TO: Diana Henrioulle, PE

FROM: Adona White, PE

DATE: January 17, 2020

Inspection Report for October 15, 2019, Consent Inspection
Humboldt County Assessor's Parcel Numbers 216-303-002 & 216-304-007

File: Cannabis Program Inspections, Humboldt County, Rowan Leavenworth, CIWQS Place ID 843434

Property information:

County: Humboldt

Physical address: 22525 Alderpoint Road, Alderpoint, CA 95511

A. Assessor's Parcel Numbers (APN), Owners, and Mailing Addresses:

216-303-002: Nick Van Den Branden,
8925 W Flamingo Rd Unit 113, Las Vegas, NV 89147

216-304-007: Very Mountain LLC
121 Penzance Ave Unit 61, Chico, CA 95973

Operator: Rowan Leavenworth
1271 Evergreen Road, Redway, CA 95560

Property Size: 216-303-002 (80 acres) and 216-304-007 (237 acres)

Watershed: Eel River Hydrologic Unit; Middle Main Eel River Hydrologic Area; Spy Rock Hydrologic Subarea (HU/HA/HSA 111.42; Table 2-1, Water Quality Control Plan for the North Coast Region)

Regulatory status with the Regional Water Board:

Site Development: Past timber harvesting; 2007 CDFW LSAA for Dobbyn Creek Property Road Improvement Project

Applicable programs: Soil disturbance of more than an acre; Action Plan for Logging Construction, and Related Activities

Onsite activities/operations: Enrolled for coverage under Regional Cannabis order No. R1-2015-0023, effective August 3, 2017. Transferred enrollment to statewide cannabis order No. DWQ-2017-0023, effective June 4, 2019.

Applicable programs: Cannabis cultivation waste discharge regulatory program.

Inspection information:

Date/time: October 15, 2019

Type: Consent Inspection, Cannabis Program Compliance Inspection

Attendance: Adona White, Water Resource Control Engineer, Regional Water Board
Amanda Piscitteli, Environmental Scientist, Regional Water Board
Jessie Cahill, Timberland Resource Consultants (TRC)

Background/Objective:

In response to concerns reported by staff of CDFW regarding potential impacts to watercourses and wetlands, Regional Water Board staff requested consent to inspect the property, accompanied by staff from TRC.

TRC prepared a Water Resource Protection Plan (WRPP), dated January 30, 2018, and revised January 4, 2019. As of the October 15, 2019, inspection, the WRPP had not been revised to fulfill the requirements of the Statewide Cannabis Order. This report provides site observations, WRPP review, and recommendations to protect water quality.

Inspection objectives for Regional Water Board staff included observing site development and activities and identifying and assessing onsite features or conditions that are causing or may cause adverse impacts to the quality and beneficial uses of receiving waters, including surface and ground water.

Inspection Maps

Figure 1 is an aerial image from April 2019, with my inspection track shown in blue. Figure 2 is a topographic map with WRPP-identified locations. Figure 3 is the WRPP aerial imagery, with water quality inspection points identified with call outs; the text and table provide descriptions of the features identified on Figure 3.

Figure 1. Inspection track. Note Dobbyn Creek slide between Property and Dobbyn Creek, in foreground is Dobbyn Creek tributary confluence, in distance is confluence of Dobbyn Creek and Mainstem Eel River at Fort Seward.

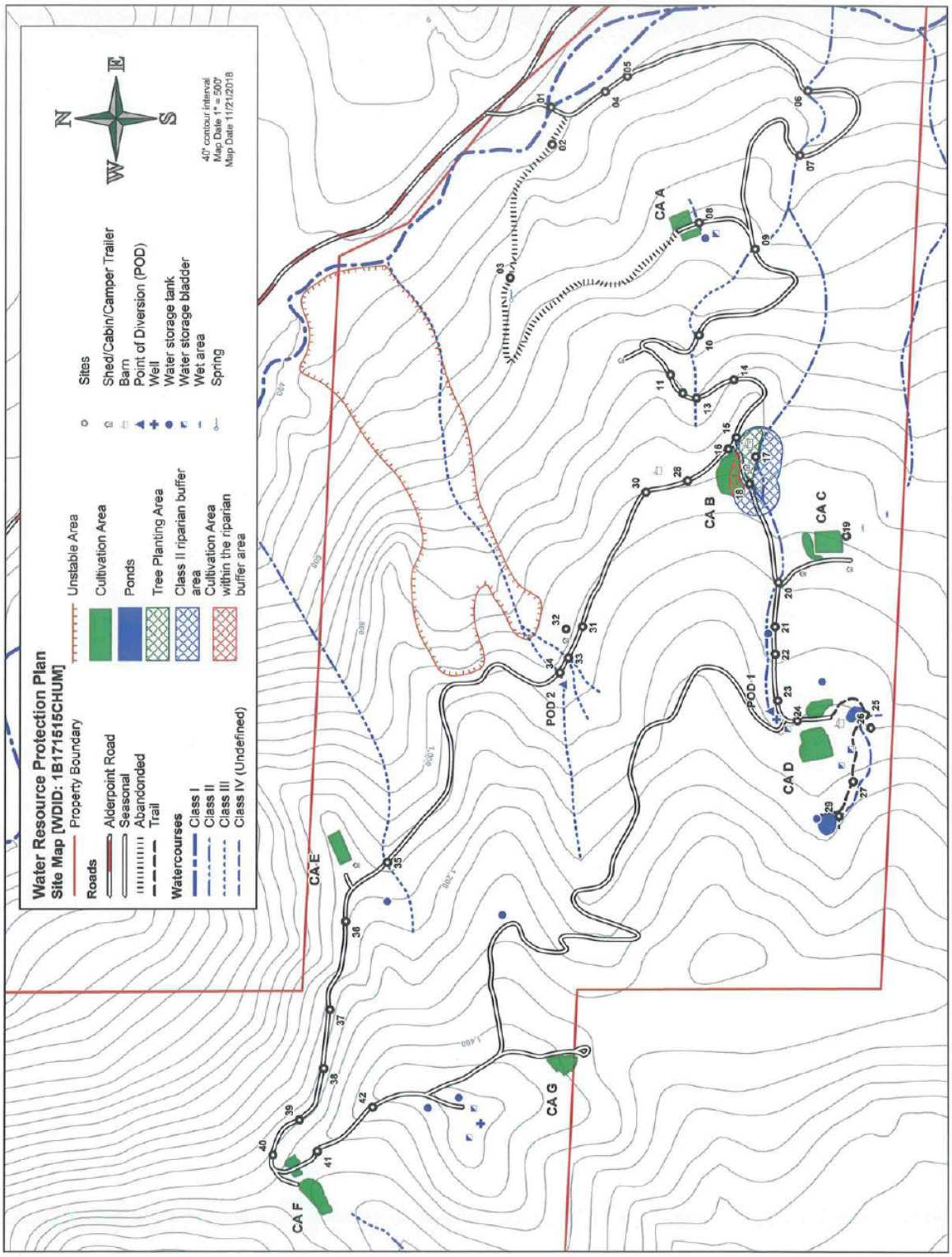

Figure 2. Topographic map identifying WRPP corrective actions and points of reference (TRC, 2018).

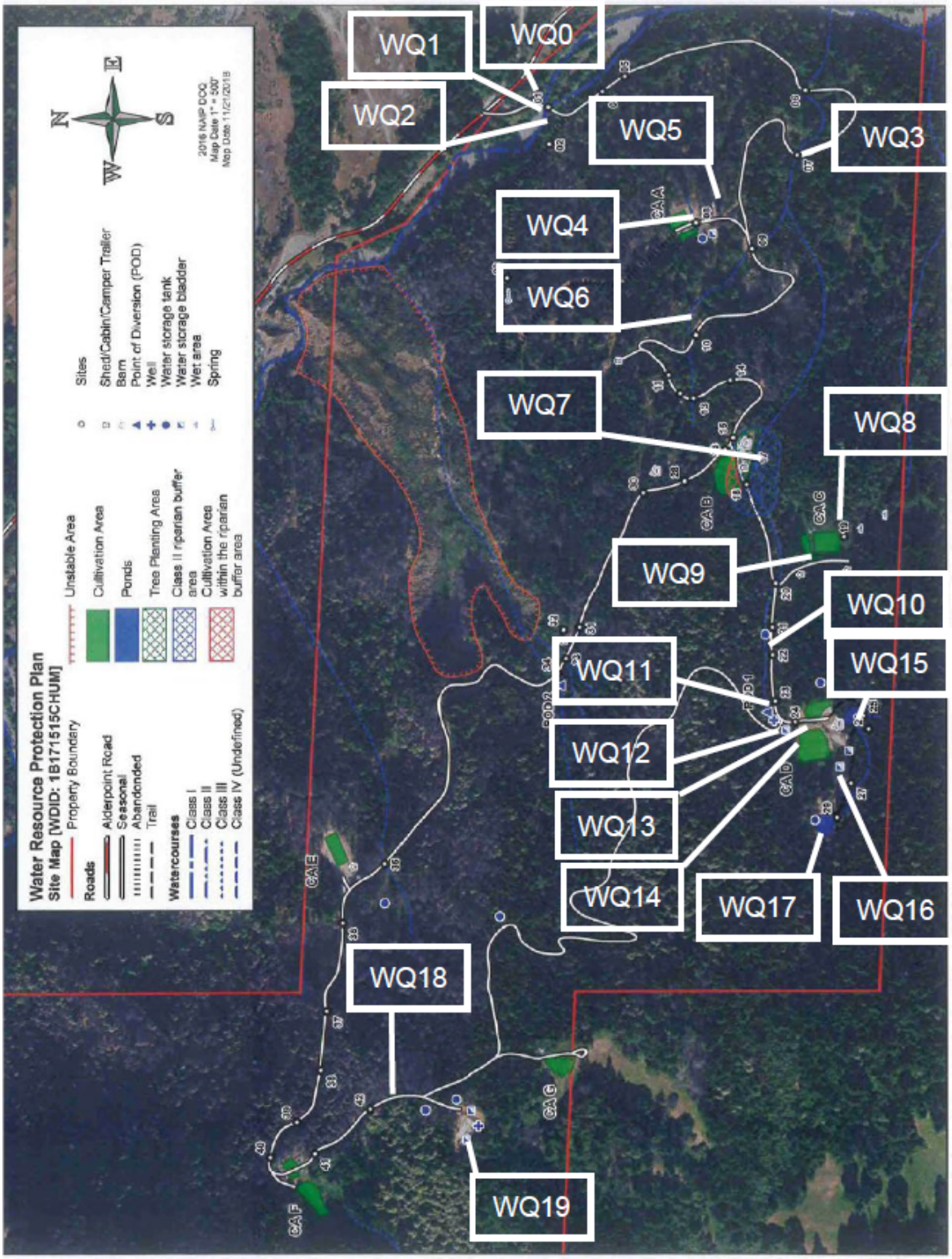

Figure 3. WRPP Map; specific locations discussed in this report are labeled with WQ0-WQ19 and discussed below.

Inspection Observations:

The Property in located in the Dobbyn Creek watershed, with the driveway accessed off Alderpoint Road between the communities of Alderpoint and Blocksburg. A short steep segment of driveway (WQ0) arrives at a bridge over Dobbyn Creek (WQ1). The segment of road is a through cut that drains toward Dobbyn Creek, and based on its condition as observed during the October 15 inspection it is likely to discharge sediment to Dobbyn Creek this winter.

WQ1: The bridge over Dobbyn Creek was installed in 2007. According to the associated 2007 CDFW Lake and Streambed Alteration Agreement, this was to be a temporary bridge, installed and removed seasonally. The bridge was in place at the time of the October 15, 2019, inspection. On October 17, 2019, CDFW issued an NOV, and directed Mr. Leavenworth to remove the bridge by October 31, 2019. On November 4, 2019, I received email notification from TRC advising that the property owner had removed the bridge per the direction from CDFW. Absent the bridge, it does not appear that Mr. Leavenworth has viable route proposed or in place to access his cannabis cultivation areas.

WQ2: Just downstream of the bridge at WQ1, on the western bank, a road parallels Dobbyn Creek. The WRPP identifies this road, and indicates that is no longer in use, is blocked, and vegetated. The WRPP identifies, as Site 2, a 15” culvert on the road, and describes it as being in adequate condition but with gravel deposits from Dobbyn Creek, resulting from its location in the floodplain. The WRPP does not mention bank erosion that I observed just downstream of the culvert; I estimate approximately 15 yd^3 eroded and delivered to Dobbyn Creek. The bank was comprised primarily of fine-grained sediment. It is possible that the erosion occurred since the WRPP was developed or revised.

Near the southeast extent of the main access road, is a 42-inch culvert identified as Site 6 in the WRPP. The WRPP indicates that this culvert is too short. The pipe length and diameter appeared adequate, but I observed that the pipe appeared to be in need of maintenance, including cleaning the inlet and placing rock at the outlet.

WQ3, WRPP Site 7: Continuing along the access road, Site 7 is an 18-inch culverted Class II watercourse crossing. A road drainage ditch delivers directly to the watercourse at this crossing. At present, the crossing comprises relatively minimal fill in the stream channel. As the watercourse transports a significant volume of bedload, likely due to a landslide and gully upstream, the WRPP specifies replacing the 18-inch culvert with a 42-inch culvert, consequently placing a large volume of fill into the stream as part of the installation. To minimize the amount of fill to be placed or added to this crossing, we discussed the potential to develop a site-specific alternative strategy for this crossing, such as constructing an armored fill and allowing only seasonal use.

WQ4, WRPP CA A: At CA A, the easternmost of the six mapped cannabis cultivation areas on the site, I observed vegetation and hydrology indicators (inspection point WQ4) that lead me to believe that the watercourse through CA A has associated wetlands. Within this area, the WRPP identifies one culvert, Site 8, a 15" ditch relief culvert, and does not propose any corrective action. The WRPP does not identify wetlands in this area and does not provide for either wetland or riparian protection provisions. As noted below, I recommend that the watercourse and any associated wetlands in this area be correctly assessed and protected, consistent with the State Cannabis Order. Cultivation materials should be removed from setback and stabilized immediately, and the site winterized. At CA A, I observed water storage bladders (inspection point WQ5). These bladders, like all other water storage bladders I observed of the Property, lacked secondary containment. Secondary containment for the bladders at this location would require additional land disturbance and would expand the developed footprint. Given the presence of and proximity to wetlands and the watercourse in this area, CA A may not be feasible for cultivation and water storage. If CA A is decommissioned, I recommend that that the flats be recontoured using "light-touch" practices to lay back fill slopes and cut-banks.

WQ6: West of CA A, downstream of WRPP Site 10, a gully has formed on the watercourse between WRPP Sites 9 and 10 (note, this is same watercourse described in WQ4). Adjacent to the gully is a water tank, within 20' of the watercourse, apparently used in part to fertilize plants at CA A. I observed an accumulation of blue crystal fertilizer and algae growth on the top of the tank.

WQ7: Just south of cultivation area CA B, at a site the WRPP identifies as Site 17, there are storage structures associated with cannabis cultivation activities, adjacent to a Class II watercourse. Along the access road nearby, at WRPP Site 18, concentrated road runoff has eroded the road surface, and I observed that this road segment is hydrologically connected to a watercourse. The WRPP indicates that corrective work at Sites 17 and 18 was to have been completed by October 15, 2019, the date of the inspection. We observed that work had not been completed, and no interim measures had been implemented. Without treatment, the eroding road segment at Site 18 will deliver fine sediment to a watercourse.

WQ8 & WQ9, WRPP Site 19, CA C: Cultivation area CA C is accessed via a spur road heading south from the access road, and is a cut and fill flat, with the cut bank approximately 10' high. The WRPP indicates that the cut bank has a seep and that the cultivation area is upslope of a seasonal wet area. However, the toe of the fill appears to encroach into a wetland. I observed surface water and hydrophytic vegetation. Water from the seep (WQ9) flows into the cultivation area, where it can contact and carry pollutants from the cultivation area to the wetland (WQ8).

WQ10: The road between CA B and CA D runs adjacent to the watercourse and lacks surface drainage structures or rock. Consequently, the road is hydrologically-connected

to the watercourse, with a number of locations where road surface sediment has a high likelihood of being transported and delivered into the watercourse. The WRPP proposes treatments to break up the drainage and minimize sediment delivery to the watercourse, but as of the date of the inspection none of the treatments had been implemented as scheduled (WRPP sites 18, 21, 22, 23, 24).

WQ11: West of CA C the access road ends at the main cultivation area CA D, where development and activities include cannabis cultivation, camping, a harvesting/processing building, porto-potties, fuels and generators, water storage, composting, refuse storage, and domestic uses. There were numerous employees present in this area during the inspection. Just before reaching CA D, the main access road intersects with a road that traverses the forest to cultivation areas CA G, CA F, and CA E (secondary road). The intersection area is used for parking, a well, water storage tanks, and a shed with fertilizer storage. Stormwater from the developed areas around CA D concentrates and drains down to the same watercourse threatened by WQ10. Consequently, pollutants associated with cannabis cultivation and associated activities in this area can be transported to the watercourse.

WQ12: I observed an inside ditch along the secondary road, just north of the intersection with the access road. Greywater was actively discharging on the surface into the ditch from what appeared to be a sink. The ditch drains through a DRC to another ditch that has the potential to discharge to the watercourse mentioned in WQ10 and WQ11.

WQ13: In the middle of CA D I observed a large building with a shed roof extending from one side. Under the roof, on bare dirt, is the generator and fuel storage and use area. It appears that temporary BMPs had been implemented to minimize petroleum releases to the environment, including trays and tarps. However, it appears that BMPs have not been maintained nor have more permanent solutions been implemented.

WQ14: Along the building, I observed a line of porto-potties.

WQ15: Also adjacent to the building, I observed an unlined pond (Pond 1), that did not appear to be onstream. Vegetation lines around the pond indicates that the pond fills. The outlet did not appear eroded, nor did the berm appear cracked. However, the pond lacks a spillway, and the existing outlet does not provide for adequate freeboard to prevent the pond from overtopping.

WQ16: Upslope and west of Pond 1 is a second pond (Pond 2; WQ17), accessed via a quad trail with deep ruts (WQ16), apparently due to wet weather use and poor drainage. The WRPP identifies Site 27 as a failing waterbar needed to drain a wet area located below Pond 2, across the quad trail, as water is pooling on the road.

WQ17: Pond 2 is the larger of the two unlined ponds. The area upslope of the pond is heavily vegetated with berries impeding access, and due to the significant instability in the area, hillslope hydrology appears disturbed; that said, based on my field observations I did not identify a channel upslope of the pond. The interior and exterior slopes and freeboard appear to be acceptable. The exterior of the berm exhibited some cracking, beyond just wet and drying cracks, warranting a geotechnical evaluation of the pond, including stability assessment and as-built plans.

WQ18: The segment of the secondary road between CA G to CA E lacks adequate surface drainage and is rutting. The WRPP identifies surface drainage structures needed to meet Regional Cannabis Order requirements to be implemented by October 15, 2019. There was no evidence of corrective work completed or underway along this road segment.

WQ19: At this inspection point, between CAG and CA F, is a flat with water bladders that do not have secondary containment.

Table 1. Description of observed features of concern to water quality.

Map point	*Feature*	*Brief Description*	*Water Quality Concern*	*Associated Photo(s)*
WQ0	Driveway between Alderpoint Road and Bridge at WQ1	Hydrologically-connected steep segment of dirt driveway with direct delivery to Dobbyn Creek Not included in WRPP	Construction-related threatened discharge of sediment to watercourse Not consistent with cannabis order requirements	Figure 4
WQ1	Bridge WRPP Site 1	Previous LSA for temporary bridge, never pulled it. Subject of a recent CDFW NOV. The deck is low and has a high likelihood to accumulate wood and alter the stream flow and transport dynamics. The road is on the floodplain	Construction-related threatened discharge of sediment to watercourse Potential for alteration of sediment transport rates due to structure impeding flow, altering river hydraulics and debris and sediment transport Not consistent with cannabis order requirements	Figures 4, 5, 6

Map point	*Feature*	*Brief Description*	*Water Quality Concern*	*Associated Photo(s)*
WQ2	Bank erosion	Class I bank erosion downstream of bridge on left bank, road prism eroded approximately 15 yd^3 of delivered sediment. Uncertain whether this is controllable discharge. WRPP identifies Site 2, a 15" DRC with outlet in floodplain and filled with river-deposited gravel. I presume the bank erosion occurred since the WRPP was developed or revised	Construction-related actual and threatened discharge of sediment to watercourse Not consistent with cannabis order requirements	Figure 7
WQ3	Class II Crossing WRPP Site 7	Current condition is minimal fill. Watercourse transports lots of bedload due to landslide and gully upstream. Rather than WRPP proposal of 42" culvert, recommend alternate crossing such as an armored fill and seasonal use. Hydrologically-connected road ditch with sediment delivery.	Construction-related actual and threatened discharge of sediment to watercourse	Figures 8, 9
WQ4	CA A	Cultivation in setbacks of suspected wetlands	Threatened discharge of waste to waters of the state. Not consistent with cannabis order requirements.	Figures 11, 12
WQ5	CA A	Bladders without containment	Threatened discharge of waste to waters of the state. Not consistent with cannabis order requirements.	Figures 10, 13, 14

Map point	*Feature*	*Brief Description*	*Water Quality Concern*	*Associated Photo(s)*
WQ6	Tank below Site 10	Feed tank on top of bank with blue crystal buildup and algae	Threatened discharge of waste to waters of the state	Figure 16
WQ7	Class II Setback at CA B	Infrastructure in setback of watercourse Identified in WRPP to be treated by 10/15/19; overdue.	Threatened discharge of waste to waters of the state. Construction-related actual and threatened discharge of sediment to watercourse Not consistent with cannabis order requirements	Figure 17
WQ8	Wetland setback at CA C	Wetland indicators of vegetation and hydrology at base of flat. Fill from flat construction may encroach on suspected wetlands. Cultivation in setback of suspected wetlands. Identified in WRPP to be treated by 10/15/19; overdue.	Threatened discharge of waste to waters of the state. Potential dredge and fill waters of the state Not consistent with cannabis order requirements	Figure 23, 24
WQ9	Cutbank at CA C WRPP Site 19	Seep in cutbank of cultivation flat Identified in WRPP to be treated by 10/15/19; overdue.	Threatened discharge of waste to waters of the state. Potential dredge and fill waters of the state Not consistent with cannabis order requirements	Figure 22
WQ10	Road segment between CA B and CA D	Road constructed next to watercourse Identified in WRPP to be treated by 10/15/19; overdue.	Construction-related threatened discharge of sediment to a watercourse Not consistent with cannabis order requirements	

Map point	*Feature*	*Brief Description*	*Water Quality Concern*	*Associated Photo(s)*
WQ11	CA D	Flat and roads hydrologically connected to watercourse	Construction-related threatened discharge of sediment to a watercourse	Figures 25 - 29
WQ12	CA D	Greywater	Threatened discharge of waste to waters of the state	Figures 26, 27
WQ13	Fuels	BMPs are not maintained	Not consistent with cannabis order requirements	Figures 31-33
WQ14	Porto Potties	numerous	Winterize	Figure 30
WQ15	Pond 1 WRPP Site 26	Pond – lacks adequate free board	Not consistent with cannabis order requirements	Figures 36 - 38
WQ16	Road to Pond 2 with deep ruts WRPP site 27	Road lacks adequate surface drainage and is rutting	Not consistent with cannabis order requirements	Figures 39 - 40
WQ17	Pond 2	Cracks, stability questions, permits to construct, permits to store and use?	Not consistent with cannabis order requirements	Figures 41-45
WQ18	Road from CA D and CA G	Road lacks adequate surface drainage and is rutting	Not consistent with cannabis order requirements	Figure 46
WQ 19	Bladders between CA G and CA F	Lack adequate containment	Not consistent with cannabis order requirements	

A comparison of conditions observed on the site with categories of activities typically associated with water quality concerns at cannabis cultivation sites:

1. Site maintenance, erosion control and drainage features: Road segments associated with WQ2, WQ3, WQ7, WQ10, WQ11, WQ16, and WQ18 are not adequately drained and pose a threat of sediment delivery to watercourses.

2. Stream crossing maintenance and improvement: The WRPP identifies needed upgrades to stream crossings that are scheduled for 2020 and still need permitting and implementation.

3. Stream and wetland buffers: Cultivation and associated activities and infrastructure are located within setbacks to surface waters at WQ4, WQ6, WQ7, and WQ8. WQ4 and WQ8 appear to be within wetland setbacks and may require removal and restoration of the graded features.

4. Spoils management: I did not note earthen material spoils placed or stored in a manner that pose a threat to water quality.

5. Water storage and use: The water sources appear to be two wells. Storage is in earthen ponds, plastic water tanks, and bladders. Pond 2 appears to warrant a geotechnical evaluation. The bladders lack required containment.

6. Irrigation runoff: The seep at WQ9 enters the cultivation area and can transport pollutants from the cultivation area into a wetland.

7. Fertilizers and soil amendments: I observed blue crystal fertilizer on the ground on the berm of Pond 2 at WQ16, stored within a watercourse setback at WQ11, and accumulated on a feed tank next to a class III watercourse at WQ6.

8. Pesticides: I did not observe pesticides.

9. Petroleum products and other chemicals: Petroleum products are used and stored in a manner and location that could lead to drips and spills, and stormwater could carry residual to the watercourse below WQ11.

10. Cultivation-related wastes: I observed compost piles of stacks and root balls located near the petroleum and Pond 1 at WQ15; the piles lacked containment or covering.

11. Refuse and human waste: I observed numerous porto-potties and service is now precluded with lack of bridge access.

Statewide Cannabis Order

The Property is enrolled in the Statewide General Order for cannabis cultivation activities, as a Tier 2 Low Risk site, meaning that the total disturbed area is more than one acre, that no portion of the disturbed area is located on slopes of more than 30%, and that all of the disturbed area complies with the riparian setback requirements. However, as mentioned above, I observed disturbed areas at WQ4, WQ6, WQ7 within a riparian setback. Consequently, the Property does not qualify to be a Low Risk site and must be enrolled as a Tier 2 High Risk site.

As part of the Tier 2 High Risk requirements the enrollee is required to submit technical reports, including a Site Management Plan, a Nitrogen Management Plan, and a Disturbed Area Stabilization Plan. Staff presently have the Water Resource Protection Plan (WRPP) prepared pursuant to the regional cannabis order, addressing many of the plan requirements of the statewide cannabis order, but the WRPP must be revised and updated to fully comply with the technical report requirements of the statewide cannabis order.

As discussed above I observed a number of features that were causing or resulting in discharges or threatened discharges of waste to receiving waters. These features were also not consistent with the requirements of the statewide order, failing to meet statewide order requirements for 1) Land Development and Maintenance, Erosion Control, and Drainage Features items 10, 17, 20, 22, 24, 25, 26, 28, and 29; 2) Cleanup, Restoration, and Mitigation item 35; 3) Stream Crossing Installation and Maintenance items 39, and 51; 4) Soil Disposal and Spoils Management item 62; Water Storage and Use items 89 and 94; 5) Fertilizers, Pesticides and Petroleum Products items 104 and 106; and 6) Winterization items 125, 126, 129, and 132.

Additionally, pursuant to the WRPP, stream crossing upgrades are scheduled for treatment in 2020. Failure to implement these corrective actions will result in additional water quality threats and compliance issues under the statewide cannabis order.

Recommendations:

1. Immediately winterize roads and other developed or disturbed features throughout the site. Provide an access plan for site maintenance and monitoring.

2. WQ0, WQ7: Immediately implement actions to shape, drain, and surface road segments to hydrologically disconnect and prevent and minimize construction-related controllable sediment delivery to watercourses.

3. WQ4, WQ6, WQ7, WQ8: Immediately remove materials associated with cultivation and related activities from locations that are within the riparian and wetland protection setbacks specified in the statewide cannabis order.

4. Immediately remove all fertilizers from setbacks, including feed tanks, empty containers, and storage of fertilizer, including in sheds.

5. Immediately store and contain all chemicals, including petroleum, fertilizer and/or pesticides properly to prevent spillage and discharge to receiving waters. Provide adequate secondary containment for all petroleum products.

6. Follow the WRPP and implement measures to ensure that all developed features, roads, watercourse crossings, ponds, and cultivation areas throughout the Property, including at WQ0, WQ1, WQ2, WQ3, WQ4, WQ5, WQ7, WQ8, WQ9, WQ10, WQ11, WQ15, WQ 16, WQ17, WQ18, and WQ19 are corrected, restored, and/or maintained in conditions that prevent or minimize erosion, sediment transport/delivery, and adverse impacts to water quality and beneficial uses. Include measures to ensure that unstable features caused or affected by onsite development and operations are removed or otherwise protected so as to minimize the potential for these features to cause adverse impacts to water quality and beneficial uses. Dispose of all development and restoration-related earthen spoils in a manner to prevent/minimize transport and delivery to receiving waters.

7. Update the WRPP in fulfillment of the State Cannabis Order requirements.

8. WQ1: Provide an access plan for cultivation activities. Without an access plan, the cultivation activities may not be feasible. If access is seasonal, then the site plans and activities need to plan for that while ensuring that water quality is protected.

9. WQ2: Include in WRPP with an estimate on timing of bank erosion delivery. Propose feasible treatment to protect against future delivery.

10. WQ3: Perform maintenance on the culvert, including cleaning the inlet and placing rock at the outlet.

11. WQ4, WQ8: Wetland delineation and restoration:

    a. Engage an appropriately licensed, qualified professional to conduct a forensic wetland delineation, following applicable U.S. Army Corps of Engineers procedures and protocols, at WQ4 and WQ8.
    b. Engage an appropriately qualified professional with relevant experience in wetland restoration to prepare and submit a wetland restoration plan for WQ4 and WQ8 which includes but is not limited to, a project description, goal of restoration, implementation plan and schedule, plan for monitoring and site maintenance following restoration, and contingency measures addressing the diversity index of wetland/ non-wetland native plant species occurring on the Property. The plan should include proposed mitigation to address the temporal and permanent losses of wetland value and function. The plan should include specifications for debris removal and disposal.
    c. Include any additional areas potentially impacted by cultivation and related activities on the property.

12. WQ5, WQ19: Provide a water plan for the Property in conformance with the statewide cannabis order, including plans for addressing containment of bladders, stability of ponds, well water, and storage.

13. Work with CDFW and the State Water Resources Control Board's Division of Water Rights (DIV) to determine and secure any applicable permits or licensing required for surface water diversion, storage, and use on the site.

14. Prior to conducting any instream work, submit to the Regional Water Board an application for Clean Water Act section 401 water quality certification, and secure approval from the Regional Water Board. The 401 Application may be found at the following hyperlink: https://www.waterboards.ca.gov/northcoast/water_issues/programs/wqc_docs/031616_401-Application.pdf

15. In the event that the property owner and/or tenant(s) propose in the future to develop or use the Property in a manner or method that will or may result in a discharge of waste to waters of the state in the future, staff recommend that the owner(s)/tenant(s) be aware of and comply with relevant regulatory requirements for water quality protection. For example, Water Code section 13260 requires that a person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system shall file with the appropriate regional board a report of the discharge. Further, Water Code section 13264 states, in part: "No person shall initiate any new discharge of waste or make any material changes in any discharge…prior to the filing of the report required by Section 13260." In addition, projects involving the disturbance of an acre or more of land are subject to regulation under the State Water Board's Construction General Stormwater permit, and projects involving dredge or fill in waters of the United States are subject to regulation under Clean Water Act section 401. You may find further information about Water Board permits that may apply to proposed site development or land use activities at this hyperlink: https://www.waterboards.ca.gov/northcoast/water_issues/programs/permit/

Enforcement Discretion:

The observations in this report will be assessed for violations of the California Water Code. The Regional Water Board and the State Water Board reserve the rights to take any enforcement action authorized by law.

PHOTO APPENDIX

Figure 4. WQ0, access road approach to bridge with high potential for sediment delivery to Dobbyn Creek.

Figure 5. WQ1 (bridge) and WQ2 (bank erosion) at Dobbyn Creek.

Figure 6. WQ1. Bridge deck at level with floodplain.

Figure 7. WQ2 bank erosion, looking upstream. Note culvert just upstream of void.

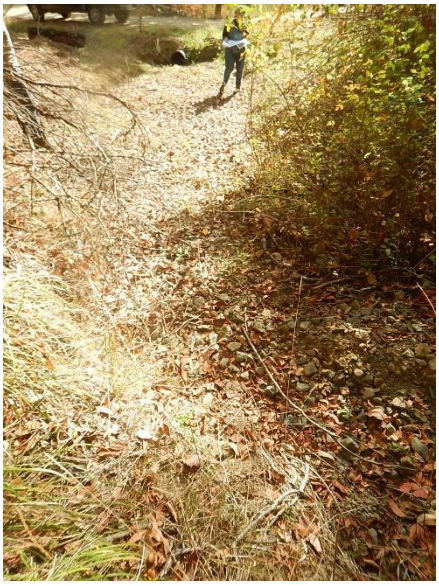

Figure 8. WQ3 inlet of crossing 7. Note minimal fill and channel width.

Figure 9. WQ3 outlet of Crossing 7.

Figure 10. WQ4 and WQ5. Bladders and cultivation at CA A.

Figure 11. Cultivation at CA A.

Figure 12. WQ 5. Bladders at CA A.

Figure 13. WQ5. Bladders at CA A without containment. Fill was convered in straw.

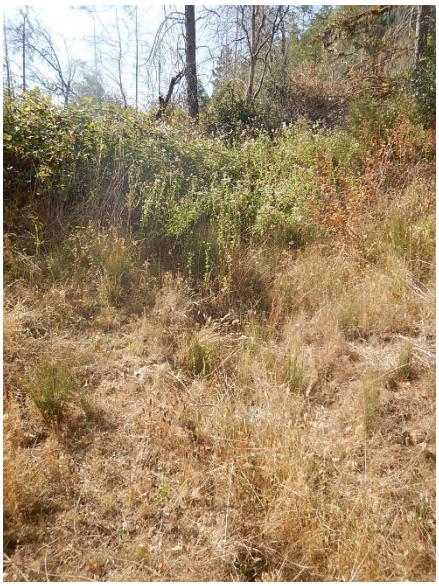

Figure 14. WQ 4. Watercourse upstream of CA A and a defined bed and banks.

Figure 15. WQ6. Gullied watercourse below Site 10.

Figure 16. WQ6. Feed tank located next to gullied watercourse, with blue crystal fertilizer accumulation on top and associated algae bloom.

Figure 17. WQ7. Cultivation related infrastructure in setbacks at CA B.

Figure 18. WQ7. Cultivation-related infrastructure in watercourse setbacks at CA B.

Figure 19. CA B.

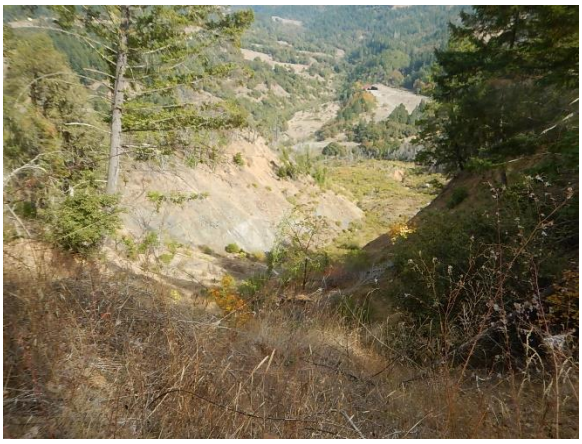

Figure 20. Looking down a portion of the large lanslide scar toward Dobbyn Creek.

Figure 21. CA E.

Figure 22. WQ9. Cutbank at CA C

Figure 23. CA C with flow path from seep at WQ9 along hoop house to fill slope and wetland.

Figure 25. WQ11. Developed surfaces at CA D are hydrologically-connected to the watercourse

Figure 24. WQ8. Potential wetlands below CA C

Figure 26. WQ12. Greywater pipe into ditch

Figure 27. WQ12. Greywater entering ditch relief culvert

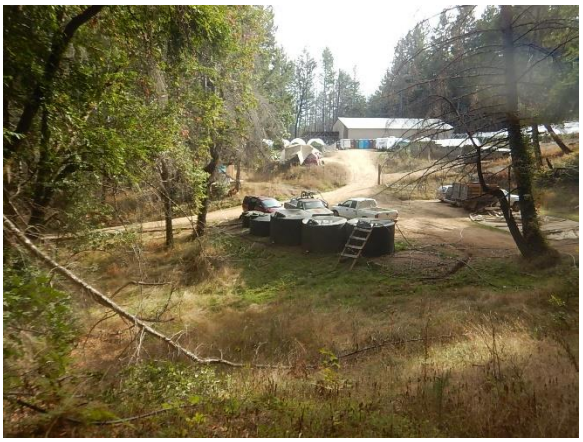

Figure WQ11. 28

Figure 29. WQ11. Feed tank with fertilizer residual on tank.

Figure 30. WQ11. Fertilizer stored in watercourse setback.

Figure 31. WQ14. Processing facility and porto-potties at CA D

Figure 32. WQ13. Fuels at CA D and Processing facility.

Figure 33. WQ13.

Figure 34. WQ13.

Figure 35. WQ13. Interim BMPS.

Figure 36. Pile of stalks near building.

Figure 37. WQ15. Ditch near house leading to Pond 1

Figure 38. WQ15. Pond 1.

Figure 39. WQ15. Pond 1 outflow pipe inlet

Figure 40. WQ15. Pond 1 outflow pipe outlet.

Figure 41. CA D bladders, hoop houses, and building.

Figure 42. WQ16. Rutted road between Pond 1 and Pond 2.

Figure 43. WQ17. Blue crystal fertilizer on Pond 2 berm, looking upslope from embankment. Pond 2 has quite a bit of water in it.

Figure 44. WQ17. Pond 2 looking downstream at embankment and overflow pipe.

Figure 45. WQ17. Tanks are located on Pond 2 berm.

Figure 46. WQ17. Cracks in berm of Pond 2.

Figure 47. WQ17. Different cracks in Pond 2 berm.

Figure 48. WQ18. Road between CA D and CA G is rutted

Figure 49. CA G

Figure 50. WQ19. Bladders between CA G and CA F.

Figure 51. WQ18. Road between bladders and CA F is rutted.

Figure 52. Road from CA F is rutted

Figure 53. CA F.