

Site Management Plan

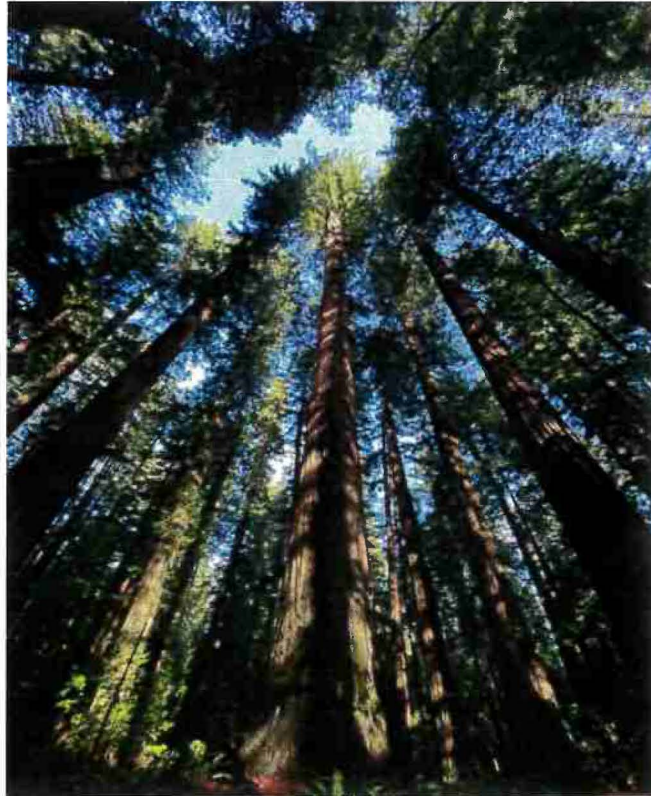
For

Lina Farm LLC

APN 221-061-034

WDID #1_12CC411865

Tier 2, Low Risk



PREPARED FOR

State Water Resources Control Board

PREPARED BY

Elevated Solutions LLC

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Appendix A. Site Map

Purpose:

This document serves as the Site Management Plan on behalf of the discharger, Lina 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 221-061-034 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 Salmon Creek (South Fork Eel 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.

- POD is a site is located in a class II watercourse which is a tributary to Salmon Creek (South Fork Eel River). Diversion structure is a ¾" poly pipe placed in the channel during the non-forbearance period used for domestic use only. Lina Farms has filed for a Small Irrigation Use Registration with the State Waterboard for the use of the POD.
- Upper off-stream pond is approximately 500,000-gallons and used for agricultural use and stores water to the 40,800-gallons of hard storage during the wet winter months.
- Lina Farm is currently enrolled in the RRR program (Retire, Relocate, Restore) with Humboldt County Planning Department and will be relocated to Honeydew Ranch, LLC pending approval in 2020 season. Plans for the restoration work are currently being drafted by Stillwater Sciences and will be submitted upon completion. Lina farm currently has an interim permit with Humboldt County for the 2020 season and a Provisional License with the State of California.
- Lina Farms has de-commissioned the lower cultivation sites and currently has an interim permit with Humboldt County and a Provisional License with the State of California to cultivate 8,102 SF of Outdoor Cultivation in metal greenhouse structures for the 2020 season.

The subject property is located off Thomas Road in Salmon Creek, CA, situated on a rocky ridge that drains into an unnamed class II watershed which is a tributary to Salmon Creek (South Fork 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.

1.1.2 Access Road Conditions

Overall, the primary access roads on the property are in fair condition. The roads were processed, rocked, and out sloped in 2018 by a licensed contractor. Road systems will be evaluated after the winter rains/snow and repaired if needed to reduce any sediment delivery.

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 are 3 road crossings located on this property that will be de-commissioned during the restoration work. Crossing #1 is a class III watercourse being diverted around its natural channel around cultivation site #4. Cultivation site was de-commissioned in 2018 and will be restored during the restoration work. Crossing #2 is an existing dirt ford with a rocked armored spill way on a class II watercourse and will be de-commissioned during the restoration work. Crossing #3 is a dirt ford on a class III watercourse and will be de-commissioned during the restoration work.

1.2 Sediment Erosion Prevention and Sediment Capture

1.2.1 Roads - Sediment and Erosion Prevention

All roads on the property are in fair condition. The road system was processed in 2018 with rock, out slope installed, and will be restored pending approval from Humboldt County Planning Department.

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 are 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 Pond Treatments

Water for agricultural use is provided by a 500,000-gallon Off-Stream Pond located at the top of the property. Pond has been in place for 25+ years and overflows to the south adjacent to Thomas Road on a grassy flat with no signs of erosion, downcutting, or downstream hydrologic connectivity.

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.

2 FERTILIZER, PESTICIDE, HERBICIDE, AND RODENTICIDE BPTC MEASURES

2.1 Summary of Products Used

Product (N-P-K if applicable)	Annual Total
Baicor Nutragreen (5-10-5) + Chelated Micronutrients	260 lbs
Baicor PK (2-6-2)	15 gal
Baicor Sulfur Complex 22%	250 lbs
Baicor Silicon Complex 7.0%	31 gal

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 pots located inside the greenhouse structures, 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. Lina 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 pots located inside the greenhouse structures, 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. Major spills should be addressed per actions described in Section 3.3 below.

3 PETROLEUM PRODUCT BPTC MEASURES

3.1 Summary of Products Used

Fuels and oils stored on site include: (1) 500-gallon fuel tank used to power the 45kw Whisper Watt generator, which provides off-grid electricity.

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). Generators and fuel are stored in a secured enclosed structure with a concrete flooring. Spill kits, fire extinguishers, and eye wash stations are located at all fuel and nutrient storage 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 septic tank and leach field system. Lina Farm will have the septic tank serviced during the 2020 season and 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. Lina Farm is currently enrolled in the RRR (Retire, Relocate, Restore) program with Humboldt County planning Department. Plans for the restoration work are currently being drafted by Stillwater Sciences and will be submitted upon completion. Lina Farms currently has an interim permit with Humboldt County and a provisional License with the State of California to cultivate 8,102 SF of outdoor cultivation during the 2020 season. Lina Farms will relocate to Honeydew ranch pending approval by Humboldt County Planning and Building Department.

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

November 2019

Elevated Solutions

Appendix A

Site Plan

LINA FARMS
HUMBOLDT COUNTY
APN: 221-061-034



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