

Water Resources Protection Plan

For

APN#: 107-272-005

WDID# 1B16652CHUM

Humboldt County Cannabis APP# 12256

Honeydew Ranch, LLC

Submitted to:

California Regional Water Quality Control Board.

North Coast Region

5550 Skylane Boulevard, Suite A

Santa Rosa, California 95403



Prepared By:

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REVISED

June 2018

June 2018

SITE ADDRESS: Honeydew Ranch, LLC
665 Old Hindley Ranch Road
Honeydew, CA 95545

Propose:

This Water Resource Protection Plan (WRPP) has been prepared on behalf of the property owner, and the leasing agent Honeydew Ranch, LLC by agreement and in response to the California Water Code Section 13260 (a), which requires that any person discharging waste or proposing to discharge waste within any region that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate regional water board a Report of the Waste Water Discharge (ROWD) containing such information and data as may be required by the Regional Water Board. The Regional Water Board may waive the requirements of the Water Code Section 13260 for specific types of discharge if the waiver is consistent with the basin Plan and in the public interest. Any waiver is conditional and may be terminated at any time. Order R1-2015-0023 Conditionally waives the requirement to file a ROWD for discharges and associated activities described in finding 4.

Scope of Report:

Order No. R-1-2015-0023 states that "Tier 2 Dischargers and Tier 3 Dischargers who intend to cultivate cannabis before, during or following site cleanup activities shall develop and implement a water resource protection plan that contains the elements listed and addressed below. Discharger must keep a copy of this report on site and produce it upon request by the Regional Water Board staff. Best Management Practices (BPM's) shall be properly designed and installed, and assessed periodically for effectiveness. If a management measure is found to be ineffective, the plan must be adapted and implemented to new or additional management practices to meet the standard conditions. The Discharger shall certify annually to the Regional Water Board individually or through an approved third party program to insure the plan is being implemented and is effectively protecting water quality, and report on the progress in implementing site improvements intended to bring the site into compliance with all conditions of this order.

Methods:

The methods used to develop this WRPP include both Field and Office Components. The office component consisted of reviewing maps (Web Soil Survey) and geologic maps (CGS, Geologic Data Map No. 2, 1977). The field time consisted of GPS mapping all watercourses, wetlands, wet areas, associated facility, and all appurtenant roads accessing such areas. An acute location of the Waters of the State is necessary to make an assessment of whether potential and existing erosion sites/pollution sites have the potential to discharge waste to an area that could affect State (including underground). Next, all cultivation areas, associated facilities, and all appurtenant roads accessing such area were assessed for discharges and related controllable

water quality factors from the activities list in order R1-2015-0023. The water resource protection plan required under Tier 2 are meant to describe the specific measure a discharger implements to achieve compliance with standard conditions. Therefore, all required components of the water resource protection plan per provision 1.8 of Order No. R1-2015-0023 were physically inspected and evaluated. A comprehensive summary of each Standard Condition as it relates to the subject property is appended.

Identified Sites Requiring Remediation:

Unique Map Point(s)	Map Point Description	Associated Standard Conditions	Temporary BMP	Permanent BMP	Priority of Action	Time for schedule Permanent BMP	Completion Date
BMP	Best Management Practices	1.A.9.A	Gas and diesel cans not in secondary containment	All fuel cans will be located in secure location with secondary containment	1	10/2017	3/2018
F-1	Fertilizer Containment	1.A.7.A	Fertilizer stored outside no secondary containment	Fertilizers shall be located in secure location with secondary containment	1	10/2017	11/2017
CW-1	Cultivation Waste	1.A.10	Cultivation waste and garbage identified	Remove all trash and cultivation waste from job site weekly	1	10/2017	3/2018
SC-1	Sediment Control	1.A.1.C 1.A.1.D 1.A.6	Soil pile covered but needs fiber roll around perimeter	Install fiber rolls to prevent sediment discharge	2	11/2017	12/2017

Unique Map Point(s)	Map Point Description	Associated Standard Conditions	Temporary BMP	Permanent BMP	Priority of Action	Time for schedule Permanent BMP	Completion Date
EC-1	Erosion Control	1.A.1.C 1.A.1.D	Erosion control measures needed	All areas of exposed dirt will have straw applied	2	11/2017	12/2017
EC-2	Erosion Control	1.A.1.A 1.A.1.D	Inboard ditch obstructed with Sediment & Debris	Remove Sediment & debris from ditch. Install 6" Rip Rap	2	11/2017	10/2018
RD	Rolling Dips	1.A.1.A 1.A.1.B 1.A.1.D	Sections of Road have no drainage pattern	Install Rd in locations identified out field analysis	2	11/2017	10/2018
CW-2	Cultivation Waste	1.A.10	Cultivation waste identified in field by large tree	Remove all Cultivation waste and dispose of properly	2	11/2017	10/2018

Treatment Priority: The time frame for treatment of the site. (1) Would indicate a very high priority with treatment being planned to occur immediately. (2) Would indicate a high priority site with treatment to occur prior to the start of the winter period (Oct. 15). (3) Would indicate a moderate priority with treatment operations. (4) Would indicate a low priority with treatment being planned to occur in the shortest time possible, but no later than the expiration of this order (five years).

Monitoring Plan:

Tier 2 Discharger shall include a monitoring element in the water resource protection plan that at a minimum provides for periodic inspection of the site, Checklist to confirm placement and efficiency of management measures, and document progress on any plan elements subject to a time schedule. Tier 2 annual reporting is a function that may be provided through an approved third party program. Monitoring of the site includes visual inspection and photographic documentation recorded with any notable changes to the site map, with new photographic documentation of each feature of interest listed on the site map with notable changes to the feature of interest. At a minimum, all site features must be monitored annually, to provide a basis for completion of the annual re-certification process. Additionally, sites shall be

monitored at the following times to ensure timely identification of changed site conditions and to determine whether implementation of additional management measures is necessary to prevent, minimize and mitigate discharges of waste to surface water: 1) Just prior to October 15 to evaluate site preparedness for storm events and storm water runoff, 2) following the accumulation of 3" total precipitation or by December 15, whichever is sooner and 3) following any rainfall event with an intensity of 3" precipitation in 24 hrs. Precipitation data can be obtained from the National Weather Service Forecast Office (e.g. by entering the zip code of the parcel location at <http://www.srh.noaa.gov/forecast>).

Inspection Personnel Contact Information:

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Monitoring Plan Reporting Requirements:

Order No. R1-2015-0023, Appendix C must be submitted to the Regional Water Board or approved third party program upon initial enrollment in the order (NOI) and annually thereafter by March 31. Forms submitted to the Regional Water Board shall be submitted electronically to Northcoast@waterboards.ca.gov. If electronic submission is infeasible, hard copies can be submitted to:

North Coast Regional Water Quality Control Board:
5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403

**Water Resource Protection Plan
Assessment of Standard Conditions
For
APN: 107-272-005
Humboldt County Cannabis App # 12256
WDID# 1B16652CHUM
Honeydew Ranch, LLC**

A. Standard Conditions, Applicable to All Dischargers

1. Site Maintenance, Erosion Control, and Drainage Features

- a. Roads shall be maintained as appropriate (with adequate surfacing and drainage features) to avoid developing surface ruts, gullies, or surface erosion that results in sediment delivery to surface waters.
 - **Road assessment revealed appropriate function and design. The existing road is surfaced with local gravel source and shows a moderate level of existing drainage system.**
- b. Roads, Driveways, trails, and other defined corridors for foot or vehicle traffic of any kind shall have adequate ditch drains relief or rolling dips and/or other measures to prevent or minimize erosion along the flow paths and at their respective outlets.
 - **Road needs to be processed after winter rains, small ruts and small areas of surface erosion due to heavy rain fall over the winter months.**
- c. Roads and other features shall be maintained so that surface water drains away from potentially unstable slopes or earthen fills. Where road runoff cannot be drained away from an unstable feature, an engineered structure or system shall be installed to ensure that surface flows will not cause slope failures.
 - **All ditches are to be cleaned out and clear of all debris.**
- d. Roads, clearings, fill prisms, and terraced areas (clear/developed areas with the potential for erosion and sediment and delivery) shall be maintained so that they are hydrologically disconnected, as feasible, from surface waters, including wetlands, ephemeral, intermittent and perennial streams.
 - **All sediment and erosion control measures are in place.**

- e. Ditch relief drains, rolling dip outlets, and road pad or terrace surface shall be maintained to promote infiltration/dispersal of outflows and have no apparent erosion or evidence of soil transport to receiving waters.
 - **Slope correction to improve the water flow by out sloping and installing rolling dips to control erosion or sediment delivery.**
- f. Stockpiled construction materials stored in a location and manner so as to prevent their transport to receiving waters.
 - **All construction materials are located in the 2100 sf barn or the 600 sf storage shed. All fuels are stored inside with secondary containment**

2. Stream Crossing Maintenance

- a. Culverts and stream crossings shall be sized to pass the expected 100year peak streamflow.
 - **Existing 30-inch concrete culvert will be upgraded to a 48-inch CMP**
- b. Culverts and stream crossings shall be designed and maintained to address debris associated with the excepted 100 year peak streamflow.
 - **Existing 30-inch concrete culvert will be upgraded to a 48-inch CMP to withstand the 100 year peak streamflow.**
- c. Culverts and stream crossings shall allow passage of all life stages of fish in fish bearing or restoration sites.
 - **YES**
- d. Stream crossings shall be maintained so as to prevent or minimize erosion from exposed surfaces adjacent to and in the channel and on the banks.
 - **All banks will be stabilized and erosion and sediment devices will be installed. All exposed dirt will get seed and straw**
- e. Culverts shall align with the stream channel at the inlet and outlet where feasible.
 - **YES**

- f. Stream crossing shall be maintained so as to prevent stream diversion in the event that the culvert/crossing is plugged and critical dips shall be employed with all crossing installations where feasible.

- **YES**

3. Riparian and Wetland Protection and Management

- a. For Tier 1 Dischargers, Cultivation areas or associated facilities shall not be located within 200 feet of surface waters. While 200 foot buffers are preferred for Tier 2 sites, at a minimum, cultivation areas and associated facilities shall not be located or occur within 100 feet of any class 1 or 2 watercourse or within 50 feet of any class 3 water course or wetland. The Regional Water Board or its or its Executive Officers may apply additional or alternative conditions on enrollment, including site-specific riparian buffers and other BMPs beyond those identified in water resource protection plans to ensure water quality protection.

All BMPs will be applied

- b. Buffers shall be maintained at a natural slope with native vegetation.
- **Slopes around greenhouses are sloped with the natural contour of the landscape which are 5%-10%.**
- c. Buffers shall be of sufficient width to filter wastes from runoff discharging from production lands and associated facilities to all wetlands, streams, drainage, ditches, or other conveyances.
- **All cultivation sites have been staked by surveyors to identify the streamside setbacks.**
- d. Riparian and wetland areas shall be protected in a manner that maintains their essential functions, including temperature and microclimate control, filtration of sediment and other pollutants, nutrients cycling, woody debris recruitment groundwater recharging, streambank stabilization, and flood peak attenuation, and flood water storage.
- **Silt fencing, fiber rolls, and seed and straw will be applied at all culvert upgrades or proposed grading sites.**

4. Spoils Management

- a. Spoils shall not be stored or placed in or where they can't enter any surface water.
 - **No spoils are located on this project.**
- b. Spoils shall be adequately contained or stabilized to prevent sediment delivery to surface water.
 - **Spoil piles will be covered and fiber rolls will be installed around the perimeter to ensure no sediment discharge.**
- c. Spoils generated through development or maintenance of roads, driveways, earthen filled pads, or other cleared or filled areas shall not be sidecast in any location where they can enter or be transported to surface waters.
 - **YES**

5. Water Storage and Use

- a. Size and scope of an operation shall be such that the amount of water uses shall not adversely impact instream flow requirements and/or benefits uses, including and in consideration with other water use by operations instream flow requires and/or needs in the watershed, defined at the scale of a HUC-12 watershed or at a smaller hydrologic watershed as determined necessary by the Regional Water Board Executive Officer.
 - **CDFW has given written permission via the 1602 agreement to use the existing well for up to 2 acres of cannabis cultivation for the 2018 season while waiting on Humboldt County Planning Department to approve the grading plans for a 3 million gallon rain catchment pond.**
- b. Water conservation measures shall be implemented. Examples include use of rainwater catchment systems or watering plants with a drip irrigation system rather than with hose or a sprinkler system.
 - **Honeydew Ranch, LLC has a total of 52,650 gallons of hard storage and is currently awaiting approval from Humboldt County Planning Department to approve the proposed 3 million gallon pond.**

- Water is conserved by the use of meters installed on the watering devise and meters installed on the main tank for the monthly monitoring reports.
 - Water conservation practices are being investigated to explore the best solutions for environment and staff use.
- c. For Tier 2 Dischargers, if possible, develop off stream storage facilities to minimize surface water diversion during low flow periods.
- **Proposed 3 million gallon off-stream pond waiting approval**
- d. Water is applied using no more than agronomics rates.
- **YES**
- e. Diversion and/or storage of water from a stream should be conducted pursuant to a valid water right and in compliance with reporting requirements under Water Code Section 5101.
- **YES**
- f. Water storage features, such as ponds, tanks and other vessels shall be selected, sited, designed, and maintained so as to insure integrity and to prevent release into Waters of the State in the event of a containment failure.
- **Please see list below of all Water Storage Tanks.**

List of Current Total Water Storage on Honeydew Ranch, LLC

Type:	Quantity (gal)	Number	Total Storage
Plastic Tank	1100	6	6600
Plastic Tank	1000	0	0
Plastic Tank	350	3	1050
Plastic Tank	2500	10	25,000
Plastic Tank	5000	4	20,000
Pioneer Tank	30,000	0	0

Total Storage: 52,650

6. Irrigation Runoff

- a. Implementing water conservation measures, irrigating at agronomic rates, applying fertilizers at agronomic rates, applying chemicals according to the label specifications, and the concentration of chemicals in the water. In the event that irrigation runoff occurs, measures shall be in place to treat/control/contain the runoff and the concentration of chemicals in that water. Irrigation runoff shall be managed so that any entrained constituents, such as fertilizers, fine sediment, suspended organic particles, and other oxygen consuming materials are not discharged to nearby watercourses. Best Management Practices (BMP's) include, but not limited to, modification to irrigation systems that reuse tail water by constructing off-stream retention basins, and active (pumping) and or passive (gravity) tail water recapture/redistribution systems. Care shall be taken to ensure that irrigation tail water is not discharged towards or impounded over unstable features or landslides.

- Honeydew Ranch, LLC irrigates at an agronomic rate, which does not produce runoff.
- An inspection of the cultivation site revealed no sign of overwatering.
- The Cultivation site is located more than 200+ ft. from any watercourse.

- Corrective Measures:

- i. *Meters have been installed to ensure 1 gallon per plant 5 days a week.*
- ii. *Spill kits will be installed at all mixing locations, at each cultivation location, all generators, and petroleum products.*

7. Fertilizers and Soil Amendment

- a. Fertilizers, potting soils, compost, and other soils and soil amendments shall be 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.
- Fertilizers are stored in a safe secondary containment building located on the map as "Storage Shed."

- b. Fertilizers and soil amendments shall be applied and used per packaging instructions and/or at proper agronomic rates.
 - **All manufactures recommendations are used when storing, mixing and feeding nutrients to assure the proper use.**
 - c. Cultivation area shall be maintained so as to prevent nutrients from leaving the site during the growing season and post-harvest.
 - **All nutrients are to be stored in a secondary storage area.**
 - **Cultivation waste is removed from the cultivation site at the end of each cycle.**
 - **Soil waste is stored in a contained soil area, and is covered between Oct 15 – April 15. “Soil Containment Area.”**
 - **Soil pile will have fiber roll installed around the perimeter to ensure there is no sediment delivery.**
- **Corrective Measures:**
 - i. **Drains will be installed to assure that water flows away from the cultivation areas to assure that runoff doesn’t occur.**
 - ii. **Sediment and erosion control measures will be installed to assure there is no sediment delivery during the construction of new roads and the 3 miliion gallon pond.**
 - iii. **All access roads will be rocked and compacted to avoid any sediment delivery.**

8. Pesticides/Herbicides

- a. At the time, there are no pesticides or herbicides registered specifically for use directly on cannabis. The use of pesticides on cannabis plants has 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 ingredient that is exempted from residue tolerance requirements and either registered and labeled for a broad use to include use on cannabis or exempt from 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 use of pesticide products shall be consistent with product labeling and any products on the site shall be placed, used, and stored in a manner that they will not enter or be released into surface or ground waters.

- YES

9. Petroleum Products and other Chemicals

- a. Petroleum products and other liquid chemicals, including but not limited to diesel, bio-diesel, gasoline, and oil shall be stored so as to prevent their spillage, discharge, or seepage into receiving waters. Storage tanks and containers must be of suitable material and construction to be compatible with the substance(s) stored and conditions of storage such as pressure and temperature.

- **All petroleum products are stored in a secure location with secondary containment.**

- b. Above ground storage tanks and containers shall be provided with a secondary means of containment for the entire capacity of the largest and single container and sufficiently freeboard to contain precipitation.

- **All above ground storage tanks have secondary containment, spill kits, and eye wash stations.**

- c. Dischargers shall ensure that diked areas are sufficiently impervious to contain discharger chemicals.

- **YES**

- d. Discharger(s) shall implement spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.

- **Spill kits are located at all fuel and nutrient locations.**

- e. 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.

- **N/A**

10. Cultivation-Related Wastes:

- a. Cultivation related wastes including, but not limited to, empty soil, soil amendment, fertilizers, pesticide bags, and containers, empty plant pots or containers, dead or harvested plant waste, and spent growth medium shall for as long as they remain on the site be stored at locations where they will not enter or be divided into surface waters, and in a manner, that ensure that residues and pollutants within those materials do not migrate or leach into surface water or ground waters.

- **All trash is removed from job site on a weekly schedule. All cultivation waste that is non-organic is taken to the local waste facility. Items that can be recycled are separated and recycled.**
- **All organic plant matter is processed and composted in a contained area.**

11. Refuse and Human Waste:

- a. Disposal of domestic sewage shall meet applicable county health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System (OWTS) policy, and shall not represent a threat to surface water or groundwater.

- **All trash is removed from job site on a weekly schedule. All cultivation waste that is non-organic is taken to the local waste facility. Items that can be recycled are separated and recycled.**

- b. Refuse and garbage shall be stored in a location and manner that prevents its charge to receiving waters and prevents and leachate or contact water from entering or percolating to receiving waters.
 - **All trash is stored in an enclosed secured 10x10 shed.**
- c. Garbage and refuse shall be disposed of at an appropriate waste disposal location.
 - **Human waste disposal systems consist of a bathroom located in the main house and 1 ADA potable bathroom that will be cleaned out monthly by Six Rivers Sanitation. Portable bathroom will be located in a central location to facilitate all employees.**

12. Remediation/Cleanup/Restoration

- a. Remediation/Cleanup/Restoration activities may include, but are not limited to, removal of fill from watercourse, stream restoration, riparian vegetation planting and maintenances, soil stabilization, erosion control, upgrading stream crossings, road out sloping and rolling dip installation where safe and suitable, installing ditch relief culverts and oversize drains removing berms, stabilizing unstable areas, reshaping cutback, and rocking native-surface roads. Restoring and cleanup conditions and provisions generally apply to Tier 3 sites, however owners/operators of a Tier 1 or Tier 2 sites may identify or propose water resource improvement or enhancing projects and mitigation measure that apply to cleanup activities such as, temporal limitations on earthmoving and construction equipment guidelines for removal of plants and revegetation conditions for erosion control, limitations on work in streams, riparian and wetland areas and other measures.
 - **Mitigation measures are listed in the Water Resource Protection Plan and also noted above in the document.**















