North Coast Regional Water Quality Control Board

TO: Diana Henrioulle

FROM: Brian Fuller

DATE: June 3, 2020

Inspection Report for May 7, 2019 Consent Inspection, Humboldt County Assessor's Parcel Numbers (APNs) 212-051-028-000, 212-051-026-000, 212-061-028-000, 212-061-030-000 and 212-051-025-000

File: Cannabis Program Inspections, Humboldt County, May 7, 2019, John Mahony Property, CIWQS Place ID 842913.

Property information:

County: Humboldt

APN: 212-051-028-000, 212-051-026-000, 212-061-028-000 and 212-061-030-000

Owner: John Mahony and Jacqueline Mahony (dischargers)

Transaction History (per LandVision): Detailed transaction history not available on Landvision. However, John Mahony and Jacqueline Mahony, or their trust, appear to have owned the property since at least 2011.

Size: Approximately 420 acres

Watershed: Eel River Hydrologic Unit; South Fork Eel River Hydrologic Area; Weott Hydrologic Subarea (HU/HA/HSA 111.31; Table 2-1, Water Quality Control Plan for the North Coast Region).

Aerial Imagery Notes (Digital Map Products' Land Vision service):
Imagery of parcel 212-051-028-000 shows:

- On September 15, 2009, a watercourse is present (Aerial Image 1).
- On June 16, 2010, the watercourse was filled (Aerial Image 2).
- On June 19, 2011, there was no sign of cannabis cultivation (Aerial Image 3).
- On August 23, 2018, cannabis cultivation was present (Aerial Image 4).
- On April 25, 2018, cannabis cultivation was present (Aerial Image 5).
- On October 6, 2018, the watercourse was unburied (Aerial Image 6).

Regulatory status with the North Coast Regional Water Quality Control Board (Regional Water Board):

Site development: There was no regulatory coverage with the Regional Water Board for site development on the property.

Applicable programs:

- Regional Water Board's Clean Water Act section 401 Water Quality Certification permit for dredge/fill activities in a surface water.

  or

- Appendix D to the Regional Water Board Order R1-2015-0023 (Regional Cannabis Order).

Onsite activities/operations:

- Regional Cannabis Order enrolled with WDID: 1B170363CHUM from November 17, 2016 to June 30, 2019.

- State Water Board Order WQ 2019-0001-DWQ (Statewide General Order) enrolled with WDID: 1_12CC415249 from July 1, 2019 to present.

Inspection information:

Date/time: May 7, 2019 midday

Type: Consent Inspection.

Attendance:
Jesse Cahill, Timberland Resource Consultants (TRC)
Brian Fuller, Regional Water Board
Adona White, Regional Water Board

Background/Objective:
On March 27, 2018, Regional Water Board staff Adona White and Brian Fuller inspected the property in the company of David Manthorne from the California Department of Fish and Wildlife (CDFW), Jack Henry, Jesse Cahill and Chris Carroll with TRC, and property owner Jacqueline Mahony. The purpose of the inspection was to review proposed remediation work presented in the dischargers' Water Resource Protection Plan, dated July 15, 2017 (July 15, 2017 WRPP).

Features we inspected included a cultivation area constructed on top of fill and overlying a watercourse, and several culverted watercourse crossings that required upgrading. During the inspection, I advised Ms. Mahony and the TRC representatives that an application for water quality certification, included as Appendix D in the Regional

Cannabis Order, was required before remediating the buried watercourse and upgrading the culverts. On April 4, 2018 I sent an email to Jack Henry and Jesse Cahill summarizing the points we covered during the March 27, 2018 site visit. In the email I reiterated the requirement for submitting an Appendix D.

On August 22, 2018, I sent an email to TRC inquiring about the plans to remediate the property. On a subsequent phone call, Jesse Cahill informed me that the dischargers had begun implementing work without submitting an Appendix D application to the Regional Water Board. I was concerned that the unauthorized work in waters of the state of California may have unintended negative impacts on water quality, so I asked Jesse Cahill to provide a report describing the unauthorized work.

On November 5, 8 and 12, of 2018 Jesse Cahill sent materials which culminated into the November 12, 2018 addition to WRPP for WDID# - 1B170363CHUM (Work Report, Attachment 1). The Work Report provided pictures and general statements about the quality of the work performed, however the report did not include the measurements, calculations or references to standards that are required in an Appendix D application. Therefore, following receipt of the Work Report, I requested to inspect the property to revisit areas with threatened impacts to water quality that I identified in 2018, and to see what condition the unauthorized work had left things in. Jesse Cahill informed me that the property owners consented to me inspecting the property on May 7, 2019. This report discusses my observations during the May 7, 2019 inspection.

Inspection Map

Figure 1: Map of northern portion of Property from July 15, 2017 WRPP.

Inspection Observations:
Figure 1, above, shows Map Points referenced and discussed below. On May 7, 2019, inspection participants accessed the property from the east along a road passing Map Point 21. We stopped first at Cultivation Area #3.

Cultivation Area #3.

The area consists of a southerly dipping delta shaped clearing, approximately 350 feet wide and 350 feet long, surrounded by trees. The northern half dips steeply south and the southern half dips more gently south. An ephemeral watercourse passes along the eastern edge of the area, and historically, there was an ephemeral watercourse visible in the center, less steep, area (Aerial Image 1). The watercourse in the center was buried in 2010 (Aerial Image 2) and cannabis cultivation began at the location of the buried watercourse in as early as 2013 (Aerial Image 4). When I inspected the area in 2018, I observed an earthen pad had been constructed in the center area, further reducing the slope, and a culvert conveyed the watercourse below the pad.

During the May 7, 2019 inspection, I observed the culvert had been removed and a channel, with a slight bend, cut into the pad (Photo 1 and Photo 2). The channel appeared to be cut to an adequate depth, with no sign of scour where the newly cut channel steepens before joining the receiving watercourse downstream (Photo 3). I observed sparse cobble check dams that appeared to be intended for grade control; given the size of the catchment area, the check dams presently in place appeared to be adequate. I observed earthen spoils on the pad, apparently associated with channel excavation; despite this, the banks of the new channel appeared to have appropriate slopes of 2:1 or less. I observed groundwater emanating from the pad on the west side of the newly cut channel (Photo 4), and I observed approximately 10 foot long tension cracks, and a patch that appeared to have been dug up (Photo 5). I noted that rock had been added to the road that passed upstream from the restored channel location (Photo 6). The area had straw, and had been planted with grasses, cedar and pine.

North of Cultivation Area #3

We walked north to the location that formerly had water bladders, identified as Map Point 25. I observed that the pad had been reshaped to dip gradually east towards an adjacent watercourse (Photo 7). The watercourse had aggraded with sediment (Photo 8 and Photo 9), and Jesse Cahill suggested the sediment originated from stormwater runoff coming from the county-maintained road to the north. Downstream, in the vicinity of Map Point 23, where in 2018 I observed the watercourse had been incising, large cobbles had been added at the points of focused erosion (Photo 10).

On the road west of Map Point 25, I observed that none of the roadwork we had discussed during the 2018 inspection had been implemented. I observed spring water flowing over the road at the junction between north-south and east-west trending roads northwest of Cultivation Area 3 (Photo 11) The spring identified as Map Point 26 continues to flow across the road surface through fine material and disappears into the

duff on the opposite side of the road (Photo 12 and Photo 13). I observed that the water lines connected to the spring diversion were empty.

West of Cultivation Area #3

We walked east from Map Point 26, then south toward Map Point 20. The road was steep, and I observed a long rill along the entire length (Photo 14 through Photo 17). At Map Point 20, I observed an earthen ford where the road crosses an ephemeral watercourse (Photo 18), a nearby flat area that had been recently graded with tracked equipment (Photo 19 and Photo 20), and approximately a half-dozen water tanks on the flat (Photo 21). I observed that the earthwork had left spoils that had a potential to discharge to the head of the nearby ephemeral watercourse.

South of Cultivation Area #3

We walked back east, towards Cultivation Area #3, then south along the road leading to Map Point 19. At Map Point 19, I observed heavy equipment tracks on the road and the form of an ephemeral watercourse both upstream and downstream with no apparent structures for facilitating the watercourse to cross the road (Photo 22 and Photo 23). We walked back east, then south towards Map Point 18. I observed that the road was steep, and discharged directly to the watercourse bordering the road to the west in the vicinity of Map Points 18, 17 and 16 (Photo 24 through Photo 26). I did not walk this section of road during the spring 2018 inspection.

Replaced Culverts:

We inspected the culverts that were addressed in the Work Report (Attachment 1). In general, I found the assessment of the culvert installations presented in the Work Report appropriate. Although I observed culvert alignment in some cases were not ideal, with some of the culverts bent as much as 15 degrees from horizontal, and with outlets perched as much as one foot (Photo 27 and Photo 28), I did not see any flow emanating from below the pipes at the culvert outlets, and I observed that the culverts appeared to be of adequate diameter, and that inlets and outlets had been adequately armored with small boulders (Photo 29 and Photo 30).

Tank storage area:

We also walked east along the road leading to APN 212-061-030-000. In the vicinity of Map Point 05, I observed an occluded culvert where the road crossed a watercourse (Photo 31). East of Map Point 05, I observed a row of lettered water tanks that were overfilling (Photo 32). Jesse Cahill explained to me that the pump that filled the tank was powered by a solar panel and the system lacked an auto shut-off system. I did not inspect the area east of the overflowing tanks.

Recommendations:

1. The work reported in the Work Report occurred in waters of the State of California without a Water Quality Certification, or waiver thereof, from the

Regional Water Board. 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 more information about Regional Water Board permits that may apply to proposed site development or land use activities, refer to this link:

https://www.waterboards.ca.gov/northcoast/water_issues/programs/permit/

2. Develop a monitoring program and schedule for the restored site features. The plan should include the following:

    a. site inspections at least once annually, and includes photo documentation of restoration work areas with associated notes on plant survival and vigor, the condition of the stream including documentation of any signs of bed and bank erosion.

    b. describe adaptive management strategy where site monitoring/inspection reveals failure or deterioration of restoration features, or low plant survival rate. Usually a minimum of 85 percent survival rate is required.

    c. ensure the schedule extends at least five years.

    d. For this site, include monitoring of:

        i. the restored stream channel at Cultivation Area #3,

        ii. the remediated bladder flat north of Cultivation Area #3,

        iii. each culvert replacement documented in the Work Report

3. Develop a workplan to either decommission the roads and watercourse crossings on the property—in particular the roads and watercourse crossings north of Map Point 12—or correct the features so that they are consistent with the requirements of the requirements of the Statewide Cannabis Order (linked-to below). Any work proposed to occur in waters of the state of California require an application for Water Quality Certification the application for which can be found below.

4. Comply with requirements/directives from CDFW and the Division of Water Rights with respect to appropriate permitting/licensing for water source(s), diversion(s), storage, and use, and ensure that water storage features are modified/maintained so as to minimize the potential for adverse impacts to water quality and beneficial uses.

5. The above recommendations should be incorporated into the Site Management Plan, which is required by the dischargers' enrollment in the Statewide Cannabis Order, and submitted to the Regional Water Board. On June 11, 2019, we received from Stephanie Bowler with TRC the 2017 WRPP, intended to serve as an SMP. However, the 2017 WRPP is out-of-date and, among other deficiencies, does not identify the restored watercourse at Cultivation Area #3. Accordingly, I recommend that the Dischargers develop and submit a SMP, in accordance with the Statewide Cannabis Order, and ensure that plan identifies and proposes corrective work to address the features of water quality concern identified by staff in this and previous reports.

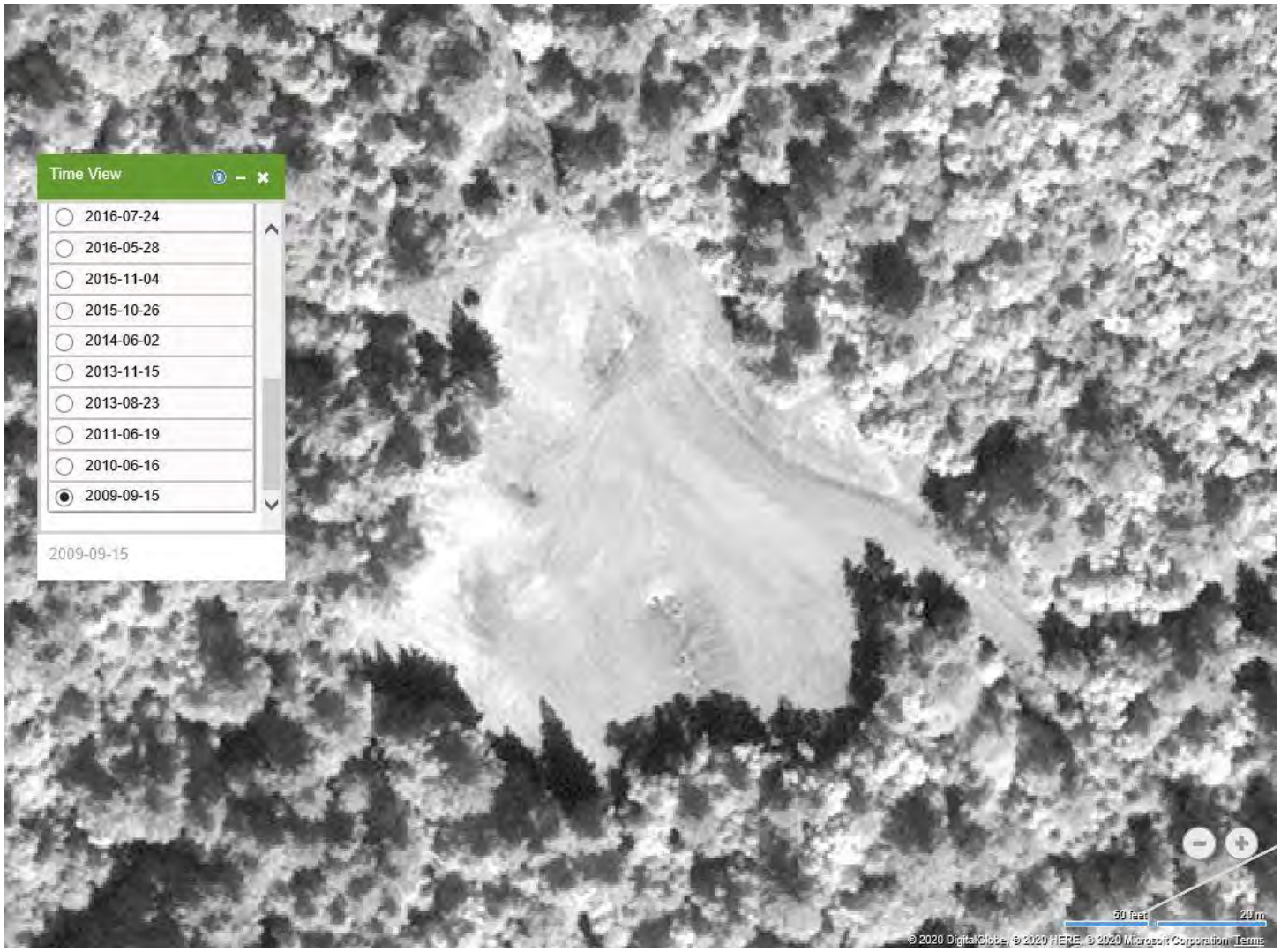
   The Statewide Cannabis Order (Order No. WQ 2019-0001-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities) can be found at this link:
   https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2019/wqo2019_0001_dwq.pdf

   Application for Water Quality Certification under the Statewide Cannabis Order WQ 2019-0001-DWQ:
   https://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/pdf/200204/RB1_Cannabis_WQC_401_App.pdf

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.

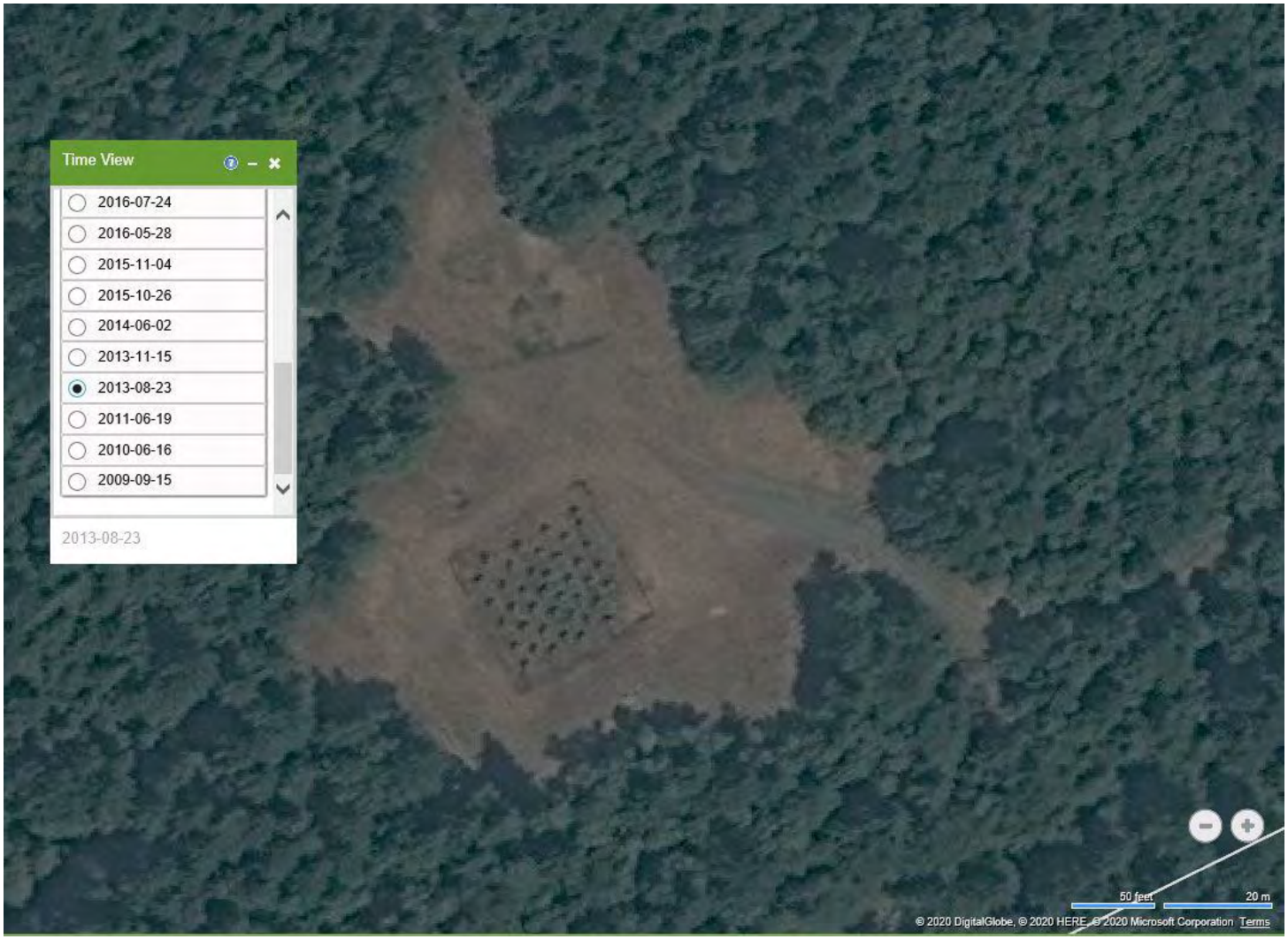
Aerial Images



Aerial Image 1—Cultivation Area #3 dated September 15, 2009, accessed with Digital Map Products' Land Vision service.

Aerial Image 2—Cultivation Area #3 dated June 16, 2010, accessed with Digital Map Products' Land Vision service.

Aerial Image 3—Cultivation Area #3 dated June 19, 2011, accessed with Digital Map Products' Land Vision service.



Aerial Image 4—Cultivation Area #3 dated August 23, 2013, accessed with Digital Map Products' Land Vision service.

Aerial Image 5—Cultivation Area #3 dated April 25, 2018, accessed with Digital Map Products' Land Vision service.

Aerial Image 6—Cultivation Area #3 dated October 6, 2018, accessed with Digital Map Products' Land Vision service.

Photo Appendix

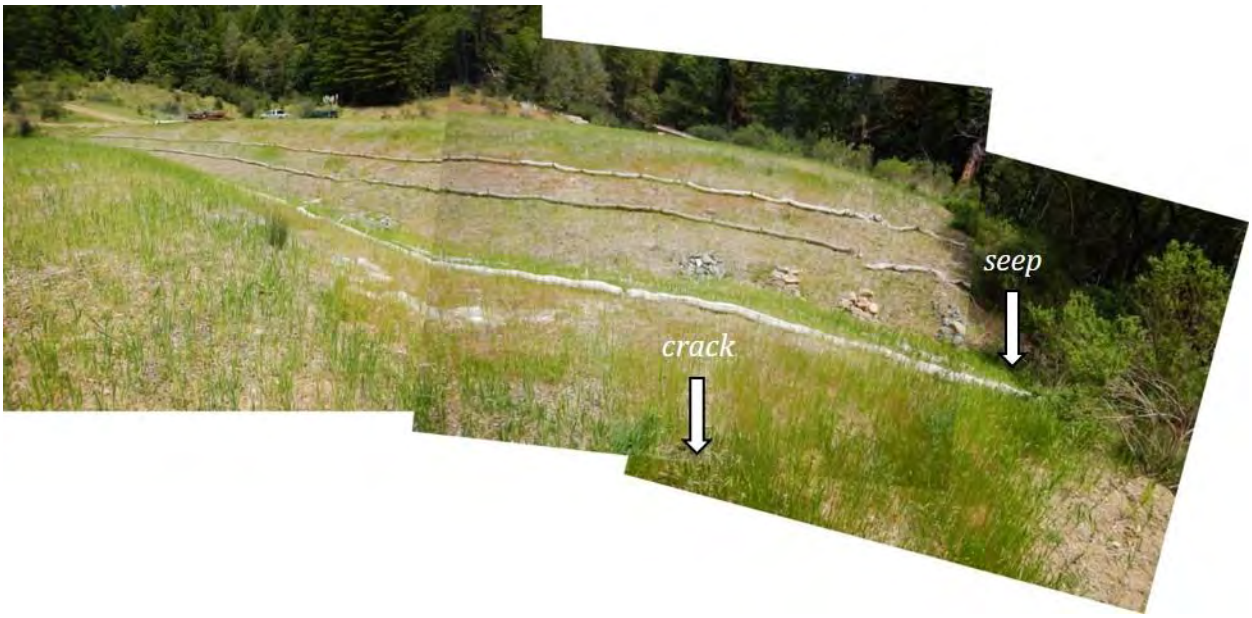


Photo 1—Looking east at remediated watercourse at Cultivation Area #3.

Photo 2—Looking southwest at remediate watercourse at Cultivation Area #3.

Photo 3—Receiving watercourse from remediated watercourse. Located south and to the right of the area pictured in Photo 1.

Photo 4—Groundwater seeping out of placed fill. Location identified as "seep" in Photo 1.

Photo 5—Tension crack in placed fill. Location identified as "crack" in Photo 1.

Photo 6—Rocked ford crossing at MP 24. Located north, to the left, of the area pictured in Photo 1.

Photo 7—Looking south at former bladder location north of cultivation Area # 3 in the vicinity of Map Point 25. A watercourse, in the shade of the trees in the left of this image, is pictured in Photo 8 below.

Photo 8—Watercourse adjacent to recently reshaped pad pictured in Photo 7 above.

Photo 9—Watercourse in the vicinity of Map Point 25, downstream from the location pictured in the previous image. Note the lens of fine sediment in the center of the image.

Photo 10—Watercourse in the vicinity of Map Point 23, downstream from the location pictured in the previous image. Note water is flowing and large cobbles had been added, armoring the watercourse.

Photo 11—Spring water flowing across road at the junction between a north-south and a east west trending road northwest of Cultivation Area 3.

Photo 12—Looking south, downstream, at spring water flowing acoss a dirt road at Map Point 26.

Photo 13—Looking north, upstream, at the spring at Map Point 26.

Photo 14—Looking north, uphill at rill scoured into road surface north of Map Point 20.

Photo 15—Looking south, downhill at rill scoured into road surface north of Map Point 20.

Photo 16—Looking at rill, scoured into road surface north of Map Point 20.

Photo 17—Looking at rill, scoured into road surface north of Map Point 20.

Photo 18—Earthen ford in the vicinity of Map Point 20.

Photo 19—Tracks from recent heavy equipment use in the vicinity of Map Point 20.

Photo 20—Tracks from recent heavy equipment use in the vicinity of Map Point 20.

Photo 21—Tanks placed on recently constructed earthen pad in the vicinity of Map Point 20.

Photo 22—Looking upstream at earthen ford located at Map Point 19. An ephemeral watercourse can be seen parallel to the waterline among the duff. Heavy equipment tracks are visible on the road in the foreground of the image.

Photo 23— Looking downstream at earthen ford located at Map Point 19. The form of an ephemeral watercourse can be seen behind the fern in the center of the image.

Photo 24—Looking north east in the vicinity of Map Point 18. Stormwater from the road in the upper left of the picture, would flow down the ditch where the photographer is standing before entering a watercourse behind the photographer pictured below.

Photo 25—Looking south west in the vicinity of Map Point 18. Shows ditch that delivers stormwater from the road pictured in above photo.

Photo 26—Looking north east in the vicinity of Map Point 17. Stormwater from the road in the upper left of the picture, flow down the ditch where the photographer is standing before entering a watercourse.

Photo 27—Looking into a 36-inch diameter culvert located at Map Point 12.

Photo 28—The culvert outlet at Map Point 12 is perched approximately one foot.

Photo 29—Looking at the outlet of an 18-inch diameter culver at Map Point 10. The channel bed is armored with small boulders and turns approximately 15 degree to the left immediately downstream from the culvert outlet.

Photo 30—Looking at the inlet of the 18-inch diameter culvert at Map Point 10. The inlet is armored with small boulders and the active channel width is approximately 12 inches.

Photo 31—Undersized pipe with buried inlet in the vicinity of Map Point 5.

Photo 32—Water tanks located east of Map Point 5. Water was overflowing the top of Tank G.

Water Resource Protection Plan

WDID# - 1B170363CHUM

**APN 212-033-012, 212-051-027,
212-051-026, 212-051-028,
212-061-028, 212-061-030**

Prepared by:

Timberland Resource Consultants

165 South Fortuna Blvd

Fortuna, CA 95540

07-15-2017

-1600 Crossing #5 (WRPP Site 06) Energy dissipater rock installed below existing outlet appears adequate.

Inlet 1600 Crossing #6 (WRPP Site 07) New 24" culvert crossing adequately installed. Culvert is as close to grade and alignment as possible. Rock armor at inlet and outlet, energy dissipater below outlet.

Outet 1600 Crossing #6 (WRPP Site 07) New 24" culvert crossing adequately installed. Culvert is as close to grade and alignment as possible. Rock armor at inlet and outlet, energy dissipater below outlet.

Inlet 1600 Crossing #7 (WRPP Site 08) New 30" culvert crossing adequately installed near grade with energy dissipater below outlet.

Outlet 1600 Crossing #7 (WRPP Site 08) New 30" culvert crossing adequately installed near grade with energy dissipater below outlet.

Erosion Control 1600 Crossing #7 (WRPP Site 08) New 30" culvert crossing adequately installed near grade with energy dissipater below outlet.

Inlet 1600 Crossing #8 (WRPP Site 10) New 18" culvert crossing adequately installed to grade with inlet and outlet armoring, and energy dissipater rock below outlet.

Outlet 1600 Crossing #8 (WRPP Site 10) New 18" culvert crossing adequately installed to grade with inlet and outlet armoring, and energy dissipater rock below outlet.

Inlet 1600 Crossing #9 (WRPP Site 11) New 24" culvert crossing adequately installed on grade with inlet and outlet armoring.

Outlet 1600 Crossing #9 (WRPP Site 11) New 24" culvert crossing adequately installed on grade with inlet and outlet armoring.

Inlet 1600 Crossing #10 (WRPP Site 12) New 30" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Outlet 1600 Crossing #10 (WRPP Site 12) New 30" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Inlet 1600 Crossing #11 (WRPP Site 13) New 30" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Outlet 1600 Crossing #11 (WRPP Site 13) New 30" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Inlet 1600 Crossing #12 (WRPP Site 14) New 36" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Outlet 1600 Crossing #12 (WRPP Site 14) New 36" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Inlet 1600 Crossing #13 (WRPP Site 15) New 36" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

Outlet 1600 Crossing #13 (WRPP Site 15) New 36" culvert crossing adequately installed on grade with inlet and outlet armoring, and energy dissipater below outlet.

1600 Crossing #15 (WRPP Site 24) Excavation of fill material placed in channel. Channel reconstruction appears adequate. Grade is consistent with natural topography and adjoining channel. Rock check-dams installed at regular intervals for grade control. Side slopes laid back to 30%. Straw wattles installed on channel banks. Erosion control measures in place for disturbed soil surfaces. Vegetation plan not yet implemented.

1600 Map Point #18 (WRPP Site 25) Fill removed from watercourse and slopes re-contoured well. Erosion control measures in place. Vegetation plan not yet implemented.