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## North Coast Regional Water Quality Control Board

May 2, 2019

Juliet Hegdal and Boden Hegdal  
PO Box 1544  
Redway, CA 95560

Certified Mail 7016 2710 0000 2635 6222

Dear Ms. Hegdal and Mr. Hegdal:

Subject: Notice of Violation and Transmittal of Inspection Reports for Humboldt County  
APN 220-261-005-000

File: Juliet Hegdal, Cannabis Waste Discharge Regulatory Program,  
CIWQS Place ID No. 856276

This letter is to notify you of observed violations of the requirements listed below for unauthorized discharges to waters of the state and the United States from Humboldt County APN 220-261-005-000 (the Property).

1. Water Quality Control Plan for the North Coast Region (Basin Plan) section 4.2.1, and
2. The California Water Code (Water Code) section 13260

**As directed below, please contact Regional Water Board staff within 30 days of the date of this letter to address and correct the observed violations.**

As discussed below, within 30 days, you must either enroll for coverage under the state cannabis waste discharge regulatory order (Order WQ 2019-0001-DWQ), General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Statewide General Order), or demonstrate that coverage is not needed because cannabis cultivation operations are no longer occurring and/or because the operations that are occurring are not subject to requirements of the Statewide General Order. A link to the Statewide General Order, including program information and resources is provided here:

[https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2019/wqo2019\\_0001\\_dwq.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2019/wqo2019_0001_dwq.pdf)

### I. Background

On December 7, 2018, and February 18, 21, and 28, 2019, staff from the North Coast Regional Water Quality Control Board (Regional Water Board) and the State Water Resources Control Board (State Water Board) Division of Water Rights (Water Rights),

accompanied by staff of the California Department of Fish and Wildlife (CDFW), inspected the Property. Staff from the State Water Board Division of Water Quality also attended the December 2018 inspection. The purpose of the inspections was to evaluate onsite development and conditions associated with cannabis cultivation and associated activities and, for Regional Water Board staff to identify and assess any impacts or threatened impacts to the quality and beneficial uses of waters of the state.

## **II. Relevant Requirements**

Based upon observations made during the inspection, Regional Water Board staff identified several features and conditions on the Property that represent violations of water quality requirements and regulations. References to these requirements and regulations are included in Attachment A – Regulatory Citations.

## **III. Observed Violations**

As documented in the enclosed December 2018 Inspection Report and February 2019 Inspections Report (Attachment B and Attachment C, respectively), Regional Water Board staff observed violations of the Basin Plan section 4.2.1 Prohibitions 1 and 2, and Water Code section 13260. Staff observed these violations at Property locations identified in the December 2018 Inspection Report and February 2019 Inspections Report as POND, OUT, C1, C2, C3, C4, RP1, RP3, and RP3, and at several points throughout the Property where cultivation related waste and refuse were not properly stored or contained. Staff observed cannabis cultivation areas of sufficient scope that subjects it to coverage and enrollment under the Statewide General Order. To date, we have no record of enrollment of the site under either the Statewide General Order or Regional Water Board Order No. R1-2015-0023, *Waiver of Waste Discharge Requirements for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region*.

## **IV. Directive to Enroll for Regulatory Coverage**

Water Code section 13260 states, in relevant part: “All of the following persons shall file with the appropriate regional board a report of the discharge, containing the information which may be required by the regional board:

- 1) Any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.”

Accordingly, based on the observations detailed in the attached inspection reports, the Regional Water Board has determined that you must take one of the following actions within 30 calendar days of receiving this letter:

- 1) Obtain regulatory coverage under the Statewide General Order;
- 2) File a Report of Waste Discharge in order to obtain individual Waste Discharge Requirements (WDRs) specific to your Property; or
- 3) Provide information demonstrating that regulatory coverage is not needed for the Property.

To enroll the Property under the Statewide General Order and provide the information required in the online application process. The application and associated information can be accessed at:

[https://www.waterboards.ca.gov/water\\_issues/programs/cannabis/cannabis\\_water\\_quality.html](https://www.waterboards.ca.gov/water_issues/programs/cannabis/cannabis_water_quality.html)

## **V. Potential Liabilities**

These observed violations create potential liability enforceable by the Regional Water Board. Discharges or threatened discharges of waste, including earthen material, into waters of the state that create a condition of nuisance or pollution may subject a person to a Cleanup and Abatement Order pursuant to Water Code section 13304. An actual discharge to waters of the state, including waste discharges in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued by a regional board may subject a person to an administrative liability up to \$5,000 per day of violation for each violation, or \$10 for each gallon of waste discharged pursuant to Water Code section 13350. Failure to submit a report of waste discharge when directed by the Regional Water Board may result in the Regional Water Board assessing administrative civil liability against you pursuant to Water Code section 13261. If you fail to take one of the actions to comply with Water Code section 13260, as described above, the Regional Water Board may refer this matter for formal enforcement, and you may be subject to penalties of up to \$1,000 per day for each day after June 1, 2019, as required by this letter.

Regional Water Board staff is in the process of assessing these violations and retains its full authority and discretion to bring formal enforcement for all violations.

You may contact me with any questions at [Mona.Dougherty@waterboards.ca.gov](mailto:Mona.Dougherty@waterboards.ca.gov) or (707) 570-3761. Additionally, we are available to meet with you if you wish to discuss this letter or our waste discharge regulatory program in further detail.

Sincerely,

Mona Dougherty P.E.  
Northern Cannabis Regulatory Unit

Attachments: 1) Attachment A – Regulatory Citations  
2) Attachment B – December 2018 Inspection Report  
3) Attachment C – February 2019 Inspections Report

Certified Mail – Return Receipt requested

**cc: Department of Fish and Wildlife**

Kalyn Bocast, [Kalyn.Bocast@wildlife.ca.gov](mailto:Kalyn.Bocast@wildlife.ca.gov)

Scott Bauer, [Scott.Bauer@wildlife.ca.gov](mailto:Scott.Bauer@wildlife.ca.gov)

**North Coast Regional Water Quality Control Board**

Kason Grady, [Kason.Grady@waterboards.ca.gov](mailto:Kason.Grady@waterboards.ca.gov)

Claudia Villacorta, [Claudia.Villacorta@waterboards.ca.gov](mailto:Claudia.Villacorta@waterboards.ca.gov)

Shannon Utley, [Shannon.Utley@waterboards.ca.gov](mailto:Shannon.Utley@waterboards.ca.gov)

**Division of Water Rights**

Taro Murano, [Taro.Murano@waterboards.ca.gov](mailto:Taro.Murano@waterboards.ca.gov)

Renee Avila, [Renee.Avila@waterboards.ca.gov](mailto:Renee.Avila@waterboards.ca.gov)

Mr. David Rosas, [David.Rosas@waterboards.ca.gov](mailto:David.Rosas@waterboards.ca.gov)

**Humboldt County Planning and Building Department**

Cliff Johnson, [cjohnson@co.humboldt.ca.us](mailto:cjohnson@co.humboldt.ca.us)

# Attachment A

## Regulatory Citations

Regulatory Section	Citation
Basin Plan Section 4.2.1, Prohibition 1	Prohibits “[t]he discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.
Basin Plan Section 4.2.1, Prohibition 2	Prohibits “[t]he placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses.”
California Water Code Section 13260	<p>“(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:</p> <p>(1) 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.</p> <p>(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.”</p>

# Attachment B

## December 2018 Inspection Report

North Coast Regional Water Quality Control Board

**Juliet Hegdal Property**  
**CIWQS Place ID No. 856276, Inspection ID No. 35427373**  
**Inspection Date December 7, 2018**

**Humboldt County Assessor's Parcel Number:**

220-261-005-000 owned by current landowner since 1985

**Site and Landowner Information**

**Landowner:** Juliet Hegdal

**Physical Site Address:**

4111 Briceland Thorne Road Redway, CA 95589

**Mailing Address:**

PO Box 1544 Redway, CA 95560

**Inspection Attendance**

**Onsite Representatives:**

Juliet Hegdal, Landowner  
Boden Hegdal, Operator

**Agency Staff:**

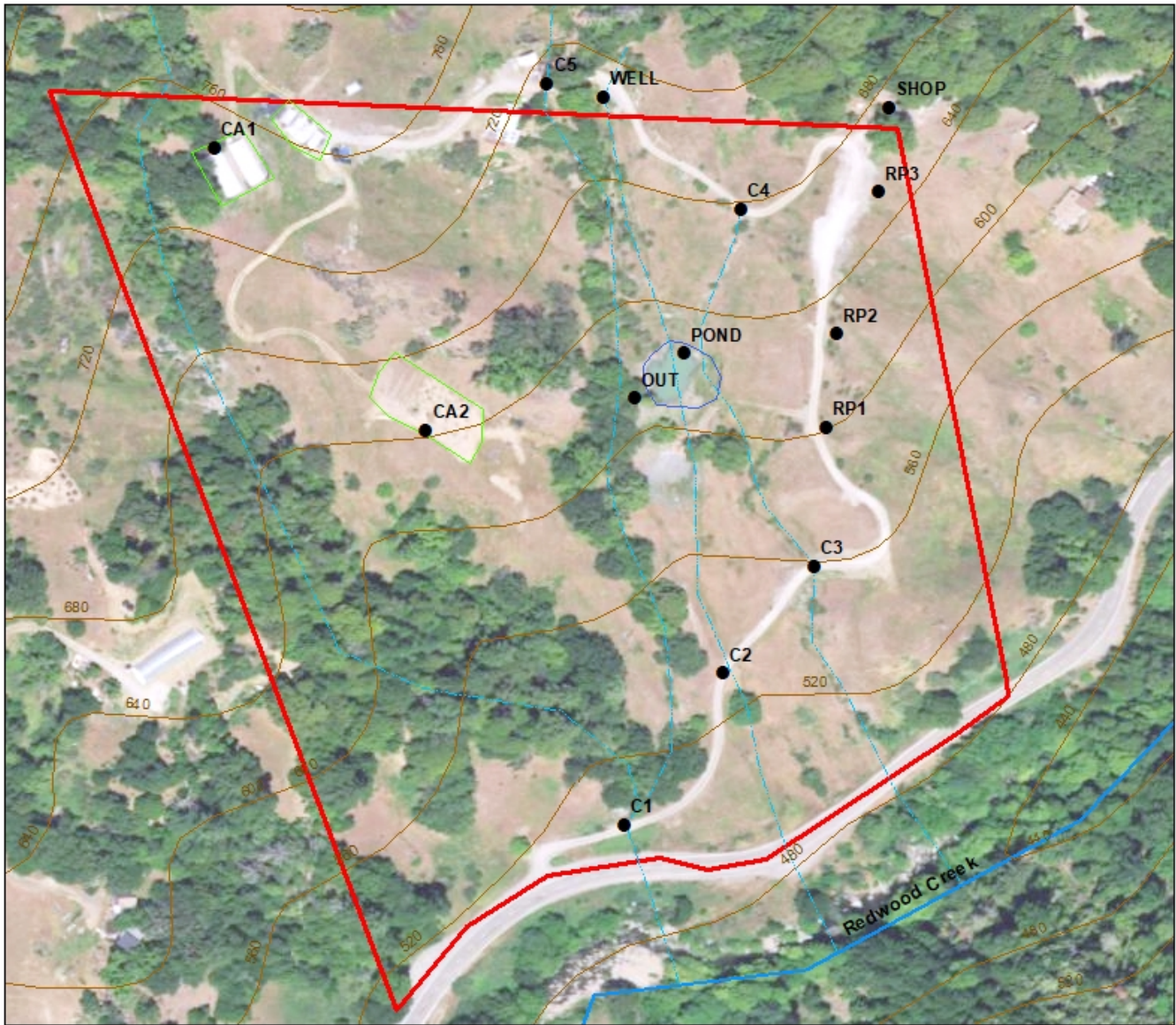
Shannon Utley, Engineering Geologist, North Coast Regional Water Quality Control Board (Regional Water Board)  
Bryan Moore, Water Resource Control Engineer, Division of Water Quality (DWQ) State Water Resource Control Board (State Water Board)  
Sean Stout, Engineering Geologist, DWQ, State Water Board  
Renee Avila, Environmental Scientist, Division of Water Rights (DWR), State Water Board  
David Rosas, Environmental Scientist, DWR, State Water Board  
Kalyn Bocast, Environmental Scientist, California Department of Fish and Wildlife (CDFW)

**Inspection Type**






Consent Inspection

Consent Provided by Juliet Hegdal (landowner) and Boden Hegdal (operator) on site at the time of the inspection.

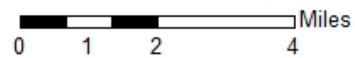
# Site Map



Juliet Hegdal Property  
 Humboldt County  
 APN 220-261-005-000

-  Pond
-  Cultivation Area
-  Property Boundary
-  Watercourse
-  Topographic Countours (ft)

Note: The base layer in this map is USDA 2016 NAIP Imagery



Note: Watercourses located on the Property were mapped by Water Board staff after the inspection.

## Inspection Report Information

**Report Prepared By:** Shannon Utley, Engineering Geologist, Regional Water Board with assistance from Bryan Moore, Water Resource Control Engineer, DWQ, State Water Board

**Report Reviewed By:** Mona Dougherty, Senior Water Resource Control Engineer, Regional Water Board

**Photographs Taken:** Photographs taken by Shannon Utley unless noted otherwise

**California Integrated Water Quality System (CIWQS) Inspection ID:** 35427373

## Permit Requirements

### California Department of Food and Agriculture

- Licensed
- Unlicensed

### State Water Board Cannabis General Order (Order 2017-0023 DWQ)

[https://www.waterboards.ca.gov/water\\_issues/programs/cannabis/docs/finaladoptedcango101717.pdf](https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/finaladoptedcango101717.pdf)

- Unregulated (not enrolled)
- Enrollment Required (if cultivation will continue)
- Enrolled in State Board Cannabis Program

### Regional Water Board Order No. R1-2015-0023

[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/cannabis/# Waiver of Waste](https://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/# Waiver of Waste)

- Unregulated (not enrolled)
- Enrolled in Regional Board Cannabis Program

### Clean Water Act section 401 Certification

[https://www.waterboards.ca.gov/water\\_issues/programs/cwa401/](https://www.waterboards.ca.gov/water_issues/programs/cwa401/)

Required?  Yes  No  
Applied?  Yes  No  
Issued?  Yes  No

Notes: Required prior to performing any instream work.

## Inspected Property Background

**Historic Imagery reviewed:** Google Earth imagery dated: September 10, 1998; June 11, 2005; May 3, 2006; July 14, 2006; May 24, 2009; April 24, 2010; August 23, 2012; and May 28, 2014. NAIP imagery dated 2005, 2009, 2010, 2012, 2014, and 2016. Humboldt County Web GIS Planet imagery (Humboldt GIS Imagery) dated May 2018, June 2018, July 2018, August 2018, September 2018, October 2018, and November 2018. United States Department of Agriculture, Soil Conservation Service, 1965 black and white photographs, frames CVL 21FF-138 and 139, nominal scale 1:20,000, dated August 31, 1965.

**Historic Site Development:** Available Google Earth imagery shows that the pond on the Property (labeled POND on the Site Map) was constructed between August 23, 2012, and May 28, 2014, and expanded between 2014 and 2016. Between 2014 and 2016, the current pond berm was constructed. The 2012 Google Earth and 2012 National Agriculture Imagery Program (NAIP) imagery do not show the presence of the pond, however the 2014 Google Earth and 2014 NAIP imagery both show the

presence of the pond filled with water. Cultivation area CA3 first appears in the 2012 Google Earth and 2012 NAIP imagery as a row of four greenhouses. Cultivation areas CA1 and CA2 are first visible in the 2016 NAIP imagery with the grading for CA2 appearing to be recently performed. The 2018 imagery available from the Humboldt County Web GIS portal shows cultivation occurred at all three cultivation areas, CA1, CA2, and CA3.

## Watershed Information

### **Redwood Creek**

Eel River Hydrologic Unit, South Fork Eel Hydrologic Area, Benbow Hydrologic Sub Area

Hydrologic Unit Code (HUC-12): 180101060402 (CDFW Biographic Information and Observation System (BIOS) Viewer)

California Interagency Watershed (CalWater, version 2.2): 1111.320802 (CDFW BIOS Viewer)

Federal Clean Water Act Section 303(d) listings of impaired water bodies for the North Coast Region:  
[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/tmdls/303d/pdf/150710/02\\_FinalNorthCoastRegion\\_2012\\_303dList.pdf](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/303d/pdf/150710/02_FinalNorthCoastRegion_2012_303dList.pdf)

Total Maximum Daily Loads applicable to the North Coast Region:

[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/tmdls/index.htmlst](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/index.htmlst)

## Inspection Observations

On December 7, 2018, staff from the Regional Water Board and DWQ (collectively Water Quality Staff) inspected Humboldt County APN 220-261-005-000 (the Property) with staff of DWR and CDFW (all staff collectively referred to as Agency Staff). The purpose of this inspection for Water Quality Staff was to assess potential threats to water quality on the Property including from activities associated with cannabis cultivation. The Division of Water Rights and CDFW may produce separate inspection reports addressing Property issues within their respective jurisdictions.

Following the inspection, Water Quality Staff performed a detailed review of the available historic Google Earth, NAIP imagery, Humboldt GIS Imagery, and historic black and white aerial photographs. A description of observed areas of interest is included in greater detail below. The Site Map included in this report shows the Property boundaries and identifies the areas inspected. Some features on the Site Map are shown as outside of the Property, however Mr. Hegdal explained that these features are located on the Property and Agency Staff verified the location of these features in the field using Garmin GPS devices. The source of the property boundary data (Humboldt County GIS records) often contains some extent of inaccuracies and is the reason some features appear outside the property boundary.

During the inspection, Ms. Utley observed two cultivation areas that had been used to cultivate cannabis. At the time of the inspection, cannabis cultivation was not occurring, and infrastructure associated with greenhouses had already been removed. Cultivation CA1 included a graded flat of approximately 4,000 square feet that was 50 feet from a Class II watercourse (as defined in the California Forest Practice Rules) and had a layer of potting soil containing perlite covering the area (Photos 1 through 3).

Based on available imagery, the graded flat where CA1 was located was constructed between 2014 and 2016. During the inspection, Agency Staff observed fill from grading activities that had been placed on the hillside adjacent to the western Class II watercourse that flows to Redwood Creek. On the way to cultivation area CA2, Ms. Uteley observed cultivation related waste in the form of old cannabis stalks placed on the hillslope 100 feet above the western Class II watercourse. At this location, any residual chemicals on the plants could be transported to surface water or could leach into groundwater (Photo 4). Cultivation area CA2 was an area approximately 10,000 square feet consisting of four terraces with approximately 4-foot wide holes for each of the plants (Photo 5 and 6). Runoff from CA2 appears to have discharged downhill in a rill formed along a foot path to the Class II watercourse near the base of CA2. Ms. Uteley observed, a third cultivation area, CA3, during review of available imagery. According to the Humboldt GIS Imagery, CA3 had contained four small greenhouses prior to the inspection. Ms. Uteley observed the footprint of CA3 during the inspection as a graded flat area approximately 1,000 square feet in size adjacent to the access road to CA1 and CA2 (Photo 7). Mr. Hegdal did not point out CA3 as a cultivation area to Agency Staff during the inspection following Agency Staff's request to be shown the cultivation areas, points of diversions, and pond.

During the inspection, Agency Staff observed an unstable landslide feature where an onstream pond (approximately 5,000 square feet) had been constructed on two Class III watercourses and adjacent to probable wetland features (POND on the Site Map) (Photos 8 through 18). The area above and below the pond consisted of hummocky terrane and slide scarps, including ponding of water and wetland vegetation within a slide scarp directly uphill of the pond, indicative of earthflow morphology. Agency Staff reviewed the available imagery following the inspection and observed the preferential growth of darker colored vegetation during summer months, which indicates the pond was developed in a potential wetland area. This observation is consistent with Ms. Hegdal's explanation for constructing the pond in that location. During the inspection, Agency Staff asked Ms. Hegdal and Mr. Hegdal why they constructed the pond in that location, and she said they chose that location because it stayed wetter longer than other places on the Property. Mr. Hegdal recalled that he had constructed the pond using a backhoe to excavate the pond and construct the pond berm 4-6 years ago; that timeline is consistent with the available imagery showing that pond excavation began between 2012 and 2014 and then expanded between 2014 and 2016 when the berm was constructed. Staff observed that the pond contained a 14-inch diameter plastic corrugated pipe acting as overflow (OUT on the Site Map) from the pond to an adjacent Class II watercourse where Mr. Hegdal installed the pipe through the streambank with the unarmored outlet located approximately three feet above the stream grade of the Class II watercourse. The earthen pond berm showed evidence of erosion, slope movement and instability on the interior in the form of crescent shaped extensional cracking. Water Quality Staff observed lateral cracks with offset slumping on the top and exterior face of the berm. One crack began near the middle of the top of the berm, continued down the exterior face, and extended through the road at the toe of the berm. DWQ staff measured the maximum vertical offset of this crack as 10 inches on the western side of the berm (Photos 15 and 16).

The Property is scattered with earthflow scarps and hummocky topography. The main road accesses the Property from Briceland Road and traverses the slope to a residence located at the top of the Property; it has steep segments, switchbacks, and long inside ditches without adequate drainage to hydrologically disconnect the road system from the stream network. The roads on the Property are located on multiple unstable earthflow features. The roads are poorly drained and contain rills and ruts and were constructed and graded with near vertical road cuts, which were actively slumping. Sections of the road appeared to be either partially constructed on unconsolidated fill or have had fill material pushed over the side of the roadway leading to additional sediment erosion and discharge (Photos 19 through 24). Three locations along the road to the residence showed signs of potential and active failure. Road point RP1 is located adjacent to the access road to the pond and showed signs of instability during the inspection in the form of surface cracking (Photo 20). Road point RP2 is located uphill from RP1 and consisted of a section of road that had slumped approximately four feet from

apparent land sliding (Photo 25). Road point RP3 is located next to the Property's storage area and showed signs of instability during the inspection in the form of crescent shaped lateral cracking (Photo 26).

During the inspection Agency Staff observed five stream crossings of varying sizes and conditions. Stream crossing C1 is located at the southern end of the Property and crosses beneath the Briceland Thorne Road, which is a County maintained road (Photo 27). C1 consists of a 48-inch corrugated metal culvert not aligned at the grade of the confluence of two Class II watercourses on the Property, which then flows through the culvert, under the County road to the culvert outlet which has an approximate 4-foot vertical drop without any energy dissipation and poses an erosional threat to Redwood Creek, a Class I tributary to the South Fork Eel River. Stream crossing C2 is located on a Class III watercourse whose original channel was blocked by the pond. C2 consists of a nonfunctioning crushed and partially buried 12-inch corrugated metal culvert with an open corrugated metal downspout. Stream crossing C3 is located up the road from C2 on a different Class III watercourse whose original channel was blocked by the pond (Photo 28). C3 consists of a rusted 24-inch corrugated metal culvert which has approximately six tires placed in the channel below the culvert outlet. Stream crossing C4 is located at the headwaters of a Class III watercourse, based on Ms. Utley's review of the 1965 aerial imagery showing a channel prior to road development; this crossing is above the pond and now contributes road runoff to the pre-existing Class III watercourse whose natural channel should connect to crossing C3 and Redwood Creek, but is now intercepted by the pond (Photo 29). The crossing consists of a rusted 8-inch corrugated metal culvert that is partially crushed and filled with sediment and had at least four tires placed below the outlet that leads down to the pond. Stream crossing C5 is located next to the Property's residence on the upper extent of the Class II watercourse that flows adjacent to the pond and consists of a rusted 24-inch culvert (Photo 30).

At various locations throughout the Property Water Quality Staff observed containers of soil amendments and chemicals that were not stored appropriately or with secondary containment (Photo 31 and 32). At the shop area (SHOP on the Site Map) Water Quality Staff observed petroleum products without appropriate secondary containment or storage (Photo 33). Beneath the bulldozer parked at the SHOP there was a piece of cardboard placed to catch actively leaking fluid; the cardboard showed evidence of the fluid flowing off the cardboard and onto the ground surface (Photos 34 through 36).

## Water Quality Assessment

**Site Maintenance, Erosion Control and Drainage Features:** Activities at the Property associated with site maintenance, erosion control, and drainage features were not protective of water quality. Roads on the Property showed signs of erosion in the form of rills and ruts and were drained by inside ditches and hydrologically connected to the stream network. The main road had failed in multiple areas through slumping of vertical cut slopes and sliding and cracking of fill that had been placed adjacent to and below the road.

**Stream Crossing Maintenance:** Stream crossings on the Property were not properly maintained and pose threats to water quality. The stream crossings on the Property were generally not functioning because they were filled with sediment, crushed, or they had tires placed in the stream channel below the crossings.

**Riparian and Wetland Protection and Management:** Activities occurring at the Property are not protective of riparian or wetland areas. Cultivation area CA1 is located within 50 feet of a Class II watercourse and cultivation related wastes and materials were placed where they could discharge to groundwater or surface waters. The Property's pond built on a probable wetland and two Class III

watercourses by Mr. Hegdal. Agency Staff found multiple tires in the stream channels below stream crossings C3 and C4. Fill from road construction had been placed in areas where it could be transported into surface waters.

**Spoils Management:** Agency Staff did not observe water quality issues associated with spoils management on the Property.

**Water Storage and Use:** Water storage practices at the Property were not protective of water quality. Water storage for the Property was in an unpermitted, unstable onstream reservoir with an earthen dam fed by channelized road runoff and two Class III watercourses, and approximately 6,900 gallons of water was stored in five plastic water storage tanks.

**Irrigation Runoff:** Irrigation runoff management was not protective of water quality. Irrigation runoff from cultivation areas CA1 and CA2 has the potential of being transported into surface waters and groundwater based on their locations adjacent to watercourses.

**Fertilizers and Soil Amendments:** Agency Staff observed storage of soil amendments was not protective of water quality. Potting soil containing perlite was located adjacent to a Class II watercourse where it could be transported to surface waters. Agency Staff observed chemical soil amendments stored outside and without secondary containment in areas where they could be transported to groundwater or surface water.

**Pesticides/Herbicides:** Agency Staff did not observe water quality issues associated with pesticides or herbicides on the Property. When asked by Ms. Utley about the use of pesticide and herbicides, Mr. Hegdal stated that he had used natural products such as neem oil.

**Petroleum Products and Other Chemicals:** Storage of petroleum products and other chemicals was not protective of water quality. Water Quality Staff observed petroleum fuel containers stored outside and without secondary containment. The bulldozer located on the Property had a fluid leak that was discharging to the ground surface and could be transported to groundwater or surface water.

**Cultivation Related Wastes:** Implementation of cultivation related waste management was not protective of water quality. Residual chemicals could be transported to surface waters or leach into groundwater from stalks of old cannabis plants placed within 100 feet of a surface water.

**Household Refuse and Human Waste:** Agency Staff did not observe water quality issues associated with household refuse or human waste on the Property.

## Recommendations

Water Quality Staff recommend that responsible parties hire qualified licensed professional geologists and engineers to prepare the necessary plans and permit applications to obtain authorization from all required agencies to stabilize, remove and restore the onstream reservoir to its original condition, restore any impacted wetlands and stream channels; stabilize, hydrologically disconnect, upgrade and maintain roads on the Property to prevent erosion and sediment discharges; and replace/upgrade failing and undersized stream crossings; removal of debris from the stream channels; and immediately repair leaking equipment and store petroleum products, soil amendments, and chemicals where they do not pose a threat to water quality. Formal recommendations and requirements are documented in full within the Cleanup and Abatement Order for the Property.

## Inspection Observation Photos



Photo 1: Cultivaiton area CA1 looking South, the adjacent Class II watercourse is to the right of the photo (DSCN4281)



Photo 2: Potting soil covering much of cultivation area CA1 (DSCN4282)



Photo 3: Fill pushed over the side of CA1 within 100 feet of a Class II watercourse (DSCN0127 photo taken by Bryan Moore)



Photo 4: Cultivaiton related waste placed within 100 feet of a Class II watercourse (DSCN0135 photo taken by Bryan Moore)



Photo 5: Cultivation area CA2 showing terraced slope (DSCN00142 photo taken by Bryan Moore)



Photo 6: Potting soil and debris uncontained at cultivation area CA2 (DSCN00144 photo taken by Bryan Moore)



Photo 7: Cultivation area CA3 (DSCN4276)



Photo 8: View looking down at the pond from stream crossing C4 (DSCN4359)



Photo 10: Pond outflow (OUT) into Class II watercourse (DSCN4315)



Photo 9: Class III watercourse below the pond (DSCN4329)



Photo 11: View of the two Class II watercourses (DSCN4302)



Photo 12: Pond and pond berm (DSCN0115 photo taken by Sean Stout)



Photo 13: Cracking on the interior of pond berm (DSCN4307)



Photo 14: Cracking in the top of pond berm on the eastern side of the pond (DSCN4328)



Photo 15: Cracking in road below pond berm adjacent to the Class II watercourse (DSCN4326)



Photo 16: Closer view of cracking below the pond berm adjacent to the road (DSCN4327)



Photo 17: Cracking in the exterior face of the pond berm on the eastern side of the pond (DSCN4335)



Photo 18: Exterior of pond berm with slumping (DSCN4330)



Photo 19: Ruts and rills in the road to CA2 (DSCN4289)



Photo 20: Main road with near vertical cuts and inside ditch adjacent to RP1 (DSCN4336)



Photo 21: Slump on the main road (DSCN0141 photo taken by Sean Stout)



Photo 22: Main road with fill pushed off road and cracking at RP3 (shown with blue arrow) (DSCN4355)



Photo 23: Fill from the road that had been sidecast into the pond's eastern Class III watercourse and adjacent to the well (DSCN4370)



Photo 24: Cracks in fill above the eastern Class III watercourse (DSCN4364)



Photo 25: Edge of road collapsing at road point RP2 (DSC4340 photo taken by Bryan Moore)



Photo 26: Cracking in fill at road point RP3 (DSCN0164 photo taken by Bryan Moore)



Photo 27: Stream crossing C1 at Briceland Thorne Road (DSCN4380)



Photo 28: Stream crossing C3 on eastern Class III watercourse below the pond (DSCN4379)



Photo 29: Tires discarded in channel below stream crossing C4 (DSCN0169 photo taken by Sean Stout)



Photo 30: Stream crossing C5 located next to residence (DSCN4372)



Photo 31: Container of soil amendment stored outside without appropriate containment (DSCN0159 photo taken by Sean Stout)



Photo 32: Chemical container stored without appropriate containment at the shop area (DSCN0145 photo taken by Sean Stout)



Photo 33: Petroleum containers stored outside without appropriate containment at the shop area (DSCN0160 photo taken by Sean Stout)



Photo 34: Bulldozer leaking fluids located at the shop area (DSCN0163 photo taken by Sean Stout)



Photo 35: Bulldozer leaking fluids at the shop area (DSCN0157 photo taken by Sean Stout)



Photo 36: Backhoe located at the shop area (DSCN0150 photo taken by Sean Stout)

# Attachment C

## February 2019 Inspection Report

North Coast Regional Water Quality Control Board

**Juliet Hegdal Property**  
**CIWQS Place ID No. 856276**  
**Inspection ID Nos. 35587583 and 35587584**  
**Inspection Dates February 18, 21, and 28, 2019**

**Humboldt County Assessor's Parcel Number:**

220-261-005-000 owned by current landowner since 1985

**Site and Landowner Information**

**Landowner:** Juliet Hegdal

**Physical Site Address:**

4111 Briceland Thorne Road Redway, CA 95589

**Mailing Address:**

PO Box 1544 Redway, CA 95560

**Inspection Attendance**

**Onsite Representatives**

Juliet Hegdal, Landowner  
 Ron Pelletier, Registered Professional Forester, Timberland Resource Consultants  
 Justin French, local contractor providing pump infrastructure

**Agency Staff**

Shannon Utley, Engineering Geologist, North Coast Regional Water Quality Control Board (Regional Water Board)  
 Adona White, Water Resources Control Engineer, Regional Water Board  
 Kalyn Bocast, Environmental Scientist, California Department of Fish and Wildlife (CDFW)  
 Kyle Shaw, Game Warden, CDFW

**Inspection Type**

Consent Inspection

Consent provided by Juliet Hegdal (landowner) and Ron Pelletier (consultant for the landowner) on site at the time of the inspections.

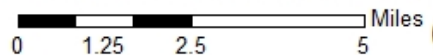
# Site Map



## Juliet Hegdal Property Humboldt County APN 220-261-005-000

- Point of Interest
- ▭ Pond
- ▭ Cultivation Area
- ▭ Property Boundary
- Watercourse
- Topographic Countours (ft)

The base layer in this map is USDA 2016 NAIP Imagery. Humboldt County property boundary data may be offset (data provided by Humboldt County GIS).



Note: Map includes points from December 2018 Inspection

## Inspection Report Information

**Report Prepared By:** Shannon Utley, Engineering Geologist, Regional Water Board with assistance from Adona White, Water Resource Control Engineer, Regional Water Board

**Report Reviewed By:** Mona Dougherty, Senior Water Resource Control Engineer, Regional Water Board

**Photographs Taken:** Photographs taken by Shannon Utley unless noted otherwise

**California Integrated Water Quality System (CIWQS) Inspection IDs:** 35587583 and 35587584

**Note:** Please refer to the December 2018 Inspection Report for the Permit Requirements and Inspected Property Background sections.

## Watershed Information

### **Redwood Creek**

Eel River Hydrologic Unit, South Fork Eel Hydrologic Area, Benbow Hydrologic Sub Area

Hydrologic Unit Code (HUC-12): 180101060402 (CDFW Biographic Information and Observation System (BIOS) Viewer)

California Interagency Watershed (CalWater, version 2.2): 1111.320802 (CDFW BIOS Viewer)

Federal Clean Water Act Section 303(d) listings of impaired water bodies for the North Coast Region  
[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/tmdls/303d/pdf/150710/02\\_FinalNorthCoastRegion\\_2012\\_303dList.pdf](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/303d/pdf/150710/02_FinalNorthCoastRegion_2012_303dList.pdf)

Total Maximum Daily Loads applicable to the North Coast Region:

[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/tmdls/index.htmlst](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/index.htmlst)

## Background

On December 7, 2018, Regional Water Board staff participated in an inspection (December 2018 Inspection) of Humboldt County APN 220-261-005-000 (the Property) (CIWQS Inspection ID 35427373), along with the State Water Board Division of Water Rights, Division of Water Quality, and the California Department of Fish and Wildlife (all staff collectively referred to as Agency Staff). The purpose of this inspection for Regional Water Board staff was to assess potential threats to water quality on the Property including from activities associated with cannabis cultivation. The Division of Water Rights and CDFW may produce separate inspection reports addressing Property issues within their respective jurisdictions.

In response to a Notice of Violation issued by CDFW on January 2, 2019, Timberland Resources Consultants (TRC) was hired by the landowner to develop a notification to CDFW of locations subject to a Lake and Streambed Alteration Agreement. On February 12, 2019, Regional Water Board staff received an email from CDFW staff that the landowner's consultants, TRC and SHN Consulting Engineers and Geologists (SHN), had serious concerns about the stability of the pond. On the same date, Gary Simpson, Certified Engineering Geologist for SHN, stated in a voicemail to Regional Water

Board staff, his concerns that the pond berm was unstable and could imminently fail if not addressed by pumping to lower the water level in the pond.

On February 14 and 15, 2019, Regional Water Board staff provided recommendations, both verbally and via email, that measures should be taken to avoid a more serious threat to water quality and that any discharge to surface waters must not cause scour, erosion, or bank instability downstream. Regional Water Board staff also communicated that water from the pond discharged to surface waters should be the cleanest possible and taken from the upper portion of the water column and any sludge be applied to land.

In response to the stability concerns raised by the consultants, beginning on February 16, 2019, the landowner, with help from a local contractor, Justin French, began pumping down the water level of the pond. Regional Water Board staff's understanding of the landowner's efforts to maintain a reduced level are described below.

### Inspection Observations

On February 18, 21, and 28, 2019 (February 2019 Inspections), Regional Water Board staff conducted focused inspections to assess the conditions of the Property's compromised pond and portions of the main road on the Property, and to meet with the landowner and consultants and discuss strategies to prevent and minimize impacts to water quality from the pond. On February 18, staff were accompanied by Justin French and Ron Pelletier; on February 21, by Juliet Hegdal, Ron Pelletier, Justin French, Kalyn Bocast and Kyle Shaw; and on February 28, 2019, by Mike and Juliet Hegdal.

Regional Water Board staff noted various changes in the site conditions relative to the December 2018 Inspection. During the February 2019 Inspections, staff observed a new crescent shaped crack within the top of the pond berm that extends the length of the berm. On February 28, the crack was approximately three inches wide and one inch deep along the top of the berm, with 6 inches of vertical displacement at the eastern toe of the berm and 22 inches of vertical displacement at the western toe of the berm. During the February 2019 Inspections, Regional Water Board staff observed that the interior of the pond had increased calving at the berm and where the two Class III watercourses (as defined in the California Forest Practice Rules) enter the pond; this calved material is contained within the pond and likely contributes to the suspended sediment concentration in the pond.

During the December 2018 Inspection, Regional Water Board identified three road points (RP1-RP3 on the Site Map) that showed signs of instability. RP1 is located on the main access road, adjacent to the access road to the Pond, observations during the February 2019 Inspections showed a 15-foot long section of the main road had slumped approximately two vertical feet (Photo 17 and 19). During the February 2019 Inspections, RP2 showed signs of recent erosion and vertical displacement (Photo 20) and at RP3, a 20-foot long section of the road had dropped approximately three vertical feet (Photo 21 and 22), and water from an inside ditch was flowing onto the slumping feature.

### Emergency Measures Implemented

Beginning on February 16, 2019, the landowner, with help from a local contractor, Justin French, began pumping down the water level of the Pond using two pumps each with a two-inch diameter hose equipped with a one-inch intake screen. Water pumped from the Pond was discharged to the adjacent Class II watercourse. Pumping from the Pond on February 16, 2019, maintained the water level during the active storm system which contributed approximately 1.5 inches (1.5") of rain in 24-hours or 4,600 gallons directly to the 5,000 square foot pond surface.

As the storm subsided between February 18 and 20, 2019, the pumping rate of approximately 35,000 gallon/hour resulted in a drop of the water surface level in the Pond of approximately one-foot per hour. The emergency pumping and discharge to surface waters facilitated a reduction in the water surface elevation in the Pond of approximately five feet, which reduced the immediate threat to Briceland Thorne Road. These emergency measures were effective to avoid catastrophic failure.

On February 21, the inspection team explored options to maintain the water level for the remainder of the winter until cleanup and restoration measures could be implemented, including land application and dispersal of pond water, prior to discharge to the Class II. Due to the concern over slope stability, few options appeared viable. Below the pond and toward the Class II, there is a bowl feature that has some rock and appears that it could accommodate discharge from a siphon. However, the discharge from pumps would likely cause erosion and without residence time, would likely be ineffective to remove the fine sediment from the pumped pond water, prior to discharge to the Class II.

On February 28, 2019, Ms. White met Ms. Hegdal's partner, Mike, at the pond, where he demonstrated the measures that he and Ms. Hegdal have been implementing to keep the pond drawn down. Between Feb 23 and February 26, the area experienced high intensity, long-duration storms, after which little to no precipitation occurred for the two days prior to the inspection. The pond water level was drawn well down. The pond interior was draped with clay material that settled as the pond drained. The landowner had established a siphon from the pond down to the lower-most area below the oak, where, on February 21, Agency Staff had discussed as being a potential area for land discharge area. The siphon consists of a 1 ¼" pipe in the pond, running overland the discharge area where the 1" line feeds into a 4" perforated pipe laid along contour where it drains onto straw and runs down into bowl shaped area, with more straw, where it flows into a short (approximately 5-10' long), established channel to the Class II. The land discharge area appears stable and able to handle the water. Mike reportedly looked up the flowrate through a full 1 ¼" pipe and found its predicted at 1500 gallons per hour. We discussed that this appeared to be a viable, sustainable option to help get through the winter. Some improvements likely could be made to improve the filtration, but the basic set-up appears to be an effective and low impact way to draw the pond level down and maintain it between storms.

In addition to the siphon, the landowner also had two pumps setup. One pump is on the dock in the pond and the other is on the bank upstream of the pond overflow culvert (OUT on the Site Map); both pump water from the pond via 2" fire hose to the Class II where they discharge to the channel. The landowner is using the pumps when the inflow overwhelms the siphon during storms. The basic setup looked good for maintaining the water level. Regional Water Board staff recommend keeping the pumps plumbed to the Class II and not applying them to land due to concern over further destabilizing the hillslope.

Based off of a coffer dam diagram provided to Ms. Hegdal by Ron Pelletier, Mike installed a diversion on the western Class III upstream of entering the pond. The install is a plastic liner placed in a pool with rocks and clay at the top to anchor it and funnel water into the plastic lined pool, supported by rocks on the downstream side, and a 1" pipe inserted into the bottom of the pool, draining it via gravity flow to the Class II. Ms. White and Mike discussed a couple of options of improving the efficiency, including, within the pool, lowering the pipe to capture more of the pool depth in the drain, and attaching the pipe to the plastic via a hose clamp. The basic setup is good. The coffer dam could be replicated on the eastern Class III watercourse upstream of the pond, though between storms it doesn't flow much and during storms, the pumps are effective. Regional Water Board staff noted that additional bales of straw were stockpiled on site.

## Recommendations

Water Quality Staff recommend that responsible parties hire qualified licensed professional geologists and engineers to prepare the necessary plans and permit applications to obtain authorization from all required agencies to stabilize, remove and restore the onstream reservoir to its original condition, restore any impacted wetlands and stream channels; stabilize, hydrologically disconnect, upgrade and maintain roads on the Property to prevent erosion and sediment discharges; and replace/upgrade failing and undersized stream crossings; removal of debris from the stream channels; and immediately repair leaking equipment and store petroleum products, soil amendments, and chemicals where they do not pose a threat to water quality. Formal recommendations and requirements are documented in full within the Cleanup and Abatement Order for the Property.

## Inspection Observation Photos



Photo 1: View looking down at the pond (DSCN9381 photo taken by Adona White, February 18, 2019)



Photo 2: Closer view looking down at the pond and adjacent Class II watercourse (DSCN9363 photo taken by Adona White, February 18, 2019)



Photo 3: Pond outflow to adjacent Class II watercourse (DSCN9368 photo taken by Adona White, February 18, 2019)



Photo 4: One of the hoses used with pumps to draw down the pond level (DSCN9369 photo taken by Adona White, February 18, 2019)



Photo 5: February 15, pond level prior to pumping (6728 photo taken by Chris Carroll, TRC)



Photo 6: February 18, pond level after pumping (DSCN9356 photo taken by Adona White, February 18, 2019)



Photo 7: February 21, pond level after additional pumping (DSCN4430, photo taken February 21, 2019)



Photo 8: February 24, pond level after further pumping (25093 photo taken by Juliet Hegdal)



Photo 9: March 1, pond level after additional rain and pumping (DSCN9454 photo taken by Adona White on March 1, 2019)



Photo 10: Eastern Class III watercourse channel above the pond (DSCN9498 photo taken by Adona White on March 1, 2019)



Photo 11: Cracking with pond berm (DSCN9469 photo taken by Adona White on March 1, 2019)



Photo 12: Pond berm showing cracks looking west (DSCN4436 photo taken February 21, 2019)



Photo 13: Cracking in exterior pond berm face (DSCN9357 photo taken by Adona White, February 18, 2019)



Photo 14: Vertical down drop of approximately 6 inches on the east side of the pond (DSCN9455 photo taken by Adona White on March 1, 2019)



Photo 15: Lateral cracks on western side of pond (DSCN4426 photo taken February 21, 2019)



Photo 16: Vertical down drop of approximately 22 inches on the west side of the pond (DSCN4424 photo taken February 21, 2019)



Photo 17: Discharge location of pumps in western Class II watercourse



Photo 18: Land discharge area where siphon is sent through a 4" perforated pipe and discharged onto land and a bed of straw.



Photo 19: Siphon discharges to a bowl area that allows moderate pooling of water



Photo 20: Land discharge area drains to the western Class III watercourse via an established, rocky channel.



Photo 17: Road failure at road point RP1 looking south (DSCN9373 photo taken by Adona White, February 18, 2019)



Photo 18: Road failure at road point RP1 looking north (DSCN4417 photo taken February 21, 2019)



Photo 19: View of road point RP1 and access road to the pond (DSCN9546 photo taken by Adona White on March 1, 2019)



Photo 20: Road point RP2 uphill from RP1 (DSCN9538 photo taken by Adona White on March 1, 2019)



Photo 21: Road failure at road point RP3 looking south (DSCN9383 photo taken by Adona White, February 18, 2019)



Photo 22: Road failure at road point RP3 looking north (DSCN9377 photo taken by Adona White, February 18, 2019)



Photo 23: Slumping of vertical road cut along main road (DSCN9374 photo taken by Adona White, February 18, 2019)



Photo 24: Stream crossing C4 with tires placed in the channel below the outlet (DSCN9382 photo taken by Adona White, February 18, 2019)