

DECEMBER 2019

Site Management Plan for Honeydew Ranch,
LLC; APN 107-272-005;
Tier 2, Low Risk

P R E P A R E D F O R

State Water Resources Control Board
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P R E P A R E D B Y

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Appendices

Appendix A. Biological Resources Technical Report

Appendix B. Grading/Remediation Plans

Purpose:

This document serves as the Site Management Plan on behalf of the discharger, Honeydew Ranch, 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**

Stillwater Sciences has been contracted by the owners of APN 107-272-005 to conduct numerous compliance-related tasks over the past several years including development of a Grading Plan for a proposed rainwater catchment pond and cultivation pads and development of a Biological Resources Technical Report to support CEQA. Most recently, Stillwater Sciences has been contracted to develop a Water Resource Protection and Site Management Plan (SMP) for the property to document site conditions and provide recommendations to decrease existing and potential future threats to water quality at the site. The site plan for the property is shown on Figure 1.

Stillwater Sciences senior engineer/hydrologist (Joel Monschke) has conducted numerous visits to the property during grading plan development and has conducted a road inventory and assessment of cultivation areas. Additional information and recommendations included in this SMP result from information provided by Steve Doyle, compliance manager for the project, as well as input from North Coast Regional Water Board (RWB) staff Adona White and Brian Fuller who conducted a compliance inspection at the site on December 5, 2019.

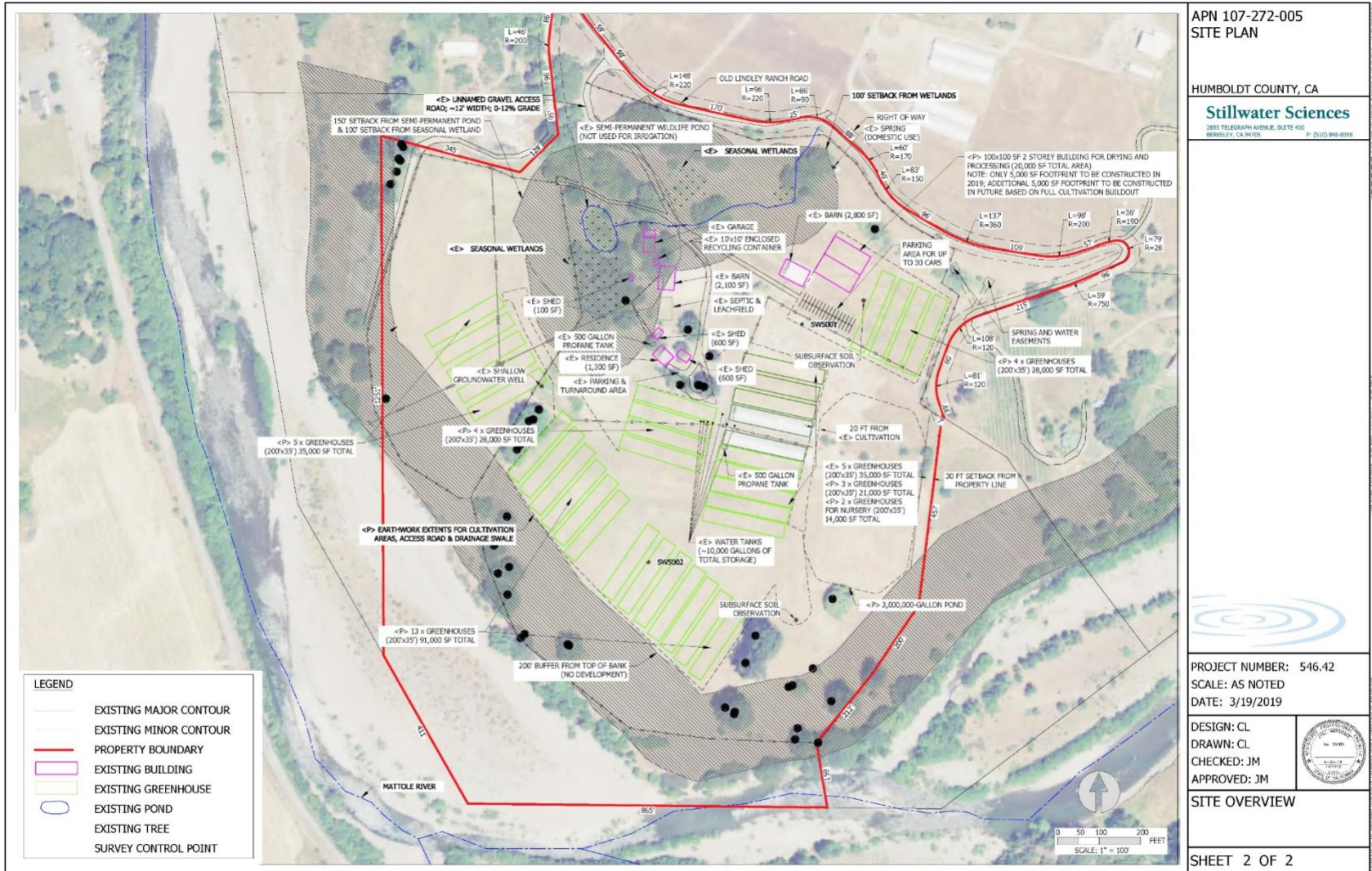
The subject property is located in Humboldt County, situated on a terrace adjacent to the Mattole River near the town of Honeydew. The majority of the site is flat or nearly flat and vegetated with grass. All work conducted to-date by Stillwater supports the finding that this site is well suited for cultivation of up to approximately 5 acres of cannabis.

1.1.1.1 Project Build-out Schedule

This property is the proposed receiving site for multiple Retirement, Remediation, and Relocation (RRR) cultivation sites being permitted through Humboldt County's Cannabis Ordinance. Currently, APN 107-272-005 is going through the final stages of CEQA approval for receiving the RRR sites, so there is some uncertainty in terms of the exact timing of relocation and full build-out of the proposed cultivation on APN 107-272-005. However, currently 16,175 SF of cultivation is permitted by Humboldt County on APN 107-272-005. This cultivation is occurring in 2.5 greenhouses (200' X 34' dimensions) located to the south and east of the existing residence.

Following CEQA approval, construction and filling of the rainwater catchment pond, construction of the 14,000 SF nursery, and approval of 9 additional individual RRR projects by Humboldt County, cultivation at the site will incrementally increase to 206,435 SF (4.73 acres). It

is expected that this build-out will begin in the summer of 2020 and be completed during the summer of 2021, although it is possible that full build-out may not be realized until the summer of 2022.



1.1.2 Access Road Conditions

Overall, the primary access roads on the property are in good condition. They are surfaced with gravel and either outsloped or crowned to reduce runoff concentration. There is some evidence of minor rilling generated from high intensity precipitation events.

1.1.3 Legacy Waste Discharge Issues

Legacy disturbance from historic ranching activities on the property prior to current ownership has been assessed. Although it is difficult to precisely define, some legacy modifications were likely made to the small tributary that drains through the northern portion of the property. There appears to have been some anthropogenic ditching excavation of the pond/wetland area. However, as described in the Biological Technical Report and shown on the site plan, these areas are currently providing habitat for various aquatic species and are being considered as natural features with appropriate setbacks. No current waste discharge issues are associated with these features, so no future remediation is recommended.

1.1.4 Vehicle stream crossing

There is one small road/stream crossing on the property that is in good condition. It is recommended that several cubic yards of rock armoring be added to the outlet to prevent future scouring during large storm events.

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 to reduce rilling of the road surface and subsequent runoff concentration.

1.2.2 Cultivation Areas – Sediment and Erosion Prevention

All existing and proposed cultivation sites are located on generally flat terrain and have appropriate setbacks from watercourses and wetlands. The 200' setbacks from the river shown on the site plan are measured from the top-of-riverbank as defined based on Stillwater Sciences' topographic survey of the property. The 100' and 150' setbacks from the wetland are also based on Stillwater's topographic survey of the property and subsequent wetland delineation (included in Appendix A).

1.2.3 Other Areas – Sediment and Erosion Prevention

Based on input from SWB staff following the site visit, there is some concern that runoff from gutters from a structure being used as the temporary refrigeration building may cause minor erosion and sediment delivery due to close proximity to the small watercourse. It is recommended that the gutter outflows be re-directed away from the watercourse and erosion control features such as straw wattles and/or small retention basins be installed to eliminate the potential for sediment delivery. There are no other significant sources of cultivation-related erosion on the property.

1.2.4 Maintenance – Sediment and Erosion Prevention

Following every dry season, all cultivation sites are winterized either by planting cover crops and spreading straw mulch, or by leaving growing areas covered with plastic. If covered with plastic, runoff concentration caused by the impervious surfaces are monitored to ensure that they aren't causing erosion. To date, no evidence of runoff concentration has been observed due to the porous soils at the site. Additionally, all areas disturbed by recent and future construction activities will follow these BMPs:

- 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

Soil tests are completed by Beneficial Living Center annually, and amendment application rates are determined based on that analysis. As such, the following application rates are based on 2019 application rates and subject to change.

Table

Annual soil amendment and chemical use (pounds or gallons):

Product (N-P-K if applicable)	Annual Total
Baicor Nutragreen (5-10-5) + Chelated Micronutrients	31.25 gal
Baicor PK (2-6-2)	15.54 gal
Baicor Sulfur Complex 22%	31.25 gal
Baicor Silicon Complex 7.0%	31.25 gal

2.1.1 Fertilizer

Fertilizers, potting soils, compost, and other soils and soil amendments shall be stored in locations and in a manner which they cannot enter or be transported into surface waters and such that nutrients or other pollutants cannot be leached into groundwater. Nutrients and soil amendments are stored in a secure storage shed with secondary containment, separate from petroleum products as they may be incompatible and could potentially react. Products shall be

applied and used per label instructions and/or proper agronomic rates. All manufacturer recommendations are used when storing, mixing, and feeding nutrients to assure the proper use. Cultivation area shall be maintained so as to prevent nutrients from leaving the site during the growing season and post-harvest.

Discharger will keep detailed records of the type, timing and volume of fertilizers and/or other soil amendments used in operation on a log posted on each cultivation area. Soil moisture will be observed so that watering, fertilizer and chemical applications are made only when necessary and overwatering and excess infiltration is avoided.

2.1.2 Pesticide, Herbicide, and Rodenticide

At this time, no pesticides, herbicides, or rodenticides are used for direct use on cannabis. The use of pesticides on cannabis plants have not been reviewed for safety, human health effects, or environmental impacts. Under California law, the only pesticide products not legal to use on cannabis are those that contain an active ingredients that is exempt from residue tolerance requirements and either registered and labeled for broad use to include use on cannabis or exempt registration requirements as a minimum risk pesticide under FIFRA section 25(b) and California Code of Regulations, title 3, section 6147. For the purpose of compliance with conditions of this Order, any potential use of pesticide products shall be consistent with product labeling and any products on-site shall be placed, used, and stored in a manner that they will not enter or be released into surface or groundwaters.

2.2 Procedures for Storage, Mixing, and Application

2.2.1 Irrigation Runoff

Honeydew Ranch, LLC irrigates at agronomic rates which do not produce runoff. An inspection of the cultivation sites revealed no signs of over-watering. The cultivation site is located greater than 200 feet from the nearest water course. Meters have been installed to ensure irrigation of 1 gallon per plant 5 days a week.

2.2.2 Spoils Management

Currently, most of the cannabis on the property is grown in pots inside the greenhouses which generates a significant amount of used potting soil spoils. This used potting soil is currently stored in a large spoils pile which is covered with plastic and surrounded with waddles to reduce sediment discharge. However, RWB staff noted that a minor amounts of potting soil containing perlite was observed outside of the tarped containment area.

Considering the expected expansion of cultivation area at this site, a more permanent potting soil spoils containment approach will be developed. First, to reduce potting soil spoils, in the future cannabis on the property will begin to be grown in beds, thereby minimizing the need for large spoils piles. If a significant potting soil spoils pile is still needed, the operator will develop a more permanent approach for storage including construction of a large shed designated specifically for soil storage with a roof and containment or purchase of several 20 CY covered dumpsters designated for used potting soil storage during the winter.

Spoils generated via construction or maintenance of roads and cultivation areas shall be reused on site and treated with the BMPs described in Section 1.2.4 above.

2.3 Procedures for Spill Prevention and Cleanup

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

On-grid electricity is provided by PG&E. Use of the on-site generator is limited to power outage events and complies with standards set by Humboldt County and the State of California. Petroleum products utilized on-site are limited to (1) 500-gallon generator diesel tank, and (5) 5-gallon motor oil cans.

3.2 Procedures for Storage, Mixing, and Application

All petroleum products described above are stored in a manner to prevent their spillage, discharge, or seepage into receiving waters, in a secure storage shed with secondary containment of suitable material and construction to be compatible with the substance(s) stored and conditions of storage such as temperature and pressure. Discharger(s) shall ensure that diked areas are sufficiently impervious to contain discharger chemicals.

3.3 Procedures for Spill Prevention and Cleanup

Spill prevention, control, and countermeasures (SPCC) shall be implemented. Appropriate cleanup materials are available onsite. Spill Kits are located at all fuel and nutrient storage locations. Underground storage tank 110 gallons and greater shall be registered with the appropriate County Health Department and comply with state and local requirements for leak detection, spill overflow, corrosion protection, and insurance coverage.

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.

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 sent out for testing and 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

Solid waste and recycling containers are stored in an enclosed secured 10'x10' shed, in a manner and location which prevents animals from accessing or disturbing garbage or refuse and prevents discharge to receiving waters. Items that can be recycled are separated and recycled. Trash and recycling are removed from job site on a weekly schedule and dumped at the Redway Transfer Station. All cultivation waste products are composted or chipped for ground cover on site. As previously described, spent soil is covered during winter months and then amended in pots before further use. All packaging from soil amendments and fertilizers will be collected and disposed at Eel River Transportation and Salvage.

4.2 Number of Employees, Visitors, or Residents at Site

Typically, two individuals would be working during production April-October. During peak planting and harvest periods as many as 8 individuals may be working on the property. As the project moves to full build-out, up to approximately 20 individuals may be working onsite.

4.2.1 Human Waste

Disposal of domestic sewage shall meet applicable county health standards, local agency management plans and ordinances and/or State Water Resource Control Board's Onsite Wastewater Treatment System (OWTS) policy and shall not pose a threat to surface water or groundwater. Human waste disposal systems consist of a bathroom located in the residence, and one ADA potable restroom that will be maintained monthly by Six Rivers Sanitation. The portable restroom is located in a central location to facilitate all employees.

For a long-term solution, it is recommended that the applicant begin to work with a licensed professional to start the permit process to retroactively permit the existing septic system and/or design and install a new septic system.

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) 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 OTHER CULTIVATION SITE INFORMATION

Stillwater Sciences has conducted significant assessment and planning at this site. A Biological Resource Evaluation and Grading Plans are included in Appendix A and B respectively.

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.



Joel Monschke, PE, Authorized Representative
Stillwater Sciences

Appendix A
Biological Resources Technical Report

Appendix B
Grading Plan
