

SITE MANAGEMENT PLAN

For

HUMBOLDT COUNTY APN:

223-034-05



PREPARED Feb, 2019 BY:

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In Consultation With

John Miranda

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Purpose

This Site Management Plan (SMP) has been developed for a proposed Commercial Cannabis operation in Humboldt County, California on behalf of John Miranda, the formal "Discharger." Pursuant to California Water Code section 13260 (a) (State Water Resources Control Board 2017): any person, citizen, or domiciliary discharging waste or proposing to discharge within any

region, other than to a community sewer system, that could affect the quality of water of the state, file a report of waste discharge (RWD) to obtain coverage under WDRs or a waiver of WDRs. Waste, person, and domiciliary are defined in Water Code Section 13050."

Pursuant to Water Code section 13269, the State Water Board or the Regional Board can conditionally waive RWD requirements given the following conditions are met:

- The waiver is consistent with the Regional Basin Plan.
- The waiver is in the public interest.
- A public hearing is held.
- The waiver is recognized as conditional, terminable at any time.
- The discharge and Discharger complies with conditions contained in ORDER WQ 2017-00232-DWQ (General Order).

Given compliance with the conditions contained in the General Order, the threat to water quality is limited and coverage under a conditional waiver is applicable. If the Discharger can no longer comply with the conditions, a consultation with the Regional Water Board will be scheduled and the appropriate plan of action will be determined (State Water Resources Control Board 2017). The full list of General Requirements and Prohibitions included in the General Order is contained in Appendix B of this report.

Scope

Technical report requirements are dictated by risk level and tier status. Tier 1 Dischargers operate outdoors and have a disturbed area greater than or equal to 2,000 square feet and less than 43,560 square feet (1 acre), while Tier 2 Dischargers operate outdoors and have a disturbed greater than 1 acre. Table 1 describes the Tiering schedule. The disturbed area includes but is not strictly limited to: road construction areas, buildings areas, areas of water storage, excavation sites, grading sites, areas where the site has been cleared, cultivation areas, and storage areas (soil, and soil amendments). Roads designed, constructed (or reconstructed) in accordance with the Handbook for Forest, Ranch, and Rural Roads (Road Handbook) and implement Best Practicable Treatment or Control (BPTC) measures for interim and long-term management are not included in the disturbed area calculation (State Water Resources Control Board 2017).

Risk is determined by maximum slope of the disturbed area as well as setbacks from sensitive areas. A Low Risk operation has no portion of the disturbed area located on a slope of 30% or greater and meets all setback requirements, a Moderate Risk operation has portions of the disturbed area on a slope greater than 30% and meets all setback requirements, and a High Risk operation has portions of the disturbed that do not meet setback requirements. **Table 1** describes Tier, Risk, and technical report requirements as dictated by the General Order (State Water Resources Control Board 2017).

Table 1 – The Technical Report Requirements Based on Risk and Tier (State Water Resources Control Board 2017).

Tier	Risk	Report Type	
Conditionally Exempt	N/A	Site Closure Report	
Tier 1	All	Site Management Plan	
Tier 1	Moderate	Site Erosion Sediment Control Plan	
Tier 1	All	Site Closure Report	
Tier 2	All	Site Management Plan	
Tier 2	Moderate	Site Erosion Sediment Control Plan	
Tier 2	High	Disturbed Area Stabilization Plan	
Tier 2	All	Nitrogen Management Plan	
Tier 2	All	Site Closure Report	

Additionally, pursuant to the "Standard Provisions for All Dischargers" a copy of the General Order shall be kept on site and personnel on site will familiarize themselves with the contents of the General Order. A copy of any technical reports will be kept on the premises and produced upon request by Regional Water Board or State Water Board representatives.

Methodology

The methods used to develop this Site Management Plan included field and office components. The office component consisted of reviewing the Humboldt County Water Resources Application, the National Geologic Map Data Base (NGMDB), the EnviroStor data base, and CDFW's Biogeographic Information and Observation System (BIOS) to determine an environmental setting with a focus on biological and water resources. The field component provided confirmation of the project vicinity to state water ways, as well as a means to identify the cultivation area, access roads, legacy features, and all associated facilities/building associated with the cultivation operation. The site was also assessed pursuant to the

"Requirements Related to Water Diversions and Waste Discharge for Cultivation" and site-specific applicability of BPTCs. A general categorical reference table is provided in **Table 2** and a comprehensive assessment is provided in Appendix A.

Table 2 – A general reference table for specific BPTC measures.

Category Reference	BPTC Category	Sub-Category Reference	BPTC Sub-Category	BPTC Measure
Land Development and Maintenance, Erosion Control, Drainage Features	A	Limitations on Earthmoving	1-5	
	Control, Drainage Features	В	Construction Equipment Use and Limitations	6-7
1		С	Erosion Control	8-14
		D	Access Road/Land Disturbance	15-29
		E	Drainage Culvert (Also Watercourse Crossings)	30-31
2	Cleanup, Restoration, and Mitigation			32-37
	Stream Crossing Installation and Maintenance	A	Limitations on Work in Watercourses and Permanently Ponded Areas	38-41
3	В	Temporary Watercourse Diversion and Dewatering: All Live Watercourses	42-47	
	C	Watercourse Crossings	48-56	
4	Soil Disposal and Spoils Management			57-62
5	Riparian and Wetland Protection and Management		63-64	
	Water Storage and Use	A	Water Supply, Diversion, and Storage	65-95
6		В	Water Conservation and Use	96-99
	of other are	C	Irrigation Runoff	100-103
	Fertilizer, Pesticides, and	A	Fertilizers and Soils	104-114
Petroleum Products 7	Petroleum Products	В	Pesticides and Herbicides	104-111, 115-116
		C	Petroleum Products and Other Chemicals	104-111, 117-119
8	Cultivation-Related Waste			120-121
9	Refuse and Domestic Waste		122-124	
10	Winterization			125-133

Monitoring and Reporting Program

Pursuant to California Water Code section 13267 a Monitoring and Reporting Program shall implemented and monitoring reports will be annually submitted herein by March 1 following the year of monitoring. A letter shall accompany each submission of annual reports noting any violations found during the reporting interval, and planned corrective actions or actions taken. Additionally, a penalty of perjury statement will accompany the reports. For Tier 1 low risk operations the annual report will also include:

- Winterization Measures
 - o Report procedures, outstanding measures, and a schedule for completion.
- Tier Status Confirmation
 - o Report any changes in Tier Status
- Third Party Identification
 - o Report any changes in Tier Status
- Nitrogen Application
 - See Appendix E

Further, retainment of all records and reports is required for a minimum of three years following the report or application date. Pursuant to BPTCs 14, 35, 99, and 113 additional records should be kept on site, and accessible to inspectors, as noted in Table 3.

Table 3 – Additional monitoring requirements as required by specific BPTCs.

BPTC Category	BPTC Subcategory & №	Monitoring Requirement
Land Development and Maintenance, Erosion Control, Drainage Features	Erosion Control (14)	Erosion control measures will be monitored during and after the following storm events: • 0.5"/day. • 1.0"/week.
Cleanup Restoration and Mitigation	(35)	Develop a revegetation plan for temporary work areas and monitor for five years.
Water Storage and Use	Water Conservation and Use (99)	Maintenance of daily records of water use for 5 years.

Records of fertilizers, pesticides, herbicides, and rodenticides as well as petroleum product information are provided in Appendices F and G respectively.

Ninety days prior to ceasing cannabis cultivation activities a site closure report is required with an accompany Notice of Termination (General Order Attachment C). The report will include: the date the operations ceased, measures to prevent sediment discharge from cultivation areas, if construction activities are proposed as a component of closure an implementation schedule will be provided, a final MRP report, certification of cease of operations, certification of stabilization of disturbed areas, certification of consolidation and disposal of wastes.

References

- California Department of Fish and Wildlife. 2017. *Biogeographic Information and Observation System*. Accessed via: https://map.dfg.ca.gov/bios/
- California Department of Toxic Substances Control. 2017. *EnviroStor*. Accessed via https://www.envirostor.dtsc.ca.gov/public/
- State Water Resources Control Board. 2017. Order WQ 2017-0023-DWQ General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities.
- United States Geologic Survey and the Association of American State Geologist. 2017. *The National Geologic Map Database*. Accessed via: https://ngmdb.usgs.gov/mapview/

Appendix A- Order WQ 2017-0023-DWQ: Attachment A: Section 2: Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation

Land Development and Maintenance, Erosion Control, and Drainage Features

Limitations on Earth Moving

- Cannabis cultivators shall not conduct grading activities for cannabis cultivation land
 development or alteration on slopes exceeding 50 percent grade, or as restricted by local county
 or city permits, ordinances, or regulations for grading, agriculture, or cannabis cultivation;
 whichever is more stringent shall apply.
 The grading prohibition on slopes exceeding 50 percent does not apply to site mitigation or
 remediation if the cannabis cultivator is issued separate WDRs or an enforcement order for the
 activity by the Regional Water Board Executive Officer.
- 2. Finished cut and fill slopes, including side slopes between terraces, shall not exceed slopes of 50 percent and should conform to the natural pre-grade slope whenever possible.
- 3. Cannabis cultivators shall not drive or operate vehicles or equipment within the riparian setbacks or within waters of the state unless authorized under 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board. This requirement does not prohibit driving on established, maintained access roads that are in compliance with this Policy.
- 4. Cannabis cultivation land development and access road construction shall be designed by qualified professionals. Cannabis cultivators shall conduct all construction or land development activities to minimize grading, soil disturbance, and disturbance to aquatic and terrestrial habitat.
- 5. The cannabis cultivator shall control all dust related to cannabis cultivation activities to ensure dust does not produce sediment-laden runoff. The cannabis cultivator shall implement dust control measures, including, but not limited to, pre-watering of excavation or grading sites, use of water trucks, track-out prevention, washing down vehicles or equipment before leaving a site, and prohibiting land disturbance activities when instantaneous wind speeds (gusts) exceed 25 miles per hour. Cannabis cultivators shall grade access roads in dry weather while moisture is still present in soil to minimize dust and to achieve design soil compaction, or when needed use a water truck to control dust and soil moisture.

During the assessment of the property, no cultivation-related land disturbance was found to be located on slopes exceeding 50 percent. All land developments and access roads shall be designed and implemented by a qualified professional with required permits. Slopes are not to exceed 50% grade before or after development or alteration. Equipment should not be operated within riparian setbacks except when authorized by the appropriate governmental agencies or while using a properly designed and maintained access road.

Construction Equipment Use and Limitations

- 6. Cannabis cultivators shall employ spill control and containment practices to prevent the discharge of fuels, oils, solvents and other chemicals to soils and waters of the state.
- 7. Cannabis cultivators shall stage and store equipment, materials, fuels, lubricants, solvents, or hazardous or toxic materials in locations that minimize the potential for discharge to waters of the state. At a minimum, the following measures shall be implemented:
 - i. Designate an area outside the riparian setback for equipment storage, short-term maintenance, and refueling. Cannabis cultivator shall not conduct any maintenance activity or refuel equipment in any location where the petroleum products or other pollutants may enter waters of the state as per Fish and Game Code section 5650(a)(1).
 - ii. Frequently inspect equipment and vehicles for leaks.
 - iii. Immediately clean up leaks, drips, and spills. Except for emergency repairs that are necessary for safe transport of equipment or vehicles to an appropriate repair facility, equipment or vehicle repairs, maintenance, and washing onsite is prohibited.
 - iv. If emergency repairs generate waste fluids, ensure they are contained and properly disposed or recycled off-site.
 - v. Properly dispose of all construction debris off-site.
 - vi. Use dry cleanup methods (e.g., absorbent materials, cat litter, and/or rags) whenever possible. Sweep up, contain, and properly dispose of spilled dry materials.

Fuels, oils, solvents and chemicals must be stored inside a protective structure and have adequate secondary containment. BPTC 7 shall be observed at all times, especially when construction equipment is used. Earthmoving equipment shall be stored and maintained outside of riparian setbacks. Additionally, fluids from the earthmoving equipment must be prevent from entering soils or nearby waterways.

Erosion Control

- 8. The cannabis cultivator shall use appropriate erosion control measures to minimize erosion of disturbed areas, potting soil, or bulk soil amendments to prevent discharges of waste. Fill soil shall not be placed where it may discharge into surface water. If used, weed-free straw mulch shall be applied at a rate of two tons per acre of exposed soils and, if warranted by site conditions, shall be secured to the ground.
- 9. The cannabis cultivator shall not plant or seed noxious weeds. Prohibited plant species include those identified in the California Invasive Pest Plant Council's database, available at: www.calipc.org/paf/. Locally native, non-invasive, and non-persistent grass species may be used for temporary erosion control benefits to stabilize disturbed land and prevent exposure of disturbed land to rainfall. Nothing in this term may be construed as a ban on cannabis cultivation that complies with the terms of this Policy.
- 10. Cannabis cultivators shall incorporate erosion control and sediment detention devices and materials into the design, work schedule, and implementation of the cannabis cultivation

activities. The erosion prevention and sediment capture measures shall be effective in protecting water quality.

- Interim erosion prevention and sediment capture measures shall be implemented within seven days of completion and land disturbance activities, and shall consist of erosion prevention measures and sediment capture measures including:
 - Erosion prevention measures are required for any earthwork that uses heavy equipment (e.g., bulldozer, compactor, excavator, etc.). Erosion prevention measures may include surface contouring, slope roughening, and upslope storm water diversion. Other types of erosion prevention measures may include mulching, hydroseeding, tarp placement, revegetation, and rock slope protection.
 - Sediment capture measures include the implementation of measures such as gravel bag berms, fiber rolls, straw bale barriers, properly installed silt fences, and sediment settling basins.
- Long-term erosion prevention and sediment capture measures shall be implemented as soon as possible and prior to the onset of fall and winter precipitation. Long-term measures may include the use of heavy equipment to reconfigure access roads or improve access road drainage, installation of properly-sized culverts, gravel placement on steeper grades, and stabilization of previously disturbed land.
- Maintenance of all erosion protection and sediment capture measures is required year round. Early monitoring allows for identification of problem areas or underperforming erosion or sediment control measures. Verification of the effectiveness of all erosion prevention and sediment capture measures is required as part of winterization activities.
- 11. Cannabis cultivators shall only use geotextiles, fiber rolls, and other erosion control measures made of loose-weave mesh (e.g., jute, coconut (coir) fiber, or from other products without welded weaves). To minimize the risk of ensnaring and strangling wildlife, cannabis cultivators shall not use synthetic (e.g., plastic or nylon) monofilament netting materials for erosion control for any cannabis cultivation activities. This prohibition includes photo- or bio-degradable plastic netting.
- 12. Cultivation sites constructed on or near slopes with a slope greater than or equal to 30 percent shall be inspected for indications of instability. Indications of instability include the occurrence of slope failures at nearby similar sites, weak soil layers, geologic bedding parallel to slope surface, hillside creep (trees, fence posts, etc. leaning downslope), tension cracks in the slope surface, bulging soil at the base of the slope, and groundwater discharge from the slope. If indicators of instability are present, the cannabis cultivator shall consult with a qualified professional to design measures to stabilize the slope to prevent sediment discharge to surface waters.
- 13. For areas outside of riparian setbacks or for upland areas, cannabis cultivators shall ensure that rock placed for slope protection is the minimum amount necessary and is part of a design that provides for native plant revegetation. If retaining walls or other structures are required to provide slope stability, they shall be designed by a qualified professional.

14. Cannabis cultivators shall monitor erosion control measures during and after each storm event that produces at least 0.5 in/day or 1.0 inch/7 days of precipitation, and repair or replace, as needed, ineffective erosion control measures immediately.

Exposed soils will be mulched and seeded with native grasses. Potting soils shall be covered and secured to prevent material and nutrient transport. Permanent erosion control measures should be constructed as soon as possible and completed before winter season (November 15th) each year. Any installed erosion control devices shall be designed and constructed by qualified professionals and will be monitored in accordance with BPTC 14.

Areas inside and immediately around cultivation sites should have any exposed/bare soils covered with erosion control or native seed mix and weed free straw mulch. All footpaths and secondary access roads shall be properly surfaced if used during wet conditions. Cultivation sites located on fill pads and fill slopes should be seeded and mulched immediately.

Access Road/Land Development and Drainage

- 15. Access roads shall be constructed consistent with the requirements of California Code of Regulations Title 14, Chapter 4. The Road Handbook describes how to implement the regulations and is available at http://www.pacificwatershed.com/PWA-publications-library. Existing access roads shall be upgraded to comply with the Road Handbook.
- 16. Cannabis cultivators shall obtain all required permits and approvals prior to the construction of any access road constructed for cannabis cultivation activities. Permits may include section 404/401 CWA permits, Regional Water Board WDRs (when applicable), CDFW LSA Agreement, and county or local agency permits.
- 17. Cannabis cultivators shall ensure that all access roads are hydrologically disconnected to receiving waters to the extent possible by installing disconnecting drainage features, increasing the frequency of (inside) ditch drain relief as needed, constructing out-sloped roads, constructing energy dissipating structures, avoiding concentrating flows in unstable areas, and performing inspection and maintenance as needed to optimize the access road performance.
- 18. New access road alignments should be constructed with grades (slopes) of 3- to 8- percent, or less, wherever possible. Forest access roads should generally be kept below 12-percent except for short pitches of 500 feet or less where road slopes may go up to 20- percent. These steeper access road slopes should be paved or rock surfaced and equipped with adequate drainage. Existing access roads that do not comply with these limits shall be inspected by a qualified professional to determine if improvements are needed.
- 19. Cannabis cultivators shall decommission or relocate existing roads away from riparian setbacks whenever possible. Roads that are proposed for decommissioning shall be abandoned and left in a condition that provides for long-term, maintenance-free function of drainage and erosion controls. Abandoned roads shall be blocked to prevent unauthorized vehicle traffic.
- 20. If site conditions prohibit drainage structures (including rolling dips and ditch-relief culverts) at adequate intervals to avoid erosion, the cannabis cultivator shall use bioengineering techniques¹

http://www.waterboards.ca.gov/sanfranciscobay/water issues/programs/stream wetland/streamprotectioncircular.pdf.

¹ A Primer on Stream and River Protection for the Regulator and Program Manager: Technical Reference Circular W.D. 02#1, San Francisco Bay Region, California Regional Water Board (April 2003)

as the preferred measure to minimize erosion (e.g., live fascines). If bioengineering cannot be used, then engineering fixes such as armoring (e.g., rock of adequate size and depth to remain in place under traffic and flow conditions) and velocity dissipaters (e.g., gravel-filled "pillows" in an inside ditch to trap sediment) may be used for problem sites. The maximum distance between water breaks shall not exceed those defined in the *Road Handbook*.

- 21. Cannabis cultivators shall have a qualified professional design the optimal access road alignment, surfacing, drainage, maintenance requirements, and spoils handling procedures.
- 22. Cannabis cultivators shall ensure that access road surfacing, especially within a segment leading to a waterbody, is sufficient to minimize sediment delivery to the wetland or waterbody and maximize access road integrity. Road surfacing may include pavement, chip-seal, lignin, rock, or other material appropriate for timing and nature of use. All access roads that will be used for winter or wet weather hauling/traffic shall be surfaced. Steeper access road grades require higher quality rock (e.g., crushed angular versus river-run) to remain in place. The use of asphalt grindings is prohibited.
- 23. Cannabis cultivators shall install erosion control measures on all access road approaches to surface water diversion sites to reduce the generation and transport of sediment to streams.
- 24. Cannabis cultivators shall ensure that access roads are out-sloped whenever possible to promote even drainage of the access road surface, prevent the concentration of storm water flow within an inboard or inside ditch, and to minimize disruption of the natural sheet flow pattern off a hill slope to a stream.
- 25. If unable to eliminate inboard or inside ditches, the cannabis cultivator shall ensure adequate ditch relief culverts to prevent down-cutting of the ditch and to reduce water runoff concentration, velocity, and erosion. Ditches shall be designed and maintained as recommended by a qualified professional. To avoid point-source discharges, inboard ditches and ditch relief culverts shall be discharged onto vegetated or armored slopes that are designed to dissipate and prevent runoff channelization. Inboard ditches and ditch relief culverts shall be designed to ensure discharges into natural stream channels or watercourses are prevented.
- 26. Cannabis cultivators shall ensure that access roads are not allowed to develop or show evidence of significant surface rutting or gullying. Cannabis cultivators shall use water bars and rolling dips as designed by a qualified professional to minimize access road surface erosion and dissipate runoff.
- 27. Cannabis cultivators shall only grade ditches when necessary to prevent erosion of the ditch, undermining of the banks, or exposure of the toe of the cut slope to erosion. Cannabis cultivators shall not remove more vegetation than necessary to keep water moving, as vegetation prevents scour and filters out sediment.
- 28. Access road storm water drainage structures shall not discharge onto unstable slopes, earthen fills, or directly to a waterbody. Drainage structures shall discharge onto stable areas with straw

- bales, slash, vegetation, and/or rock riprap.
- 29. Sediment control devices (e.g., check dams, sand/gravel bag barriers, etc.) shall be used when it is not practical to disperse storm water before discharge to a waterbody. Where potential discharge to a wetland or waterbody exists (e.g., within 200 feet of a waterbody) access road surface drainage shall be filtered through vegetation, slash, other appropriate material, or settled into a depression with an outlet with adequate drainage. Sediment basins shall be engineered and properly sized to allow sediment settling, spillway stability, and maintenance activities.

The main access road on the property was found to be featuring rills, suggesting inadequate drainage of the road surface. The Cultivator is encouraged to install the appropriate road surface drainage features in order to allow for proper drainage, as well as surfacing if traffic is intended during the winter period. Road maintenance and upgrades will occur pursuant to the Handbook for Forest, Ranch & Rural Roads. All primary and secondary access roads shall be properly surfaced and graded. All graded and trafficked areas must be properly sloped and hydrologically disconnected from surface waters and riparian setbacks. Additionally, concentrated stormwaters shall not be allowed to discharge directly onto excessively sloped grounds or fill prisms.

Drainage Culverts (See Also Water Crossings)

- 30. Cannabis cultivators shall regularly inspect ditch-relief culverts and clear them of any debris or sediment. To reduce ditch-relief culvert plugging by debris, cannabis cultivators shall use 15- to 24-inch diameter pipes, at minimum. In forested areas with a potential for woody debris, a minimum 18-inch diameter pipe shall be used to reduce clogging. Ditch relief culverts shall be designed by a qualified professional based on site-specific conditions.
- 31. Cannabis cultivators shall ensure that all permanent watercourse crossings that are constructed or reconstructed are capable of accommodating the estimated 100-year flood flow, including debris and sediment loads. Watercourse crossings shall be designed and sized by a qualified professional.

Five culverted watercourse crossings were observed to be located on the property at the time of the assessment. The Cultivator is encouraged to hire a qualified professional for review of CDFW LSA compliance. All watercourse crossings are required to be sized to accommodate flows associated with a 100-year peak stream flow scenario.

Cleanup, Restoration, and Mitigation

- 32. Cannabis cultivators shall limit disturbance to existing grades and vegetation to the actual site of the cleanup or remediation and any necessary access routes.
- 33. Cannabis cultivators shall avoid damage to native riparian vegetation. All exposed or disturbed land and access points within the stream and riparian setback with damaged vegetation shall be restored with regional native vegetation of similar native species. Riparian trees over four inches diameter at breast height shall be replaced by similar native species at a ratio of three to one (3:1). Restored areas must be mulched, using at least 2 to 4 inches of weed-free, clean straw or similar biodegradable mulch over the seeded area. Mulching shall be completed within 30 days after land disturbance activities in the areas cease. Revegetation planting shall occur at a seasonally appropriate time until vegetation is restored to pre-cannabis or pre-Legacy condition or better.

Cannabis cultivators shall stabilize and restore any temporary work areas with native vegetation to pre-cannabis cultivation or pre-Legacy conditions or better. Vegetation shall be planted at an adequate density and variety to control surface erosion and re-generate a diverse composition of

regional native vegetation of similar native species.

- 34. Cannabis cultivators shall avoid damage to oak woodlands. Cannabis cultivator shall plant three oak trees for every one oak tree damaged or removed. Trees may be planted in groves in order to maximize wildlife benefits and shall be native to the local county.
- 35. Cannabis cultivators shall develop a revegetation plan for:
 - i. All exposed or disturbed riparian vegetation areas,
 - ii. any oak trees that are damaged or removed, and
- iii. temporary work areas.

Cannabis cultivators shall develop a monitoring plan that evaluates the revegetation plan for five years. Cannabis cultivators shall maintain annual inspections for the purpose of assessing an 85 percent survival and growth of revegetated areas within a five-year period. The presence of exposed soil shall be documented for three years following revegetation work. If the revegetation results in less than an 85 percent success rate, the unsuccessful vegetation areas shall be replanted. Cannabis cultivators shall identify the location and extent of exposed soil associated with the site; pre- and post-revegetation work photos; diagram of all areas revegetated, the planting methods, and plants used; and an assessment of the success of the revegetation program. Cannabis cultivators shall maintain a copy of the revegetation plan and monitoring results onsite and make them available, upon request, to Water Boards staff or authorized representatives. An electronic copy of monitoring results is acceptable in Portable Document Format (PDF).

- 36. Cannabis cultivators shall revegetate soil exposed as a result of cannabis cultivation activities with native vegetation by live planting, seed casting, or hydroseeding within seven days of exposure.
- 37. Cannabis cultivators shall prevent the spread or introduction of exotic plant species to the maximum extent possible by cleaning equipment before delivery to the cannabis cultivation Site and before removal, restoring land disturbance with appropriate native species, and post-cannabis cultivation activities monitoring and control of exotic species. Nothing in this term may be construed as a ban on cannabis cultivation that complies with the terms of this Policy.

During the assessment, improperly stored trash was observed to be located surrounding cultivation areas. The Cultivator is required to collect, store, and properly dispose of all trash on a regular basis. All exposed soils should be revegetated within 7 days of disturbance. Use of non-invasive erosion control seed and weed free mulch is required. A revegatative plan shall be developed and monitored in accordance with BPTC 35 when riparian areas are exposed, oak trees are removed or damaged, or for temporary work areas.

<u>Stream Crossing Installation and Maintenance</u> <u>Limitations on Work in Watercourses and Permanently Ponded Areas</u>

38. Cannabis cultivators shall obtain all applicable permits and approvals prior to doing any work in or around waterbodies or within the riparian setbacks. Permits may include section 404/401 CWA permits, Regional Water Board WDRs (when applicable), and a CDFW LSA Agreement.

- 39. Cannabis cultivators shall avoid or minimize temporary stream crossings. When necessary, temporary stream crossings shall be located in areas where erosion potential and damage to the existing habitat is low. Cannabis cultivators shall avoid areas where runoff from access roadway side slopes and natural hillsides will drain and flow into the temporary crossing. Temporary stream crossings that impede fish passage are strictly prohibited on permanent or seasonal fishbearing streams.
- 40. Cannabis cultivators shall avoid or minimize use of heavy equipment² in a watercourse. If use is unavoidable, heavy equipment may only travel or work in a waterbody with a rocky or cobbled channel. Wood, rubber, or clean native rock temporary work pads shall be used on the channel bottom prior to use of heavy equipment to protect channel bed and preserve channel morphology. Temporary work pads and other channel protection shall be removed as soon as possible once the use of heavy equipment is complete.
- 41. Cannabis cultivators shall avoid or minimize work in or near a stream, creek, river, lake, pond, or other waterbody. If work in a waterbody cannot be avoided, activities and associated workspace shall be isolated from flowing water by directing the water around the work site. If water is present, then the cannabis cultivator shall develop a site-specific plan prepared by a qualified professional. The plan shall consider partial or full stream diversion and dewatering. The plan shall consider the use of coffer dams upstream and downstream of the work site and the diversion of all flow from upstream of the upstream dam to downstream of the downstream dam, through a suitably sized pipe with intake screens that protect and prevent impacts to fish and wildlife. Cannabis cultivation activities and associated work shall be performed outside the waterbody from the top of the bank to the maximum extent possible.

No work in a watercourse or permanently ponded area is proposed, however, consultation with a qualified professional in relation to CDFW LSA stream crossing compliance may change this. The Cultivator is required to obtain all necessary permits prior to any work in a riparian area.

Temporary Watercourse Diversion and Dewatering: All Live Watercourse

- 42. Cannabis cultivators shall ensure that coffer dams are constructed prior to commencing work and as close as practicable upstream and downstream of the work area. Cofferdam construction using offsite materials, such as clean gravel bags or inflatable dams, is preferred. Thick plastic may be used to minimize leakage, but shall be completely removed and properly disposed of upon work completion. If the coffer dams or stream diversion fail, the cannabis cultivator shall repair them immediately.
- 43. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, the cannabis cultivator shall allow sufficient water at all times to pass downstream to maintain aquatic life below the dam pursuant to Fish and Game Code section 5937.
- 44. If possible, gravity flow is the preferred method of water diversion. If a pump is used, the cannabis cultivator shall ensure that the pump is operated at the rate of flow that passes through the cannabis cultivation site. Pumping rates shall not dewater or impound water on the upstream

² Heavy equipment is defined as large pieces of machinery or vehicles, especially those used in the building and construction industry (e.g., bulldozers, excavators, backhoes, bobcats, tractors, etc.).

- side of the coffer dam. When diversion pipe is used it shall be protected from cannabis cultivation activities and maintained to prevent debris blockage.
- 45. Cannabis cultivators shall only divert water such that water does not scour the channel bed or banks at the downstream end. Cannabis cultivator shall divert flow in a manner that prevents turbidity, siltation, and pollution and provides flows to downstream reaches. Cannabis cultivators shall provide flows to downstream reaches during all times that the natural flow would have supported aquatic life. Flows shall be of sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion. Block netting and intake screens shall be sized to protect and prevent impacts to fish and wildlife.
- 46. Once water has been diverted around the work area, cannabis cultivators may dewater the site to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to a settling tank, dewatering filter bag, or upland area, or to another location approved by CDFW or the appropriate Regional Water Board Executive Officer prior to re-entering the watercourse.
- 47. Upon completion of work, cannabis cultivators shall immediately remove the flow diversion structure in a manner that allows flow to resume with a minimum of disturbance to the channel substrate and that minimizes the generation of turbidity.

No temporary diversions or dewatering of a watercourse exist or are planned for the subject parcel at this time.

Watercourse Crossings

- 48. Cannabis cultivators shall ensure that watercourse crossings are designed by a qualified professional.
- 49. Cannabis cultivators shall ensure that all access road watercourse crossing structures allow for the unrestricted passage of water and shall be designed to accommodate the estimated 100-year flood flow and associated debris (based upon an assessment of the streams potential to generate debris during high flow events). Consult CAL FIRE 100 year Watercourse Crossings document for examples and design calculations, available at: http://calfire.ca.gov/resource_mgt/downloads/100%20yr%20revised%208-08-17%20(final-a).pdf.
- 50. Cannabis cultivators shall ensure that watercourse crossings allow migration of aquatic life during all life stages supported or potentially supported by that stream reach. Design measures shall be incorporated to ensure water depth and velocity does not inhibit migration of aquatic life. Any access road crossing structure on watercourses that supports fish shall be constructed for the unrestricted passage of fish at all life stages, and should use the following design guidelines:
 - CDFW's Culvert Criteria for Fish Passage;
 - CDFW's Salmonid Stream Habitat Restoration Manual, Volume 2, Part IX: Fish Passage Evaluation at Stream Crossings; and
 - National Marine Fisheries Service, Southwest Region Guidelines for Salmonid Passage at Stream Crossings

- 51. Cannabis cultivators shall conduct regular inspection and maintenance of stream crossings to ensure crossings are not blocked by debris. Refer to California Board of Forestry Technical Rule No. 5 available at: http://www.calforests.org/wp-content/uploads/2013/10/Adopted-TRA5.pdf.
- 52. Cannabis cultivators shall only use rock fords for temporary seasonal crossings on small watercourses where aquatic life passage is not required during the time period of use. Rock fords shall be oriented perpendicular to the flow of the watercourse and designed to maintain the range of surface flows that occur in the watercourse. When constructed, rock shall be sized to withstand the range of flow events that occur at the crossing and rock shall be maintained at the rock ford to completely cover the channel bed and bank surfaces to minimize soil compaction, rutting, and erosion. Rock must extend on either side of the ford up to the break in slope. The use of rock fords as watercourse crossings for all-weather access road use is prohibited.
- 53. Cannabis cultivators shall ensure that culverts used at watercourse crossings are designed to direct flow and debris toward the inlet (e.g., use of wing-walls, pipe beveling, rock armoring, etc.) to prevent erosion of road fill, debris blocking the culvert, and watercourses from eroding a new channel.
- 54. Cannabis cultivators shall regularly inspect and maintain the condition of access roads, access road drainage features, and watercourse crossings. At a minimum, cannabis cultivators shall perform inspections prior to the onset of fall and winter precipitation and following storm events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation. Cannabis cultivators are required to perform all of the following maintenance:
 - Remove any wood debris that may restrict flow in a culvert.
 - Remove sediment that impacts access road or drainage feature performance. Place any removed sediment in a location outside the riparian setbacks and stabilize the sediment.
 - Maintain records of access road and drainage feature maintenance and consider redesigning the access road to improve performance and reduce maintenance needs.
- 55. Cannabis cultivators shall compact access road crossing approaches and fill slopes during installation and shall stabilize them with rock or other appropriate surface protection to minimize surface erosion. When possible, cannabis cultivators shall ensure that access roads over culverts are equipped with a critical dip to ensure that, if the culvert becomes blocked or plugged, water can flow over the access road surface without washing away the fill prism. Access road crossings where specific conditions do not allow for a critical dip or in areas with potential for significant debris accumulation, shall include additional measures such as emergency overflow culverts or oversized culverts that are designed by a qualified professional.
- 56. Cannabis cultivators shall ensure that culverts used at watercourse crossings are: 1)installed parallel to the watercourse alignment to the extent possible, 2) of sufficient length to extend beyond stabilized fill/sidecast material, and 3) embedded or installed at the same level and gradient of the streambed in which they are being placed to prevent erosion.

Five watercourse crossings on the property are required to be inspected for CDFW LSA compliance. Discharger shall consult with a qualified professional for design and installation requirements.

Soils Disposal and Spoils Management

- 57. Cannabis cultivators shall store soil, construction, and waste materials outside the riparian setback except as needed for immediate construction needs. Such materials shall not be stored in locations of known slope instability or where the storage of construction or waste material could reduce slope stability.
- 58. Cannabis cultivators shall separate large organic material (e.g., roots, woody debris, etc.) from soil materials. Cannabis cultivators shall either place the large organic material in long-term, upland storage sites, or properly dispose of these materials offsite.
- 59. Cannabis cultivators shall store erodible soil, soil amendments, and spoil piles to prevent sediment discharges in storm water. Storage practices may include use of tarps, upslope land contouring to divert surface flow around the material, or use of sediment control devices (e.g., silt fences, straw wattles, etc.).
- 60. Cannabis cultivators shall contour and stabilize stored spoils to mimic natural slope contours and drainage patterns (as appropriate) to reduce the potential for fill saturation and slope failure.
- 61. For soil disposal sites cannabis cultivators shall:
 - revegetate soil disposal sites with a mix of native plant species.
 - cover the seeded and planted areas with mulched straw at a rate of two tons per acre, and
 - apply non-synthetic netting or similar erosion control fabric (e.g., jute) on slopes greater than 2:1 if the site is erodible.
- 62. Cannabis cultivators shall haul away and properly dispose of excess soil and other debris as needed to prevent discharge to waters of the state.

Soil and spoils from grading and construction shall be separated and placed upland and outside of sloped areas. Both temporary and long-term soil piles shall be located outside areas of potential discharge to waterways. Sediment control measures shall be incorporated to prevent transport of materials and encourage water filtration. Alternatively, spoils could be moved off-site.

Riparian and Wetland Protection and Management

- 63. Cannabis cultivators shall not disturb aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under a CWA section 404 permit, CWA section 401 certification, Regional Water Board WDRs (when applicable), or a CDFW LSA Agreement.
- 64. Cannabis cultivators shall maintain existing, naturally occurring, riparian vegetative cover (e.g., trees, shrubs, and grasses) in aquatic habitat areas to the maximum extent possible to maintain riparian areas for streambank stabilization, erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, wildlife support, and to minimize waste discharge.

No wetland or riparian areas exist within the cultivation site. Possible Class II and Class III watercourses are located on the parcel. A legacy building exists on the property that is within riparian setbacks. Watercourses located on property are outside riparian setbacks from cultivation area and are protected under compliance with conditions in ORDER WQ2017-0023-DWQ.

Water Storage and Use

Water Supply, Diversion, and Storage

- 65. Cannabis cultivators shall only install, maintain, and destroy wells in compliance with county, city, and local ordinances and with California Well Standards as stipulated in California Department of Water Resources Bulletins 74-90 and 74-81³
- 66. All water diversions for cannabis cultivation from a surface stream, subterranean stream flowing through a known and definite channel (e.g., groundwater well diversions from subsurface stream flows), or other surface waterbody are subject to the surface water Numeric and Narrative Instream Flow Requirements. This includes lakes, ponds, and springs (unless the spring is deemed exempt by the Deputy Director). See Section 3. Numeric and Narrative Instream Flow Requirements of this Attachment A for more information.
- 67. Groundwater diversions may be subject to additional requirements, such as a forbearance period, if the State Water Board determines those requirements are reasonably necessary to implement the purposes of this Policy.
- 68. Cannabis cultivators are encouraged to use appropriate rainwater catchment systems to collect from impermeable surfaces (e.g., roof tops, etc.) during the wet season and store storm water in tanks, bladders, or off-stream engineered reservoirs to reduce the need for surface water or groundwater diversions.
- 69. Cannabis cultivators shall not divert surface water unless it is diverted in accordance with an existing water right that specifies, as appropriate, the source, location of the point of diversion, purpose of use, place of use, and quantity and season of diversion. Cannabis cultivators shall maintain documentation of the water right at the cannabis cultivation site. Documentation of the water right shall be available for review and inspection by the Water Boards, CDFW, and any other authorized representatives of the Water Boards or CDFW.
- 70. Cannabis cultivators shall ensure that all water diversion facilities are designed, constructed, and maintained so they do not prevent, impede, or tend to prevent the passing of fish, as defined by Fish and Game Code section 45, upstream or downstream, as required by Fish and Game Code section 5901. This includes but is not limited to the supply of water at an appropriate depth, temperature, and velocity to facilitate upstream and downstream aquatic life movement and migration. Cannabis cultivators shall allow sufficient water at all times to pass past the point of diversion to keep in good condition any fish that may be planted or exist below the point of diversion as defined by Fish and Game Code section 5937. Cannabis cultivators shall not divert water in a manner contrary to or inconsistent with these Requirements.

³ California Well Standards are available at: http://www.water.ca.gov/groundwater/well_info and_other/california_well_standards/well_standards_content.html.

- 71. Cannabis cultivators issued a Cannabis SIUR by the State Water Board shall not divert surface water unless in compliance with all additional Cannabis SIUR conditions required by CDFW.
- 72. Water diversion facilities shall include satisfactory means for bypassing water to satisfy downstream prior rights and any requirements of policies for water quality control, water quality control plans, water quality certifications, waste discharge requirements, or other local, state or federal instream flow requirements. Cannabis cultivators shall not divert in a manner that results in injury to holders of legal downstream senior rights. Cannabis cultivators may be required to curtail diversions should diversion result in injury to holders of legal downstream senior water rights or interfere with maintenance of downstream instream flow requirements.
- 73. Fuel powered (e.g., gas, diesel, etc.) diversion pumps shall be located in a stable and secure location outside of the riparian setbacks unless authorized under a 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board. Use of non-fuel powered diversion pumps (solar, electric, gravity, etc.) is encouraged.

In all cases, all pumps shall:

- i. be properly maintained,
- ii. have suitable containment to ensure any spills or leaks do not enter surface waterbodies or groundwater, and
- iii. have sufficient overhead cover to prevent exposure of equipment to precipitation.
- 74. No water shall be diverted unless the cannabis cultivator is operating the water diversion facility with a CDFW-approved water-intake screen (e.g. fish screen). The water intake screen shall be designed and maintained in accordance with screening criteria approved by CDFW. The screen shall prevent wildlife from entering the diversion intake and becoming entrapped. The cannabis cultivator shall contact the regional CDFW Office, LSA Program for information on screening criteria for diversion(s). The cannabis cultivator shall provide evidence that demonstrates that the water intake screen is in good condition whenever requested by the Water Boards or CDFW. Points of re-diversion from off-stream storage facilities that are open to the environment shall have a water intake screen, as required by CDFW.
- 75. Cannabis cultivators shall inspect, maintain, and clean water intake screens and bypass appurtenances as directed by CDFW to ensure proper operation for the protection of fish and wildlife.
- 76. Cannabis cultivators shall not obstruct, alter, dam, or divert all or any portion of a natural watercourse prior to obtaining all applicable permits and approvals. Permits may include a valid water right, 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board.

⁴ CDFW's Lake and Streambed program information is available at; https://www.wildlife.ca.gov/Conservation/LSA .

- 77. Cannabis cultivators shall plug, block, cap, disconnect, or remove the diversion intake associated with cannabis cultivation activities during the surface water forbearance period, unless the diversion intake is used for other beneficial uses, to ensure no water is diverted during that time.
- 78. Cannabis cultivators shall not divert from a surface water or from a subterranean stream for cannabis cultivation at a rate more than a maximum instantaneous diversion rate of 10 gallons per minute, unless authorized under an existing appropriative water right.
- 82. Onstream storage reservoirs are prohibited unless either:
 - The cannabis cultivator has an existing water right with irrigation as a designated use, issued prior to October 31, 2017, that authorizes the onstream storage reservoir, or
 - The cannabis cultivator obtains an appropriative water right permit with irrigation as a designated use prior to diverting water from an onstream storage reservoir for cannabis cultivation. Cannabis cultivators with a pending application or an unpermitted onstream storage reservoir shall not divert for cannabis cultivation until the cannabis cultivator has obtain a valid water right.
- 83. Cannabis cultivators are encouraged to install separate storage systems for water diverted for cannabis irrigation and water diverted for any other beneficial uses,⁵ or otherwise shall install separate measuring devices to quantify diversion to and from each storage facility, including the quantity of water diverted and the quantity, place, and purpose of use (e.g., cannabis irrigation, other crop irrigation, domestic, etc.) for the stored water.
- 84. The cannabis cultivator shall install and maintain a measuring device(s) for surface water or subterranean stream diversions. The measuring device shall be, at a minimum equivalent to the requirements for direct diversions greater than 10 acre-feet per year in California Code of Regulations, Title 23, Division 3, Chapter 2.7.6 The measuring device(s) shall be located as close to the point of diversion as reasonable. Cannabis cultivators shall maintain daily diversion records for water diverted for cannabis cultivation. Cannabis cultivators shall maintain separate records that document the amount of water used for cannabis cultivation separated out from the amount of water used for other irrigation purposes and other beneficial uses of water (e.g., domestic, fire protection, etc.). Cannabis cultivators shall maintain daily diversion records at the cultivation site and shall make the records available for review or by request by the Water Boards CDFW, or any other authorized representatives of the Water Boards or CDFW. Daily diversion records shall be retained for a minimum of five years. Compliance with this term is required for any surface water diversion for cannabis cultivation, even those under 10 acre-feet per year.
- 85. The State Water Board intends to develop and implement a basin-wide program for real-time electronic monitoring and reporting of diversions, withdrawals, releases and streamflow in a standardized format if and when resources become available. Such real-time reporting will be

⁵ Other beneficial uses of water include: domestic, irrigation, power, municipal, mining, industrial, fish and wildlife preservation and enhancement, aquaculture, recreational, stockwatering, water quality, frost protection, and heat control. (California Code of Regulations, Title 23 sections 659-672).

⁶ Additional information on measuring devices may be found at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/water_use.shtml#measurement

required upon a showing by the State Water Board that the program and the infrastructure are in place to accept real-time electronic reports. Implementation of the reporting requirements shall not necessitate amendment to this Requirement.

86. Cannabis cultivators shall not use off-stream storage reservoirs and ponds to store water for cannabis cultivation unless they are sited and designed or approved by a qualified professional in compliance with Division of Safety of Dams (DSOD), county, and/or city requirements, as applicable. If the DSOD, county, and/or city do not have established requirements they shall be designed consistent with the Natural Resource Conservation Service National Engineering Manual. Reservoirs shall be designed with an adequate overflow outlet that is protected and promotes the dispersal and infiltration of flow and prevents channelization.

All off-stream storage reservoirs and ponds shall be designed, managed, and maintained to accommodate average annual winter period precipitation and storm water inputs to reduce the potential for overflow.

Cannabis cultivators shall plant native vegetation along the perimeter of the reservoir in locations where it does not impact the structural integrity of the reservoir berm or spillway. The cannabis cultivator shall control vegetation around the reservoir berm and spillway to allow for visual inspection of berm and spillway condition and control burrowing animals as necessary.

- 87. Cannabis cultivators shall implement an invasive species management plan prepared by a Qualified Biologist for any existing or proposed water storage facilities that are open to the environment. The plan shall include, at a minimum, an annual survey for bullfrogs and other invasive aquatic species. If bullfrogs or other invasive aquatic species are identified, eradication measures shall be implemented under the direction of a qualified biologist, if appropriate after consultation with CDFW (pursuant to Fish and Game Code section 6400). Eradication methods can be direct or indirect. Direct methods may include hand- held dip net, hook and line, lights, spears, gigs, or fish tackle under a fishing license (pursuant to Fish and Game Code section 6855). An indirect method may involve seasonally timed complete dewatering and a drying period of the off-stream storage facility under a Permit to Destroy Harmful Species (pursuant to Fish and Game Code section 5501) issued by CDFW.
- 88. Water storage bladders are not encouraged for long-term use. If bladders are used, the cannabis cultivator shall ensure that the bladder is designed and properly installed to store water and that the bladder is sited to minimize the potential for water to flow into a watercourse in the event of a catastrophic failure. If a storage bladder has been previously used, the cannabis cultivator shall carefully inspect the bladder to confirm its integrity and confirm the absence of any interior residual chemicals prior to resuming use. Cannabis cultivators shall periodically inspect water storage bladders and containment features to ensure integrity. Water storage bladders shall be properly disposed of or recycled and not resold when assurance of structural integrity is no longer guaranteed.
- 89. Cannabis cultivators shall not use water storage bladders unless the bladder is safely contained within a secondary containment system with sufficient capacity to capture 110 percent of a bladder's maximum possible contents in the event of bladder failure (i.e., 110 percent of bladder's capacity). Secondary containment systems shall be of sufficient strength and stability to

withstand the forces of released contents in the event of catastrophic bladder failure. In addition, secondary containment systems that are open to the environment shall be designed and maintained with sufficient capacity to accommodate precipitation and storm water inputs from a 25-year, 24-hour storm event.

- 90. Cannabis cultivators shall not cause or allow any overflow from off-stream water storage facilities that are closed to the environment (e.g., tanks and bladders) if the off-stream facilities are served by a diversion from surface water or groundwater. Cannabis cultivators shall regularly inspect for and repair all leaks of the diversion and storage system.
- 91. Water storage tanks, bladders, and other off-stream water storage facilities that are closed to the environment shall not be located in a riparian setback or next to equipment that generates heat. Cannabis cultivators shall place water storage tanks, bladders, and other off-stream water storage facilities that are closed to the environment in areas that allow for ease of installation, access, maintenance, and minimize road development.
- 92. Cannabis cultivators shall install vertical and horizontal tanks according to manufacturer's specifications and shall place tanks on properly compacted soil that is free of rocks and sharp objects and capable of bearing the weight of the tank and its maximum contents with minimal settlement. Tanks shall not be located in areas of slope instability. Cannabis cultivators shall install water storage tanks capable of containing more than 8,000 gallons only on a reinforced concrete pad providing adequate support and enough space to attach a tank restraint system (anchor using the molded-in tie down lugs with moderate tension, being careful not to overtighten) per the recommendations of a qualified professional.
- 93. To prevent rupture or overflow and runoff, cannabis cultivators shall only use water storage tanks and bladders equipped with a float valve, or equivalent device, to shut off diversion when storage systems are full. Cannabis cultivators shall install any other measures necessary to prevent overflow of storage systems to prevent runoff and the diversion of more water than can be used and/or stored.
- 94. Cannabis cultivators shall ensure that all vents and other openings on water storage tanks are designed to prevent the entry and/or entrapment of wildlife.
- 95. Cannabis cultivators shall retain, for a minimum of five years, appropriate documentation for any hauled water used for cannabis cultivation. Documentation for hauled water shall include, for each delivery, all of the following:
 - i. A receipt that shows the date of delivery and the name, address, license plate number, and license plate issuing state for the water hauler,
 - ii. A copy of the Water Hauler's License (California Health and Safety Code section 111120),
 - iii. A copy of proof of the Water Hauler's water right, groundwater well, or other authorization to take water, and the location of the water source, and

⁷ Water hauler means any person who hauls water in bulk by any means of transportation.

iv. The quantity of water delivered or picked up from a water source, in gallons.

Documentation shall be made available, upon request, to Water Boards or CDFW staff and any other authorized representatives of the Water Boards or CDFW.

A surface water diversion via a spring box has been used previously for agricultural waters, and currently supplies domestic use waters as well. Discharger plans to install a permitted groundwater well for continued agricultural water supply. Water is currently stored in a water bladder, and multiple hard plastic water storage tanks. Discharger shall ensure bladder is safely contained within a secondary containment system. Discharger should consult with a qualified professional prior to construction of bladder containment. In addition, the Discharger shall understand that adequate water storage to comply with the forbearance period is required for use of a surface water diversion until a non-jurisdictional water source (i.e. groundwater well) is constructed.

All water storage tanks must be equipped with overflow prevention systems and rupture mitigation measures. Fuels and petroleum powered equipment must be located outside riparian setbacks and pose no threat to water quality. Discharger is encouraged to investigate rainwater catchment and storage systems to help offset potential future water forbearance requirements.

Water Conservation and Use

- 96. Cannabis cultivators shall regularly inspect their entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks.
- 97. Cannabis cultivators shall use weed-free mulch in cultivation areas that do not have ground cover to conserve soil moisture and minimize evaporative loss.
- 98. Cannabis cultivators shall implement water conserving irrigation methods (e.g., drip or trickle irrigation, micro-spray, or hydroponics
- 99. Cannabis cultivators shall maintain daily records of all water used for irrigation of cannabis. Daily records may be calculated by the use of a measuring device or, if known, by calculating the irrigation system rates and duration of time watered (e.g., irrigating for one hour twice per day using 50 half-gallon drips equates to 50 gallons per day (1*2*50*0.5) of water used for irrigation). Cannabis cultivators shall retain, for a minimum of 5 years, irrigation records at the cannabis cultivation site and shall make all irrigation records available for review by the Water Boards, CDFW and any other authorized representatives of the Water Boards or CDFW.

Water delivery systems will be inspected for leaks regularly. Cultivators are required to implement water conservation measures with their irrigation infrastructure. Water conservation may be achieved through the use of mulches, cover crops, and agronomic drip or micro-spray irrigation. Records will be retained in accordance with BPTC 99.

Irrigation Runoff

100. Cannabis cultivators shall regularly inspect for leaks in mainlines⁸, laterals⁹, in irrigation connections, sprinkler heads, or at the ends of drip tape and feeder lines and immediately repair

⁸ Mainlines are pipes that go from the water source to the control valves.

⁹ Laterals are the pipes between the control valve and the sprinkler heads.

any leaks found upon detection.

- 101. The irrigation system shall be designed to include redundancy (e.g., safety valves) in the event that leaks occur, so that waste of water and runoff is prevented and minimized.
- 102. Cannabis cultivators shall regularly replace worn, outdated, or inefficient irrigation system components and equipment to ensure a properly functioning, leak-free irrigation system at all times.
- 103. Cannabis cultivators shall minimize irrigation deep percolation¹⁰ by applying irrigation water at agronomic rates.

During the assessment, no runoff, or evidence of such runoff was observed anywhere ner the cultivation areas on the property. Irrigation systems shall be inspected for leaks regularly and also designed for safety redundancy. All irrigation waters will be applied at agronomic rates.

Fertilizers, Pesticides, and Petroleum Products

- 104. Cannabis cultivators shall not mix, prepare, over apply, or dispose of agricultural chemicals/products (e.g., fertilizers, pesticides¹¹, and other chemicals as defined in the applicable water quality control plan) in any location where they could enter the riparian setback or waters of the state. The use of agricultural chemicals inconsistently with product labeling, storage instructions, or DPR requirements for pesticide applications¹² is prohibited. Disposal of unused product and containers shall be consistent with labels.
- 105. Cannabis cultivators shall keep and use absorbent materials designated for spill containment and spill cleanup equipment on-site for use in an accidental spill of fertilizers, petroleum products, hazardous materials, and other substances which may degrade waters of the state. The cannabis cultivator shall immediately notify the California Office of Emergency Services at 1-800-852-7550 and immediately initiate cleanup activities for all spills that could enter a waterbody or degrade groundwater.

-Per California Code of Regulations Title 3. Division 6. Section 6000:

(a) Any substance or mixture of substances that is a pesticide as defined in the Food and Agricultural Code and includes mixtures and dilutions of pesticides;

(b) As the term is used in Section 12995 of the California Food and Agricultural Code, includes any substance or product that the user intends to be used for the pesticidal poison purposes specified in Sections 12753 and 12758 of the Food and Agricultural

-Per California Food and Agricultural Code section 12753(b), the term "Pesticide" includes any of the following: Any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.

-In laymen's terms: "pesticide" includes: rodenticides, herbicides, insecticides, fungicides, and disinfectants.

http://www.cdpr.ca.gov/docs/legbills/laws_regulations.htm,

http://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2017/2017atch/attach0301.pdf, and http://www.cdpr.ca.gov/docs/cannabis/index.htm

¹⁰ Deep percolation occurs when excess irrigation water is applied and percolates below the plant root zone.

¹¹ Pesticide is defined as follows:

¹² More information on DPR requirements is available at:

106. Cannabis cultivators shall establish and use a separate storage area for pesticides, and fertilizers, and another storage area for petroleum or other liquid chemicals (including diesel, gasoline, oils, etc.). All such storage areas shall comply with the riparian setback Requirements, be in a secured location in compliance with label instructions, outside of areas of known slope instability, and be protected from accidental ignition, weather, and wildlife. All storage areas shall have appropriate secondary containment structures, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage.

Storage tanks and containers must be of suitable material and construction to be compatible with the substances stored and conditions of storage, such as pressure and temperature.

- 107. Throughout the wet season, Cannabis Cultivators shall ensure that any temporary storage areas have a permanent cover and side-wind protection or be covered during non-working days and prior to and during rain events.
- 108. Cannabis cultivators shall only use hazardous materials¹³ in manner consistent with product's label.
- 109. Cannabis cultivators shall only keep hazardous materials in their original containers with labels intact, and shall store hazardous materials to prevent exposure to sunlight, excessive heat, and precipitation. Cannabis cultivators shall provide secondary containment for hazardous materials to prevent possible exposure to the environment. Disposal of unused hazardous materials and containers shall be consistent with the label.
- 110. Cannabis cultivators shall only mix, prepare, apply, or load hazardous materials outside of the riparian setbacks.
- 111. Cannabis cultivators shall not apply agricultural chemicals within 48 hours of a predicted rainfall event of 0.25 inches or greater with a probability greater than 50-percent. In the Lake Tahoe Hydrologic Unit, cannabis cultivators shall not apply agricultural chemicals within 48 hours of any weather pattern that is forecast to have a 30 percent or greater chance of precipitation greater than 0.1 inch per 24 hours. This requirement may be updated based on amendments to the Lahontan Regional Water Board construction storm water general order.

During the assessment, multiple generators were found to be improperly stored on the property. All petroleum products. and generators holding petroleum products are required to be stored in compliance with the above BPTC's. Proper storage of these products is considered to be under top-cover, and above properly-sized secondary containment basins. A properly-sized secondary containment basin is considered to be at least 100% of the volume of petroleum products it is stored under.

Agricultural chemicals and petroleum products must be stored in separate secured areas with secondary containment. All products must be used and disposed of in accordance with labels. Mixing, preparation, and application of agricultural chemicals shall not occur in a place or manner which could discharge to state waterways or riparian setbacks. Additionally, adequate spill equipment will be kept in the vicinity to mitigate any spills.

Agricultural chemicals shall not be applied to cultivation areas within 48 hrs of rainfall predicted to be at least 1/4" with a 50% or greater probability. See Appendices E, F, and G for additional information.

¹³ A hazardous material is any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

Fertilizers and Soils

- 112. To minimize infiltration and water quality degradation, Cannabis cultivators shall irrigate and apply fertilizer to consistent with the crop need (i.e., agronomic rate).
- 113. When used, cannabis cultivators shall apply nitrogen to cannabis cultivation areas consistent with crop need (i.e., agronomic rate). Cannabis cultivators shall not apply nitrogen at a rate that may result in a discharge to surface water or groundwater that causes or contributes to exceedance of water quality objectives, and no greater than 319 pounds/acre/year unless plant tissue analysis performed by a qualified individual demonstrates the need for additional nitrogen application. The analysis shall be performed by an agricultural laboratory certified by the State Water Board's Environmental Laboratory Accreditation Program.
- 114. Cannabis cultivators shall ensure that potting soil or soil amendments, when not in use, are placed and stored with covers, when needed, to protect from rainfall and erosion, to prevent discharge to waters of the state, and to minimize leaching of waste constituents into groundwater.

Nitrogen and fertilizers will be applied at agronomic rates. Nitrogen use will be monitored and shall not be applied at a rate greater than 319 lbs/acre/year, unless tissue analysis demonstrates the need for additional amounts. Appendix E of this document contains an example Nitrogen Reporting Form to assist Discharger with calculating quantities of fertilizer used.

A secure location, which protects from rainfall and prevents run-off and leaching, for potting soils and amendments shall be established immediately.

Pesticides and Herbicides

- 115. Cannabis cultivators shall not apply restricted materials, including restricted pesticides, or allow restricted materials to be stored at the cannabis cultivation site.
- 116. Cannabis cultivators shall implement integrated pest management strategies where possible to reduce the need and use of pesticides and the potential for discharges to waters of the state.¹⁴

Restricted materials and pesticides shall not be stored or applied at the cultivation site. A professionally designed and effectively implemented IPM program is encouraged to reduce the need for pesticides. Appendix F of this document contains a sample Pesticide and Herbicide Info sheet. The Discharger is responsible for maintaining an accurate list of the products used.

Petroleum Products and Other Chemicals

117. Cannabis cultivators shall only refuel vehicles or equipment outside of riparian setbacks.

Cannabis cultivators shall inspect all equipment using oil, hydraulic fluid, or petroleum products

¹⁴ https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles

for leaks prior to use and shall monitor equipment for leakage. Stationary equipment (e.g., motors, pumps, generators, etc.) and vehicles not in use shall be located outside of riparian setbacks. Spill and containment equipment (e.g., oil spill booms, sorbent pads, etc.) shall be stored onsite at all locations where equipment is used or staged.

- 118. Cannabis cultivators shall store petroleum, petroleum products, and similar fluids in a manner that provides chemical compatibility, provides secondary containment, and protection from accidental ignition, the sun, wind, and rain.
- 119. Use of an underground storage tank(s) for the storage of petroleum products is allowed if compliant with all applicable federal, state, and local laws; regulations; and permitting requirements.

Petroleum products and other chemicals must be stored in a separate location from fertilizers and direct cultivation inputs. All petroleum products and other chemicals must have sufficient secondary containment, be protected from environmental elements, and accompanied with spill mitigation measures. No servicing or refueling of equipment shall occur inside the riparian setbacks. Regular inspection for leaks of all petroleum utilizing equipment is required.

Appendix G of this document contains a sample Petroleum Product Info sheet. The Discharger is responsible for maintaining an accurate list of the products used.

Cultivation Related Waste

- 120. Cannabis cultivators shall contain and regularly remove all debris and trash associated with cannabis cultivation activities from the cannabis cultivation site. Cannabis cultivators shall only dispose of debris and trash at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations. Cannabis cultivators shall not allow litter, plastic, or similar debris to enter the riparian setback or waters of the state. Cannabis plant material may be disposed of onsite in compliance with any applicable CDFA license conditions.
- 121. Cannabis cultivators shall only dispose or reuse spent growth medium (e.g., soil and other organic media) in a manner that prevents discharge of soil and residual nutrients and chemicals to the riparian setback or waters of the state. Spent growth medium shall be covered with plastic sheeting or stored in water tight dumpsters prior to proper disposal or reuse. Spent growth medium should be disposed of at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations. Proper reuse of spent growth medium may include incorporation into garden beds or spreading on a stable surface and revegetating the surface with native plants. Cannabis cultivators shall use erosion control techniques, as needed, for any reused or stored spent growth medium to prevent polluted runoff.

Plant waste is currently contained via a 10' x 12' composting structure. Cultivation related wastes shall be collected daily and transported regularly to an authorized disposal site. Cannabis plant material shall be disposed of in accordance with CDFA licensing. On site composting of cannabis material is strongly encouraged. Used growing medium can be disposed at an authorized facility or spread on stable ground and treated as exposed soils. Spent growth medium shall be stored in a manner preventing transport of nutrients or materials off site.

Refuse and Domestic Waste

122. Cannabis cultivators shall ensure that debris, soil, silt, bark, slash, sawdust, rubbish, creosotetreated wood, raw cement and concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to

- any life stage of fish and wildlife or their habitat (includes food sources) does not contaminate soil or enter the riparian setback or waters of the state.
- 123. Cannabis cultivators shall not dispose of domestic wastewater unless it meets applicable local agency and/or Regional Water Board requirements. Cannabis cultivators shall ensure that human or animal waste is disposed of properly. Cannabis cultivators shall ensure onsite wastewater treatment systems (e.g., septic system) are permitted by the local agency or applicable Regional Water Board.
- 124. If used, chemical toilets or holding tanks shall be maintained in a manner appropriate for the frequency and conditions of usage, sited in stable locations, and comply with the riparian setback Requirements.

During the assessment of the property, domestic wastewater was found to be contained via a septic system plumbed to the residence on the property. All refuse and domestic waste shall be collected daily and placed in secured containers protected from environmental conditions and wildlife. The waste storage site shall be located outside riparian setbacks. A county permitted septic tank and leach lines have been installed and connected to the newly permitted dwelling.

Winterization

- 125. Cannabis cultivators shall implement all applicable Erosion Control and Soil Disposal and Spoils Management Requirements in addition to the Winterization Requirements below by the onset of the winter period.
- 126. Cannabis cultivators shall block or otherwise close any temporary access roads to all motorized vehicles no later than the onset of the winter period each year.
- 127. Cannabis cultivators shall not operate heavy equipment of any kind at the cannabis cultivation site during the winter period, unless authorized for emergency repairs contained in an enforcement order issued by the State Water Board, Regional Water Board, or other agency having jurisdiction.
- 128. Cannabis cultivators shall apply linear sediment controls (e.g., silt fences, wattles, etc.) along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow length 15 below.

¹⁵ Sheet flow length is the length that shallow, low velocity flow travels across a site.

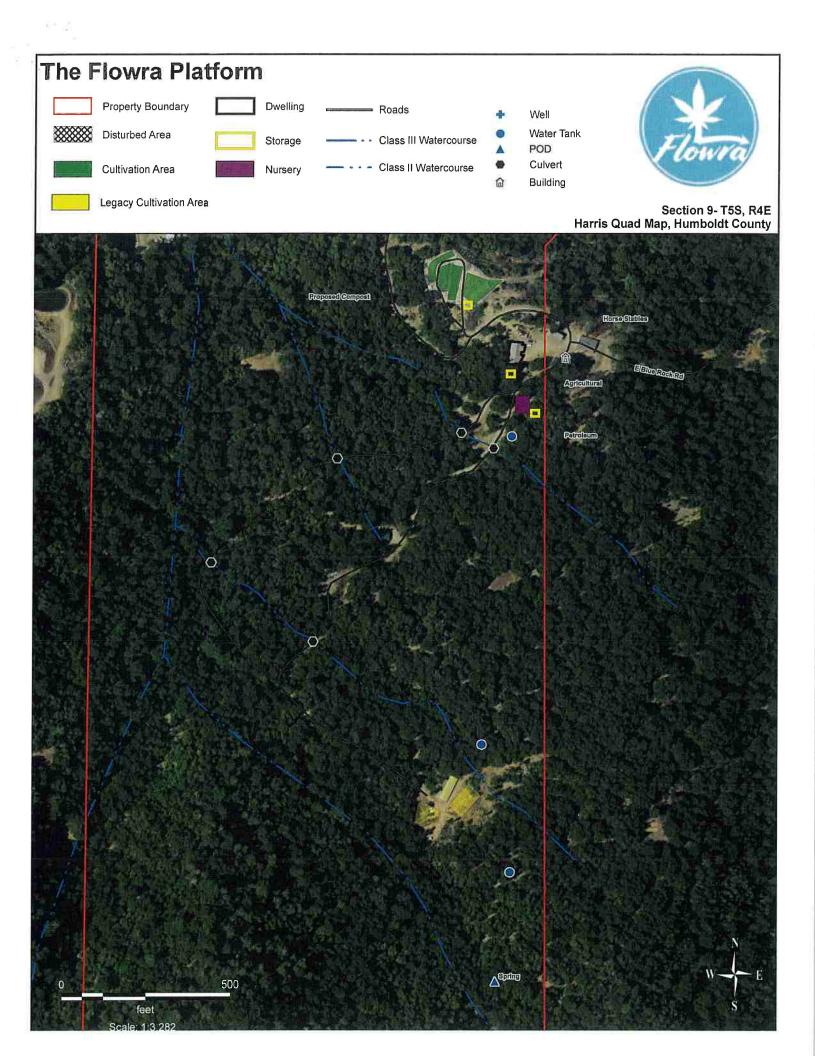
Slope (percent)	Sheet Flow Length Not to Exceed (feet)
0 – 25	20
25 – 50	15
>50	10

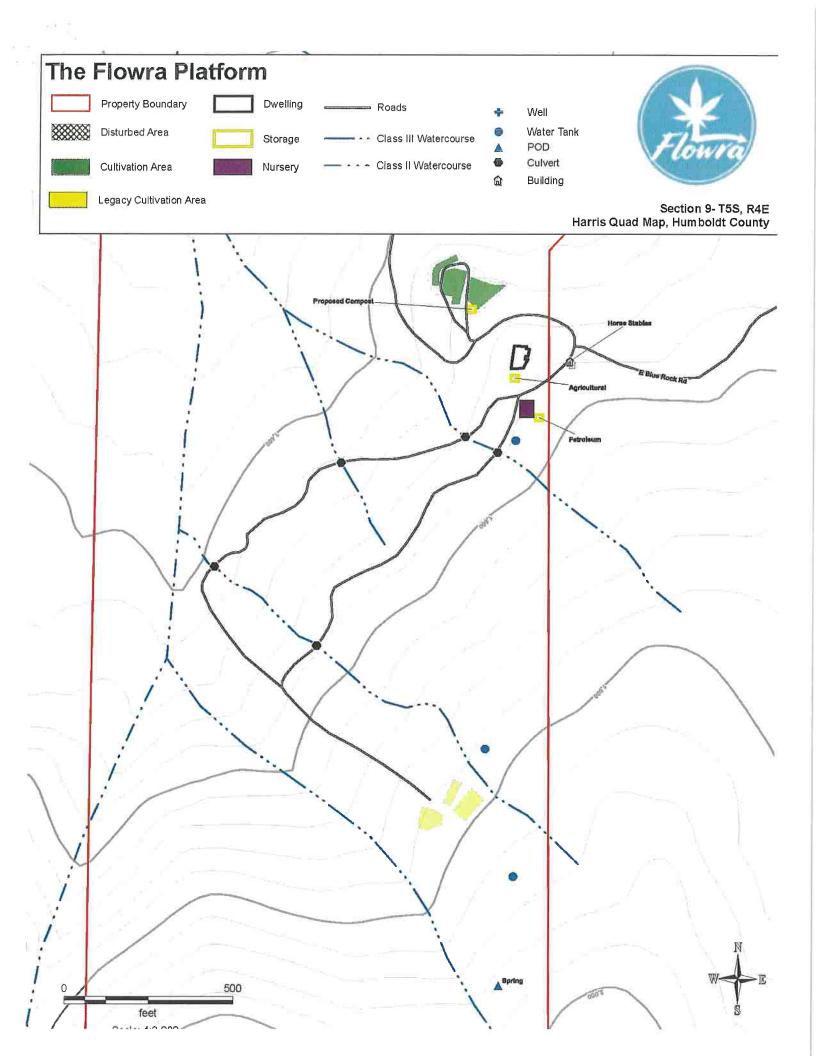
- 129. Cannabis cultivators shall maintain all culverts, drop inlets, trash racks and similar devices to ensure they are not blocked by debris or sediment. The outflow of culverts shall be inspected to ensure erosion is not undermining the culvert. Culverts shall be inspected prior to the onset of fall and winter precipitation and following precipitation events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation to determine if maintenance or cleaning is required.
- 130. Cannabis cultivators shall stabilize all disturbed areas and construction entrances and exits to control erosion and sediment discharges from land disturbance.
- 131. Cannabis cultivators shall cover and berm all loose stockpiled construction materials (e.g., soil, spoils, aggregate, etc.) that are not actively (scheduled for use within 48 hours) being used as needed to prevent erosion by storm water. The cannabis cultivator shall have adequate cover and berm materials available onsite if the weather forecast indicates a probability of precipitation.
- 132. Cannabis cultivators shall apply erosion repair and control measures to the bare ground (e.g., cultivation area, access paths, etc.) to prevent discharge of sediment to waters of the state.
- 133. As part of the winterization plan approval process, the Regional Water Board may require cannabis cultivators to implement additional site-specific erosion and sediment control requirements if the implementation of the Requirements in this section do not adequately protect water quality.

All erosion control, soil disposal, and spoils management requirements will be implemented before the onset of the Winter Period (November 15th-April 1st). Access roads will be closed and heavy equipment use in cultivation area is prohibited. Culverts, if existing, shall be inspected after 1/2" rain per day or 1" per week. All disturbed areas and bare ground shall be stabilized appropriately. Stockpiled materials must be covered and bermed to prevent material transport or leaching. It is the Cultivator's responsibility to ensure the property is properly winterized prior to the onset of the Winter Period each year.

Appendix B- Maps and Site Images

Intentional Blank-Space





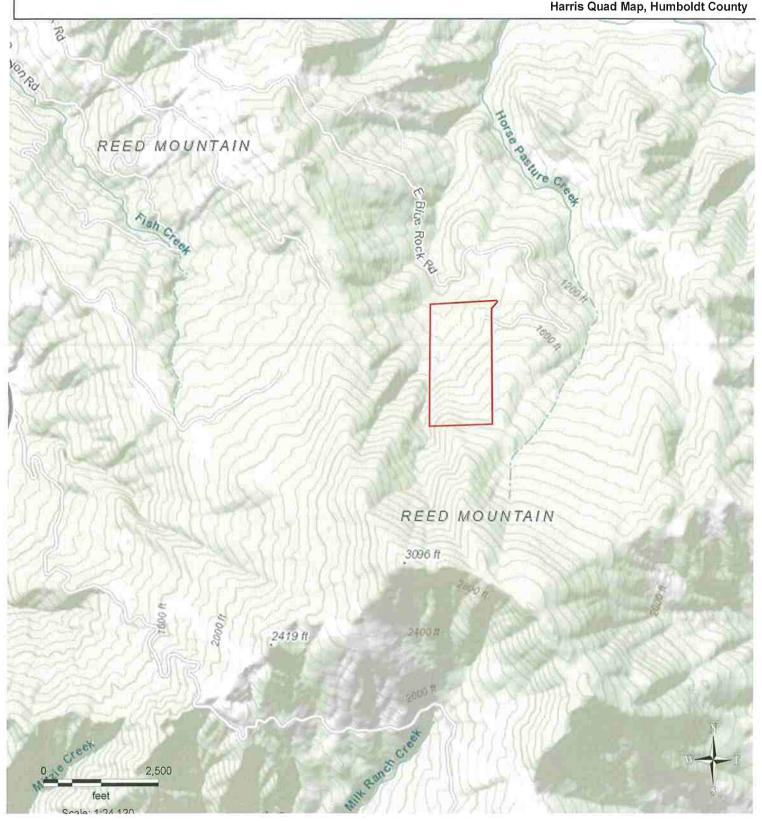
The Flowra Platform

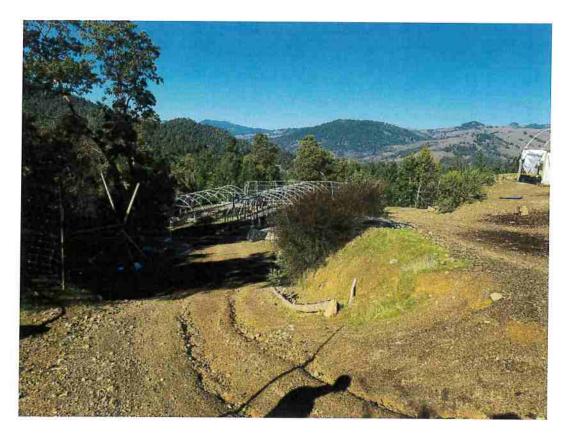


Property Boundary



Section 9- T5S, R4E Harris Quad Map, Humboldt County





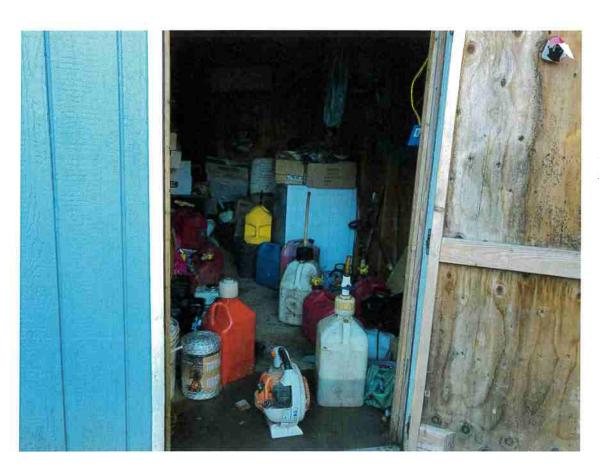
Cultivation Access Road With Rills Running Down The Road Surface

First Culverted Watercourse Crossing, South Of The Dwelling





Horse Stables



Current Petroleum Product Storage

Vegetated Cultivation Area



Processing and Propagation Building

No.	TERM					
	Chapter 4. Forest Practices (Forest Practice Rules) shall be implemented consistent with the permitting, licensing, and performance standards of the Forest Practice Rules, and the Requirements of this Policy, whichever is more stringent.					
	The cannabis cultivator shall apply for a Lake and Streambed Alteration Agreement (LSA Agreement) or consult with CDFW to determine if a LSA Agreement is needed prior to commencing any activity that may substantially:					
3.	 divert or obstruct the natural flow of any river, stream, or lake; change or use any material from the bed, channel, or bank of any river, stream, or lake; or 					
3.	 deposit debris, waste, or other materials that could pass into any river stream or lake. "Any river, stream or lake," as defined by CDFW, includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. 					
4.	Cannabis cultivators shall not take any action which results in the taking of Special-Status Plants (state listed and California Native Plant Society 1B.1 and 1B.2), Fully Protected species (Fish and Game Code sections 3511, 4700, 5050, and 5515), or a threatened, endangered, or candidate species under either the California Endangered Species Act (ESA) (Fish & Game Code §§ 2050 et seq.) or the federal ESA (16 U.S.C. § 1531 et seq.). If a "take," as defined by the California ESA (Fish and Game Code section 86) or the federal ESA (16 U.S.C. § 1532(21)), may result from any act authorized under this Policy, the cannabis cultivator must obtain authorization from CDFW, National Marine Fisheries Service, and United States Fish and Wildlife Service, as applicable, to incidentally take such species prior to land disturbance or operation associated with the cannabis cultivation activities. The cannabis cultivator is responsible for meeting all requirements under the California ESA and the federal ESA.					
5.	A Regional Water Board may adopt site-specific WDRs or an enforcement order for a cannabis cultivation facility that does not include requirements consistent with the following if the site-specific WDRs or enforcement order contains sufficient requirements to be protective of water quality:					
	The maximum slope limit of 50 percent in disturbed areas. The state of the st					
	 The minimum riparian setbacks described herein. The prohibition against land disturbance activities during the winter period. 					
6.	To avoid water quality degradation from erosion and sedimentation, land disturbance activities shall not occur during the winter period unless authorized by a Regional Water Board Executive Officer. Cannabis cultivators shall ensure land disturbing activities are completed and site stabilization measures are in place prior to the onset of the winter period.					

No.	TERM							
	All land disturbing activities during the winter period shall be supervised by a Qualified Professional. ²							
7.	A California Licensed Timber Operator (LTO) ³ shall be used if any commercial tree species are to be removed from the cannabis cultivation site. All timberland conversions shall be permitted and compliant with the Forest Practice Rules and CAL FIRE permitting requirements.							
8.	Site improvements and limited repairs may be performed by the cannabis cultivator or contractors as allowed by the Business and Professions Code (Bus. & Prof. Code, section 7044 and/or section 7048). All contracts to perform work that is valued at \$500 or more in combined labor and material costs shall be performed by an appropriately qualified and licensed contractor as required by the California Contractors' State License Board.							
	During land disturbance activities the cannabis cultivator shall review and evaluate the applicable daily weather forecast and any applicable 24 hour forecast ⁴ at least once per 24 hour period and maintain records of the weather forecast for each day land disturbance activities are conducted. The cannabis cultivator shall cease land disturbance activities and shall implement erosion control Requirements described in this Policy during any 24 hour period in which the applicable daily weather forecast or any 24 hour forecast reports a 50 percent or greater chance of precipitation greater than 0.5 inch per 24 hours.							
9.	Consistent with Lahontan Regional Water Board Order No R6T-2016-0010, an anticipated precipitation event within the Lake Tahoe Hydrologic Unit (Department of Water Resources Hydrologic Unit No.634.00) is any weather pattern that is forecast to have a 30 percent or greater chance of producing 0.1 inch of precipitation as rainfall in the project area. Cannabis cultivators located in the Lake Tahoe Hydrologic Unit shall cease land disturbance activities and shall implement erosion control Requirements described in this Policy during any 24 hour period in which the applicable daily weather forecast or any 24 hour forecast reports a 30 percent or greater chance of precipitation greater than 0.1 inch per 24 hours. This requirement may be updated based on amendments to the Lahontan Regional Water Board construction storm water general order.							
10.	Prior to commencing any cannabis land development or site expansion activities the cannabis cultivator shall retain a qualified biologist to identify sensitive plant, wildlife species, or communities at the proposed development site. If sensitive plant, wildlife species, or communities are identified, the cannabis cultivator and Qualified Biologist shall consult with							

² Although emergency mitigation measures may not require obtaining coverage under the Construction Storm Water Program, the elevated threat to water quality caused by emergency mitigation or remediation work performed during the winter period requires planning and supervision by an appropriately qualified professional to protect water quality, such as an appropriately certified or registered Storm Water Pollution Prevention Plan Developer.

³ Licensed Timber Operators or "LTOs" are persons who have been licensed under the Forest Practice Act law and are authorized to conduct forest tree cutting and removal operations.

⁴ If available, the cannabis cultivator shall refer to the weather forecast developed by the National Oceanic and Atmospheric Administration (NOAA) for the local National Weather Service Office (http://www.weather.gov). If the NOAA forecast is not available, a forecast by a local television news or radio broadcast shall be used.

No.	TERM						
	CDFW and CAL FIRE to designate a no-disturbance buffer to protect identified sensitive plant, wildlife species, and communities. A copy of the report shall be submitted to the appropriate Regional Water Board.						
11.	To prevent transfer of invasive species, ⁵ all equipment used at the cannabis cultivation site, including excavators, graders, etc., shall be cleaned before arriving and before leaving the site.						
12.	The cannabis cultivator shall comply with all applicable requirements of the State Water Board and Regional Water Boards' (collectively Water Boards) water quality control plans and policies.						
13.	The cannabis cultivator shall immediately report any significant hazardous material release or spill that causes a film or sheen on the water's surface, leaves a sludge or emulsion beneath the water's surface, or a release or threatened release of a hazardous material that may potentially discharge to waters of the state, to the California Office of Emergency Services at (800) 852-7550 and the local Unified Program Agency. The cannabis cultivator shall also immediately notify the appropriate Regional Water Board and CDFW of the release.						
14.	The cannabis cultivator shall comply with all water quality objectives/standards, policies, and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (California Water Code section 13000, et seq.) or CWA section 303 (33 U.S.C. § 1313).						
	During reasonable hours, the cannabis cultivator shall allow the Water Boards, CDFW, CAL FIRE, and any other authorized representatives of the Water Boards, CDFW, or CAL FIRE upon presentation of a badge, employee identification card, or similar credentials, to:						
	 enter premises and facilities where cannabis is cultivated; where water is diverted, stored, or used; where wastes are treated, stored, or disposed of; or in which any records are kept; 						
15.	access and copy, any records required to be kept under the terms and conditions of this Policy;						
	 inspect, photograph, and record audio and video, any cannabis cultivation sites, and associated premises, facilities, monitoring equipment or device, practices, or operations regulated or required by this Policy; and 						
	sample, monitor, photograph, and record audio and video of site conditions, any discharge, waste material substances, or water quality parameters at any location for						

⁵CDFW defines invasive species as organisms (plants, animals, or microbes) that are not native to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health. Cannabis cultivators may refer to CDFW Internet webpage for guidance on decontamination methods and species of concern. See CDFW's invasive species webpage at: https://www.wildlife.ca.gov/Conservation/Invasives.

⁶ Visit the Unified Program Agency website at http://cersapps.calepa.ca.gov/public/directory for local contact information. If internet service is not available call 911 to report the hazardous material release.

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	the purposes of assuring compliance with this Policy.						
16.	The State Water Board may modify this Policy to implement new or revised water quality standards, policies, or water quality control plans; total maximum daily loads (TMDLs), TMDL implementation plans, or revisions to the California Water Code or CWA.						
17.	The State Water Board may modify this Policy and the terms and conditions of water right registrations if monitoring results indicate that cannabis cultivation activities could violate instream flow requirements, water quality objectives, or impair the beneficial uses of a waterbody or its tributaries.						
18.	Cannabis cultivators shall not commit trespass. Nothing in this Policy or any program implementing this Policy shall be construed to authorize cannabis cultivation: (a) on land not owned by the cannabis cultivator without the express written permission of the landowner; or (b) inconsistent with a conservation easement, open space easement, or greenway easement. This includes but is not limited to land owned by the United States or any department thereof, the State of California or any department thereof, any local agency, or any other person who is not the cannabis cultivator. This includes but is not limited to any land owned by a California Native American tribe, as defined in section 21073 of the Public Resources Code, whether or not the land meets the definition of tribal lands and includes lands owned for the purposes of preserving or protecting Native American cultural resources of the kinds listed in Public Resources Code section 5097.9 and 5097.993. This includes but is not limited to conservation easements held by a qualifying California Native American tribe pursuant to Civil Code section 815.3 and greenway easements held by a qualifying California Native American tribe pursuant to Civil Code section 816.56.						
19.	The cannabis cultivator shall not cultivate cannabis on tribal lands or within 600 feet of tribal lands without the express written permission of the governing body of the affected tribe or from a person deputized by the governing body of the affected tribe to authorize cannabis cultivation on tribal lands. ⁷						
20.	No cannabis cultivation activities shall occur within 600 feet of an identified tribal cultural resource site. The cannabis cultivator is solely responsible for identifying any tribal cultural resource sites ⁸ within the cannabis cultivation area.						
21.	Prior to land disturbance activities for new or expanded cannabis cultivation activities, the cannabis cultivator shall perform a records search of potential Native American archeological or cultural resources at a California Historical Resources Information System (CHRIS) information center. Any person who meets qualification requirements for access to the CHRIS may perform the initial CHRIS records search and document the results. The requirement to perform a CHRIS records search may be satisfied by using the results of a previous CHRIS records search completed within the previous 10 years for the specific parcel or parcels where new or expanded cannabis cultivation activities are proposed to						

 $^{^7\}mathrm{Tribal}$ lands means lands recognized as "Indian country" within the meaning of title 18, United States Code, section 1151.

⁸ Identified tribal cultural resource site means a tribal cultural resource that meets the requirements of section 21074, subdivision (a)(1) of the Public Resources Code.

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	occur.				
	Prior to land disturbance activities for new or expanded cannabis cultivation activities, the cannabis cultivator shall also request a search of the Sacred Lands Inventory that is maintained by the Native American Heritage Commission pursuant to Public Resources Code sections 5097.94, subdivision (a), and 5097.96 (Sacred Lands Inventory). If the Sacred Lands Inventory search reveals the presence or potential presence of Native American places of special or social significance to Native Americans, Native American known graves or cemeteries, or Native American sacred places, the cannabis cultivator shall consult with the tribe or tribes that are culturally affiliated with the area in which these Native American cultural resources exist or potentially exist prior to any ground disturbing activities. The information provided by tribes through consultation with the cannabis cultivator shall be maintained as confidential by the cannabis cultivator and its agents. A new Sacred Lands Inventory search is always required prior to ground disturbing activities for new or expanded cannabis cultivation.				
	The cannabis cultivator shall notify the Appropriate Person within seven days of receiving a CHRIS positive result or Sacred Lands Inventory positive result. The Appropriate Person is the Deputy Director for Water Rights (Deputy Director) if the cannabis cultivator is operating under the Cannabis Small Irrigation Use Registration (SIUR), the Executive Officer of the applicable Regional Water Board (Executive Officer) if the cannabis cultivator is operating under the Cannabis General Order or Cannabis General Water Quality Certification, or both if the cannabis cultivator is operating under both programs.				
	In the event that prehistoric archeological materials or indicators are identified in a CHRIS positive result, the cannabis cultivator shall also notify the Native American Heritage Commission within seven days of receiving the CHRIS positive result and request a list of any California Native American tribes that are potentially culturally affiliated with the positive result. The cannabis cultivator shall notify any potentially culturally affiliated California Native American tribes of the CHRIS positive result within 48 hours of receiving a list from the Native American Heritage Commission.				
	The cannabis cultivator shall promptly retain a professional archeologist ⁹ to evaluate the CHRIS positive result and recommend appropriate conservation measures. In the event of a Sacred Lands Inventory positive result, the cannabis cultivator shall develop appropriate mitigation and conservation measures in consultation with the affected California Native American tribe, and shall promptly retain a professional archeologist to assist in this task in the event of a Sacred Lands Inventory positive result related to human remains or archeological resources. The cannabis cultivator shall submit proposed mitigation and conservation measures to the appropriate person(s) (Deputy Director for the Cannabis SIUR and Executive Officer for the Cannabis General Order or Cannabis General Water Quality Certification) for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery. In the event that prehistoric archeological materials or indicators are identified in a CHRIS				

⁹ A professional archeologist is one that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.

No.	TERM					
	positive result, or in the event of a Sacred Lands Inventory positive result, the cannabis cultivator shall also provide a copy of the final proposed mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving tribal cultural resources and prehistoric archeological resources with appropriate dignity.					
	Ground-disturbing activities shall not commence until all approved measures have been completed to the satisfaction of the Deputy Director and/or Executive Officer, as applicable.					
	If any buried archeological materials or indicators ¹⁰ are uncovered or discovered during any cannabis cultivation activities, all ground-disturbing activities shall immediately cease within 100 feet of the find.					
	The cannabis cultivator shall notify the Appropriate Person within 48 hours of any discovery. The Appropriate Person is the Deputy Director if the cannabis cultivator is operating under the Cannabis SIUR, the Regional Water Board Executive Officer if the cannabis cultivator is operating under the Cannabis General Order or Cannabis General Water Quality Certification, or both if the cannabis cultivator is operating under both programs.					
22.	In the event that prehistoric archeological materials or indicators are discovered, the cannabis cultivator shall also notify the Native American Heritage Commission within 48 hours of any discovery and request a list of any California Native American tribes that are potentially culturally affiliated with the discovery. The cannabis cultivator shall notify any potentially culturally affiliated California Native American tribes of the discovery within 48 hours of receiving a list from the Native American Heritage Commission.					
	The cannabis cultivator shall promptly retain a professional archeologist ¹¹ to evaluate the discovery. The cannabis cultivator shall submit proposed mitigation and conservation measures to the appropriate person(s) (Deputy Director for the Cannabis SIUR and Regional Water Board Executive Officer for the Cannabis General Order or Cannabis General Water Quality Certification) for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.					
	In the event of a discovery of prehistoric archeological materials or indicators are discovered, the cannabis cultivator shall also provide a copy of the final proposed mitigation and					

¹⁰ Prehistoric archaeological indicators include, but are not limited to: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; groundstone implements (grinding slabs, mortars, and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone, fire affected stones, shellfish, or other dietary refuse. Historic period site indicators generally include, but are not limited to: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails.

¹¹ A professional archaeologist is one that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.

No.	TERM				
	conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving prehistoric archeological resources and tribal cultural resources with appropriate dignity.				
	Ground-disturbing activities shall not resume within 100 feet of the discovery until all approved measures have been completed to the satisfaction of the Deputy Director and/or Executive Officer, as applicable.				
	Upon discovery of any human remains, cannabis cultivators shall immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98. The following actions shall be taken immediately upon the discovery of human remains:				
	All ground-disturbing activities in the vicinity of the discovery shall stop immediately. The cannabis cultivator shall immediately notify the county coroner. Ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98 have been met. The cannabis cultivator shall ensure that the human remains are treated with appropriate dignity.				
	Per Health and Safety Code section 7050.5, the coroner has two working days to examine human remains after being notified by the person responsible for the excavation, or by their authorized representative. If the remains are Native American, the coroner has 24 hours to notify the Native American Heritage Commission.				
23.	Per Public Resources Code section 5097.98, the Native American Heritage Commission will immediately notify the persons it believes to be the most likely descended from the deceased Native American. The most likely descendent has 48 hours to make recommendations to the landowner or representative for the treatment or disposition, with proper appropriate dignity, of the human remains and any associated grave goods. If the Native American Heritage Commission is unable to identify a descendant; the mediation provided for pursuant to subdivision (k) of Public Resources Code section 5097.94, if invoked, fails to provide measures acceptable to the landowner; or the most likely descendent does not make recommendations within 48 hours; and the most likely descendants and the landowner have not mutually agreed to extend discussions regarding treatment and disposition pursuant to subdivision (b)(2) of Public Resources Code section 5097.98, the landowner or their authorized representative shall reinter the human remains and items associated with the Native American human remains with appropriate dignity on the property in a location not subject to further and future disturbance consistent with subdivision (e) of Public Resources Code section 5097.98 If the landowner does not accept the descendant's recommendations, the landowner or the descendants may request mediation by the Native American Heritage Commission pursuant to Public Resources Code section 5097.94, subdivision (k).				

Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of

No.	TERM						
	said water.						
25.	Cannabis cultivators shall not discharge waste in a manner that creates or threatens to create a condition of pollution or nuisance, as defined by Water Code section 13050.						
26.	 Except as allowed and authorized in this Policy, cannabis cultivators shall not discharge: irrigation runoff, tailwater, sediment, plant waste, or chemicals to surface water or via surface runoff; waste classified as hazardous (California Code of Regulations, title 23, section 2521(a)) or defined as a designated waste (Water Code section 13173); or waste in violation of, or in a manner inconsistent with, the appropriate Water Quality Control Plan(s). 						
27.	 Unless authorized by separate waste discharge requirements, the Cannabis General Order, or a CWA section 404 permit, the following discharges are prohibited: any waste that could affect the quality of the waters of the state; or wastewater from cannabis manufacturing activities defined in Business and Professions Code section 26100, indoor grow operations, or other industrial wastewater to an onsite wastewater treatment system (e.g., septic tank and associated disposal facilities), to surface water, or to land. 						
28.	Unless authorized by a Regional Water Board site-specific WDR, cannabis cultivators shall not cultivate cannabis or have cannabis cultivation related land disturbance on slopes greater than 50 percent.						
29.	Cannabis cultivators shall not use a cesspool for domestic or industrial wastewater disposal. Cannabis cultivators shall not install or continue use of an outhouse, pit-privy, pit-toilet, or similar device without approval from the Regional Water Board Executive Officer of the applicable Regional Water Board.						
30.	In timberland areas, cannabis cultivators shall not remove commercial tree species or other vegetation within 150 feet of fish bearing water bodies or 100 feet of aquatic habitat for non-fish aquatic species (e.g., aquatic insects) prior to obtaining all applicable permits required from CAL FIRE, CDFW (i.e., LSA Agreement), and/or the Regional Water Board Executive Officer.						

31.	Tier 1 or 2 cannabis cultivators located on slopes greater than 30% and less than 50% must submit a Site Erosion and Sediment Control Plan to the Regional Water Board Executive Officer for any cannabis-related land development or alteration. The Site Erosion and Sediment Control Plan shall be approved by the applicable Regional Water Board Executive Officer prior to the cannabis cultivator initiating or expanding any land disturbance. The Regional Water Board Executive Officer may deny the request to conduct new land disturbance activities for cannabis cultivation if local conditions (e.g., soil type, site instability, proximity to a waterbody, etc.) do not allow for adequate erosion and sediment control measures to ensure discharges to waters of the state will not occur.					
32.	Tier 1 or 2 cannabis cultivators with any portion of the disturbed areas existing within the setbacks shall submit a Disturbed Area Stabilization Plan to the Regional Water Board					
No.	TERM					
	Executive Officer. The Disturbed Area Stabilization Plan shall be approved by the applicable Regional Water Board Executive Officer prior to the cannabis cultivator initiating any land stabilization activities. This requirement does not apply to disturbed areas resulting from activities authorized under 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board.					
33.	Cannabis cultivators under any Cannabis General Order or individual WDRs implementing this Policy shall self-certify that they have complied with or will comply with all applicable Requirements in this Policy no later than the onset of the winter period of the same year as the application date and each year thereafter. If application occurs after the onset of the winter period, cannabis cultivators shall self-certify that all applicable Requirements in this Policy will be implemented by the onset of the winter period of the next calendar year, and each year thereafter. Those cannabis cultivators that cannot implement all applicable Requirements by the onset of the winter period shall, within 90 days of application submittal, submit to the Executive Officer of the applicable Regional Water Board a time schedule and scope of work for use by the Regional Water Board in developing a compliance schedule.					
34.	Cannabis cultivators shall implement interim Requirements immediately following land disturbance, to minimize discharges of waste constituents. Interim Requirements are those that are implemented immediately upon site development. Cannabis cultivators shall complete all winterization Requirements prior to the onset of the winter period to prevent waste discharges that may result in water quality degradation.					
35.	Cannabis cultivators shall not cause downstream exceedance of applicable water quality objectives identified in the applicable water quality control plan(s).					
36.	The landowner is ultimately responsible for any water quality degradation that occurs on or emanates from its property and for water diversions that are not in compliance with this Policy. Landowners will be named as responsible parties and will be notified if a Cannabis General Order Notice of Applicability or conditional exemption has been issued for cannabis activities on their property. The cannabis cultivator and the landowner will be held responsible for correcting non-compliance.					
37.	Cannabis cultivators shall comply with the minimum riparian setbacks described below for all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle					

storage, petroleum powered pump locations, water storage areas, and chemical toilet placement). The riparian setbacks shall be measured from the waterbody's bankfull stage (high flow water levels that occur every 1.5 to 2 years) or from the top edge of the waterbody bank in incised channels, whichever is more conservative. Riparian setbacks for springheads shall be measured from the springhead in all directions (circular buffer). Riparian setbacks for wetlands shall be measured from the edge of wetland as delineated by a qualified professional with experience implementing the Corps of Engineers Wetlands Delineation Manual (with regional supplements). The Regional Water Board Executive Officer may require additional riparian setbacks or additional requirements, as needed, to meet the performance requirement of protecting surface water from discharges that threaten water quality. If the cannabis cultivation site cannot be managed to protect water quality, the Executive Officer of the applicable Regional Water Board may revoke authorization for cannabis cultivation activities at the cannabis cultivation site.

No.	TERM					
	Minimum Riparian Setbacks ^{1,}					
		Common Name	Watercourse Class ³	Distance		
		Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs ⁴		150 ft.		
		Intermittent watercourses or wetlands	II	100 ft.		
		Ephemeral watercourses	111	50 ft.		
		Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established Riparian Vegetation Zone		
		All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals	IV	N/A		
	cultivator with r Officer determi requirements to Cannabis cultiva WDRs for cann applicable undo Officer determi quality Except where m Rules Water C Chapter 4. For Course and La Spring riparian s downstream an	ler Board may adopt site-specific WDRs requirements that are inconsistent with nes that the site-specific WDRs or enforce be protective of water quality. It is a cultivation activities prior to October that Regional Water Board order unleases that the reduced setbacks applicable ore restrictive, the stream class designates ourse and Lake Protection Zone definitiest Practice Rules, Subchapters 4, 5, a ke Protection). etbacks default to the applicable water addor upstream of the spring's confluence the point where the spring forms a water	the setbacks in procement order of order adopting er 17, 2017, makes the Regionable under that or ations are equivalent (California and 6 Forest Discourse ripariance with the water order	this table if the contains suffice g WDRs or a gay retain reduced Water Boarder are not provided to the F Code of Registrict Rules, Australia Setback 150 fercourse or 15	waiver of ced setbacks d's Executive rotective of water forest Practice ulations, title 14, rticle 6 Water feet	

Cannabis General Water Quality Certification

For the purposes of section 401 of the Clean Water Act, the State Water Board certifies that cannabis cultivation activities in compliance with the conditions of the Policy and General Order will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, subject to the following additional terms and conditions:

No.	TERM					
1.	This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and California Code of Regulations, title 23, section 3867.					
2.	This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b), and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.					
3.	This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.					
4.	A cannabis cultivator seeking water quality certification coverage for activities in surface waters shall notify the Executive Officer of the Regional Water Board or State Water Board Executive Director at least 60 days prior to commencement of the activity and submit information regarding the construction schedule and other relevant information. Work may not commence until the cannabis cultivator is provided authorization by the appropriate Executive Officer of the Regional Water Board or Executive Director of the State Water Board. The Executive Officer of the Regional Water Board or Executive Director of the State Water Board may include specific monitoring requirements for turbidity and other constituents that may be associated with the activity to ensure applicable state water quality standards are met.					
5.	The authorization of this certification for any coverage under this Cannabis General Water Quality Certification or dredge and fill activities expires five years from the date this Policy is approved by the Office of Administrative Law.					
6.	Upon completion of the discharges of dredged or fill material, the cannabis cultivator shall submit a Notice of Completion certifying that all the conditions and monitoring and reporting requirements of this General Water Quality Certification, including the Policy, Cannabis General Order (if applicable), and conditions imposed by the Regional Water Board Executive Officer or State Water Board Executive Director, have been met.					
7.	All Policy and Cannabis General Order Requirements, standard conditions, general terms and provisions, and prohibitions are enforceable conditions of this General Water Quality Certification.					
8.	In the event of any violation or threatened violation of the conditions of this General Water Quality Certification, the violation or threatened violation shall be subject to any remedies, penalties, processes, or sanctions as provided for under state law. For purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.					
No.	TERM					

9. This General Water Quality Certification may be modified as needed by the Executive Director of the State Water Board.

Appendix D- Order WQ 2017-0023-DWQ: Attachment A: Section 6: Useful Guidance Documents

The following resources are found in Section 6 of Attachment A to SWRCB Order WQ 2017-0023-DWQ:

Handbook for Forest, Ranch, & Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining, and Closing Wildland Roads http://www.pacificwatershed.com/sites/default/files/RoadsEnglishBOOKapril2015b.pdf

A Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California Watersheds http://www.5counties.org/roadmanual.htm

Construction Site BMP Fact Sheets http://www.dot.ca.gov/hq/construc/stormwater/factsheets.htm

United States Environmental Protection Agency Riparian/Forested Buffer https://nepis.epa.gov/Exe/ZyPDF.cgi/2000W45Y.PDF?Dockey=2000W45Y.PDF

Creating Effective Local Riparian Buffer Ordinances http://www.ohioenvironmentallawblog.com/uploads/file/UGA%20riparian_buffer_guidebook.pdf

How to Install Residential Scale Best Management Practices (BMPs) in the Lake Tahoe Basin

http://www.tahoebmp.org/Documents/Contractors%20BMP%20Manual.pdf

Spoil Pile BMPs

http://michigan.gov/documents/deq/deq-wb-nps-sp 250905 7.pdf

Sanctuary Forest Water Storage Guide https://greywateraction.org/wpcontent/uploads/2014/11/SantuaryForrest_Water_Storage_Guide.pdf

Natural Resources Conservation Service-USDA, "Ponds – Planning, Design, Construction", Agriculture Handbook http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_030362.pdf

Division of Safety of Dams Size Requirements http://www.water.ca.gov/damsafety/jurischart/

Water Tanks: Guidelines for Installation and Use http://www.waterandseptictanks.com/Portals/0/files/GUIDELINES-FOR-INSTALLATIONOF-WATER-TANKS-_rev1_-03-20-08-_2_.pdf

Guidelines for Use and Installation of Above Ground Water Tanks

http://www.waterandseptictanks.com/Portals/0/files/GUIDELINES-FOR-INSTALLATIONOF-WATER-TANKS- rev1 -03-20-08- 2 .pdf

BEST MANAGEMENT PRACTICES (BMP's) University of California Cooperative Extension

http://www.waterboards.ca.gov/sandiego/water issues/programs/wine country/docs/upd ates081910/ucce bmps.pdf

California Storm Water Quality Association, Section 4: Source Control BMPs https://www.casga.org/sites/default/files/BMPHandbooks/sd-12.pdf

CA DOT Solid Waste Management Plan http://www.dot.ca.gov/hg/construc/stormwater/WM-05.pdf

State Water Resources Control Board Onsite Wastewater Treatment System (OWTS) Policy

http://www.waterboards.ca.gov/water_issues/programs/owts/docs/owts_policy.pdf

California Storm Water Quality Association Section 4: Source Control BMPs https://www.casga.org/sites/default/files/BMPHandbooks/sd-32.pdf

California Riparian Habitat Restoration Handbook http://www.conservation.ca.gov/dlrp/watershedportal/InformationResources/Documents/ Restoration Handbook Final Dec09.pdf

The Practical Streambank Bioengineering Guide http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/idpmcpu116.pd f

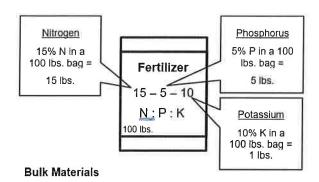
Watershed Best Management Practices for Cannabis Growers and other Rural Gardeners http://mcrcd.org/resources/publications

21. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region

http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/west_mt_finals upp2.pd

Appendix E - Order WQ 2017-0023-DWQ: Attachment D



Nitrogen (lbs.) = $\frac{\%N}{100}$ × fertilizer weight applied (lbs.)

Dry Fertilizers

Nitrogen (lbs.) =
$$\frac{\%N}{100}$$
 × fertilizer weight applied (lbs.)

Liquid Fertilizers

$$Nitrogen (lbs.) = \frac{\sqrt[901]{}}{100} \times density (\frac{10s.}{}) \times gallons \ of \ product \\ \frac{100}{\sqrt[90]{}} \times density (\frac{}{}) \times ounces \ of \ product \\ \frac{100}{\sqrt[90]{}} \times density (\frac{}{\sqrt[90]{}}) \\ Density = \frac{weight \ of \ product \ (lbs.)}{volume \ of \ product \ (gal. \ or \ oz.)}$$

Report monthly bulk, dry, liquid fertilizers individually

$$Rate\ Applied = \frac{Nitrogen\ Applied\ (lbs.)}{canopy\ acre}$$

EXAMPLE NITROGEN REPORTING FORM

The nitrogen reporting form below shows the monthly and annual nitrogen application rates in pounds of nitrogen per canopy acre.

In April two bags of bulk fertilizer weight 100 lbs. each were used at a <u>0.50 acre</u> cultivation site. The quantity of nitrogen from the bulk soil applied in April is 30 lbs.

$$\frac{15\%}{100}$$
 × 200 lbs. = 30 lbs. of Nitrogen

The amount of nitrogen applied per canopy acre is then calculated as:

(30 lbs. N)/(0.50 canopy acre) = (60 lbs. N)/(canopy acre)

	Bulk	Dry	Liquid	Rate Applied
Month	Nitrogen reported as (canoov acre)			
January	0	0	o	0
February	0	0	0	0
March	0	0	0	0
April	60	20	8	88
May	0	0	24	24
June	0	0	24	24
July	0	8	24	32
August	0	10	30	40
September	0	20	40	60
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Subtotal	60	58	150	
	Total Annual Nitrogen Applied (lbs. per canopy acre) =			

Appendix F- Fertilizers, Pesticides, Herbicides, and Rodenticides Information

Product Type (Fertilizer, Pesticide, Herbicide, Rodenticide)	Product Name	N-P-K Ratio	Storage Method	Amount (Pounds; Gallons)	Delivery Date	Winterization (Disposal or Storage)
		Micro				

Description of Mixtures, Applications, and Disposal:					

Appendix G- Petroleum Product Information

Product = - Type	Product Name	Intended Use	Storage Method	Amount (Pounds, Gallons)	Delivery Date	Winterization (Disposal or Storage)

Description of Fuers, Eutoricants, and other petroleum products wixing, Application and Disposar:				



COUNTY OF HUMBOLDT

PLANNING AND BUILDING DEPARTMENT CANNABIS SERVICES DIVISION

3015 H Street Eureka CA 95501 Fax: (707) 268-3792 Phone: (707)445-7541

July 26, 2018

John Miranda 1943 Port Canyon Rd. Ferndale, CA 95536

RE: Permit Application No. 12147 APN 223-034-005

Case No.: SP16-414

Dear John Miranda.

Thank you for your submittal of the above referenced application for a commercial cannabis permit on December 21, 2016 for 8,100 square feet of existing outdoor medical cannabis cultivation. Prior correspondence regarding the project has included an Incomplete Letter dated February 9, 2017 and an Application Withdrawal Notice Letter dated August 9, 2017. Additional application materials have since been received. Unfortunately, after review the application submittal was found not to contain all of the required information and we are unable to move the permit forward at this time.

Listed below are the actions you must take for staff to continue processing this permit application:

- 1. Submit a copy of a Water Resources Protection Plan (WRPP) prepared for the project, or a letter from a qualified professional indicating that one is being prepared.
- 2. Submit a completed Road Evaluation Report (enclosed)
- 3. If you wish for this application to move forward under the business name "Double J Stables" an Application Transfer form will be required along with the business entity documents filed with the California Secretary of State. If you do not wish to go this route please update the Operations plan and DEH forms that currently utilize the Double J Stables business name for the project.
- 4. * Update Cultivation and Operations Plan to include the following:
 - a) Clarify and update relevant materials to ensure consistency on the amount of cultivation proposed:
 - The operations plan describes 8,100 square feet of outdoor cultivation
 - The Site Plan depicts 9,970 square feet of cultivation area
 - b) Description of site drainage, including runoff and erosion control measures
 - c) Provide estimated generator usage (in hours) per month for any cultivation related activities
 - d) Indicate how the proposed greenhouses construction and configuration complies with Humboldt County Zoning Regulations Section 313 - 69.1.5.2.
 - e) Processing is described as currently occurring onsite, as such; please provide further details within the processing plan section that meets minimum standards in Section 55.4.11 (a) through (u). – (some of these items are already included in the ops plan and have been noted on the following list)
 - Summary of Processing Practices;
 - Description of location where processing will occur (already included);

- Estimated number of employees, if any (how many family members will be included?);
- Summary of Employee Safety Practices;
- Description of toilet and handwashing facilities
- Description of plumbing and/or septic system and whether or not the system is capable of handling increased usage (will there be increased usage?);
- Description of source of drinking water for employees;
- Description of increased road use resulting from processing and a plan to minimize that impact;
- Description of on-site house, if any (will there be Farmworker housing provided?).
- 5. *Update Site Plan of entire parcel showing:
 - a) Location and area of cultivation (Label each proposed greenhouse and outdoor cultivation area, along with its area)
 - b) Graded flats (if applicable
 - c) Water storage structures labeled as to type, capacity, and <u>date of construction</u> –
 (You may need to specify the individual structures if installed/constructed at different times/years.)
 - d) Septic/Sewer System Location
- 6. If on-site relocation of existing cultivation is part of the proposed project, provide a Remediation Plan prepared by a qualified professional (e.g. biologist, hydrologist, engineer etc.) demonstrating that the new site is environmentally superior to the present condition, describing the methods of restoration, and targets to abate existing environmental harm at the previous cultivation area. If the relocation occurred after January 1, 2016, include an explanation as to why this took place prior to the permit or clearance required under the CMMLUO being obtained.
- 7. In order to recommend approval, a finding that the project is consistent with the Humboldt County General Plan must be made. One of the General Plan policies states "New Development may be approved only if it can be demonstrated that the proposed development will neither create nor significantly contribute to, or be impacted by, geological instability or geologic hazards [Reference S-P11]. As the subject property and the surrounding area are located in an area with a High Seismic and Slope Instability rating, that there is a mapped historic landslide on the subject property and landslides on surrounding properties, and the slopes range from 15 percent or greater, at this time there is insufficient documentation demonstrating that a project would not create nor significantly contribute to, or be impacted by, geological instability or geologic hazards. In order to continue processing the project, a written evaluation of the suitability of the project location for the economic lifespan of the project prepared by a California licensed engineer and a geologist (or an engineering geologist) needs to be submitted. This evaluation needs to consider whether the project will create or contribute to, or be impacted by, geological instability or geologic hazards for the economic lifespan of the project. This evaluation needs to be signed and stamped by the report preparer(s).
- 8. Pursuant to Humboldt County Code Section 312-11.2, "Development permits shall be issued only for a lot that was created in compliance with all applicable state and local subdivision regulations." While our office is in the process of completing this review for your parcel, it may be necessary for you to submit additional information in order to determine how the property was created in its current configuration. If additional information is needed our office will contact you.

* In order to ensure accurate review and timely processing of your application, please ensure the Cultivation and Operations Plan and Site Plan are consistent with each other. I recommend you use the numbered items as your outline for the Cultivation and Operations Plan (i.e. numbered items are their own paragraphs or titled sections).

Be advised, if your source of water for cultivation and associated activities is a spring, forbearance will be required pursuant to Humboldt County Code Section 314-55.4.11(I) unless it can be demonstrated that the spring is not hydrologically connected to surface water. As a condition of project approval you will be required to provide confirmation from CDFW that the spring is not hydrologically connected to surface water, or ensure water storage capacity to comply with a mandatory forbearance period.

County staff will conduct a review of previous land use actions that have been approved on the subject parcel(s) to ensure that, "The proposed development complies with the terms and conditions of any applicable permit and/or subdivision map that was previously approved for such development" (HCC §312-2.4.1.2). If a relevant project is found and additional information is needed, our office will contact you.

Please keep in mind, additional information may be requested once the project is reviewed by State and local agencies during the referral stage of the process. The Department cannot make the required findings specified in Humboldt County Code Sections 312-1.1,2 and 312-17 et seq., and the California Environmental Quality Act (CEQA) based on the information submitted to date. In order for the Department to further evaluate this project for compliance, the additional requested information must be submitted.

Please accumulate all requested material and submit as a complete package and submit these items to the contact listed below during regular business hours. When submitting these items please include the Application Number and APN found at the top of this letter. For most efficient processing, please include a copy of this letter with your submittals.

Please note that this project was issued an Interim Permit on August 2, 2018, which authorizes the applicant to seek State licensure and continue operations until completion of the local permit review process or denial of a County permit, or January 1, 2019, whichever occurs first. The items requested in this letter must be submitted within 30 days in order to ensure timely processing of your permit.

Please remember that the filing of a permit application does not authorize the applicant to engage in any new commercial marijuana cultivation, processing, manufacture or distribution activity. No such activity shall commence until the application has been processed to decision and all requisite clearances, permits and/or licenses have been secured. If you have questions about this letter, please contact Max Hilken at 707-445-7541.

Sincerely,

Max Hilken

Max Hilken

Cannabis Services Division

Vendorlaco2@co.humboldt.ca.us

Cc Agent:

Emerald Heritage Farms Dani Burkhart

P.O. Box 4553 Arcata, CA 95518

Attachments:

Road Evaluation Form