. The road system was processed and rocked in 2018 and rolling dips/ out sloping has been implemented.

1.2.2 Cultivation Areas - Sediment and Erosion Prevention

All cultivation sites have appropriate setbacks from watercourses and follow the BMPs. Soil pile is covered starting October 1 with plastic and the perimeter is contained with straw wattles. All dirt areas have straw applied and straw bales have been placed strategically on out sloped areas to prevent any sediment delivery. Greenhouse covers have been removed and wattles have been placed around the perimeter of the structure.

1.2.3 Other Areas - Sediment and Erosion Prevention

1.2.3.1 Groundwater Well Treatments

Water is provided by a permitted groundwater well (Humboldt County Permit # 01/02-921). Water is stored during the winter months into the 56,750 gallons of hard plastic tank storage and used for agricultural use during the forbearance period. Larabee Farms will upgrade an additional 20,000 gallons of hard plastic tank storage during the 2020 season.

1.2.4 Maintenance - Sediment and Erosion Prevention

- Erosion and sediment control best management practices (BMPs) shall be installed prior to the wet season (1 October through 30 April).

- Sensitive areas and areas where existing vegetation is being preserved shall be protected with construction fencing; fencing shall be maintained throughout construction activities.
- All areas disturbed during grading activities shall be seeded with native grass seed and mulched with rice straw.
- Prior to seeding and straw, disturbed areas should be roughened by track walking with a dozer.
- Straw shall be applied at a uniform rate of approximately 4,000 lbs per acre by hand.
- At the completion of the project, straw wattles shall be placed as directed by the engineer or geologist.
- All sediment control BMPs shall be maintained throughout the wet season until new vegetation has become established on all graded areas.
- Soil Pile is covered with plastic, secured with rope and sandbags, and straw wattles have been placed around the perimeter. Long term solution will be a wooden structure around the soil pile to prevent delivery with a covered roof to prevent leaching.

2 FERTILIZER, PESTICIDE, HERBICIDE, AND RODENTICIDE BPTC MEASURES

2.1 Summary of Products Used

Product (NPK)	Annual Total
Bio Bud (0-0-1)	8.7 gal
Bio Root (1-1-1)	21.8 gal
Botanicare Cal Mag Plus (2-0-0)	62.5 gal
Bio Marine (2-3-1)	65.6 gal
Botanicare Silica Blast (0-0-.5)	21.9 gal
Humboldt Nutrients Verde (16-1-2)	5.2 gal
Fox Farm Cha-Ching (9-50-10)	7.2 lbs
MaxSea All Purpose Fertilizer (16-16-16)	90 lbs

2.1.1 Fertilizer

Fertilizers, potting soils, compost, and other soils and soil amendments are stored in locations and in a manner in which they cannot enter or be transported into surface waters and such that nutrients or other pollutants cannot be leached into groundwater. All soil is contained in a single pile, covered with plastic, and straw wattles have been placed around the perimeter to avoid any delivery to surface waters.

If the landowner wishes to keep fertilizers and soil amendments on the Project Site, they should continue to be stored fully under cover, off the ground, and in a stable location not exposed to the elements. All fertilizers are stored in a secure cargo shipping container with secondary containment, identified as Nutrient and Pesticide storage area. Fertilizers, potting soils, compost, and other soils and soil amendments should not be stored with petroleum products as they may be incompatible and could potentially react. All petroleum products are stored in a secure cargo shipping container with secondary containment identified as Oil and Petroleum storage area.

Applicant is required to keep detailed records of the type, timing and volume of fertilizers and/or other soil amendments you use in your operations. Observe and monitor soil moisture so watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided. Larabee Farm utilizes hand watering to avoid any overwatering.

2.1.2 Pesticide, Herbicide, and Rodenticide

To be compliant with the Order, all pesticides, herbicides and related materials (e.g., fungicides) must be used and applied consistent with product labeling. Pesticide and herbicide storage and use on the Project Site must be closely monitored and recorded. Landowner is required to keep records (logs) of the type, timing and volume of pesticides and herbicides used in your operations.

When present, pesticides and herbicides should be stored within enclosed buildings in such a way they cannot enter or be released into surface or ground waters. They should not be stored with petroleum products as they may be incompatible and could potentially react.

2.2 Procedures for Storage, Mixing, and Application

2.2.1 Irrigation Runoff

Irrigation water is applied to cultivation areas at agronomic rates, so runoff is not an issue.

2.2.2 Spoils Management

All spoils generated by the operations are reused on site. All soil is contained in a single pile, covered with plastic, straw wattles placed around the perimeter, and amended each year after analysis. All dirt areas in the greenhouses that are exposed are covered in straw and perimeter of greenhouses have straw wattles.

2.3 Procedures for Spill Prevention and Cleanup

To prevent nutrient leaching from cultivation areas, continue to plant dense cover crops in spent pots, holes and beds to enrich soil and lock up nutrients or; 1) fully tarp any exposed soils and growing mediums in beds, pots, holes or piles; or 2) move spent soils and amendments inside or under cover to temporarily store them during the wet season (November 1 – May 15). If dense cover crops cannot be kept alive, all planted areas should be tarped to protect them from rainfall, snowmelt and subsequent infiltration and leaching of nutrients. Winterize all cultivation areas and all disturbed areas on the Project Site by placing straw wattles with biodegradable wrapping on the downslope perimeter and/or by mulching/seeding any bare soil areas on cultivation sites.

All the necessary spill prevention and clean-up materials are on site and available in the immediate vicinity of storage area for petroleum and pesticide. Major spills should be addressed per actions described in Section 3.3 below.

3 PETROLEUM PRODUCT BPTC MEASURES

3.1 Summary of Products Used

Electricity is provided by PG&E for all cultivation and domestic uses. Use of the on-site generator is used only during power outages and follows all guidelines set by Humboldt County and the State of California. Fuel is limited to (1) 55-gal drum of generator fuel for back up use, and smaller gas cans as needed to power garden equipment, etc.

3.2 Procedures for Storage, Mixing, and Application

All small fuel cans, generators, fuel tanks, gasoline powered garden equipment and any other items containing petroleum products in adequate secondary containment basins and store in a safe, covered, secure location (e.g. away from slopes and outside of riparian buffers). These items are stored in the 10'x14' fuel & generator shed, depicted in the site map. Generator and fuel storage area has concrete flooring, secondary containment, and a secure enclosed structure. Spill kits, fire extinguishers, and first aid kits are located at the pesticide and nutrient storage area as well as fuel and generator area.

3.3 Procedures for Spill Prevention and Cleanup

If gas or oil is spilled, immediate attention will be taken to stop the spill by turning off valves or plugging the source of the leak. If the source is a tank or any other kind of container and it is punctured, a wooden plug or a bolt will be used to prevent further leaking. Spill kits and fire extinguishers are located at the fuel/generator shed and Oil/Petroleum storage area.

After stopping the spill, the contaminated soil will be removed from the ground and contained in a bucket, pail, or other non-permeable container. All soil that has visible oil stains or petroleum odor will be dug out and contained. The contaminated soil will be disposed of in accordance with state law.

After the cleaning process is finished, the employee must submit a report of the incident describing what was spilled and the amount, how the spill was cleaned, and the steps that will be taken to prevent future spills. Illustrations or diagrams should be included to show the contaminated area, the excavation of the soil, and the kind of waste that was created. The spillage event and corrective actions will be written down in the Field Sanitation Unit Service Log and kept in our records.

In general, the following clean-up steps will be performed:

1. Any affected material is immediately disposed of in a covered waste bin.
2. The contaminated area will be marked off with caution tape or string.
3. Signs in appropriate languages will be posted at the perimeter prohibiting entry to the contaminated area.
4. People and animals will be kept out until the area is sufficiently decontaminated.
5. Any solid waste still resting on the surface will be collected, shoveled up, and removed to the waste bin.
8. The spillage event and corrective actions will be written down in the Field Sanitation Unit Service Log and kept in our records.

4 TRASH/REFUSE AND DOMESTIC WASTEWATER BPTC MEASURES

4.1 Trash/Refuse

All refuse is stored in trash containers in a secure location. It is important to utilize storage facilities which prevent animals from accessing or disturbing garbage or refuse. Garbage is removed from the property and hauled to approved County collection location at least once per month. All Trash is stored in a 10x10 secure enclosed structure.

4.2 Number of Employees, Visitors, or Residents at Site

Typically, two individuals would be working during production April-October. During peak harvest periods as many as 4 individuals may be working on the property in July through October.

4.2.1 Human Waste

Human waste is directed from the residence to the existing permitted septic tank and leach field system approved by Humboldt County. Larabee Farm had the septic tank cleaned in 2018 by Steve's Septic Service and will continue to service as needed.

5 WINTERIZATION BPTC MEASURES & SCHEDULE

The applicant should conduct the following activities prior to the onset of measurable rainfall:

- 1) Ensure that the cultivation areas are either tarped or planted with thick cover crop
- 2) Make sure that all cultivation related supplies and equipment are in a secure covered location per Sections 2-4 above
- 3) Roads are surfaced with rolling dips and out slope installed to prevent sediment delivery
- 4) Soil pile is covered with plastic and straw wattles are placed around the perimeter
- 5) Perform yearly maintenance on drainage features as applicable to reduce runoff concentration (i.e. handwork or small equipment work to maintain water bars, ditches, sediment catchment areas, etc.)
- 6) Project site is monitored monthly or after a significant rainfall event for any sign of sediment control failures.

6 OTHER CULTIVATION SITE INFORMATION

Elevated Solutions has conducted significant assessment and planning at this site. Humboldt County Planning Department and Bear River Tribe did a site inspection in October for final approval. Larabee Farm will upgrade an additional 20,000-gallons of hard plastic storage during the 2020 season. Larabee Farm proposes a 1000 SF ancillary nursery that will be used for propagation of nursery stock.

7 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Steve Doyle
State Contractor # 1031712
Elevated Solutions