Attachment E

	Field Inspec	tion Report	
Name and Location of Facility Inspected Trinity County APNs 015-180-06-00, 015-180-38-00, 015-170-39-00 and 015-170-31-00 Frietas Gulch and Mule Gulch, Douglas City, CA		Inspection Date(s) April 9-10, 2015 October 7, 2015	Receiving Waters: Frietas Gulch, Indian Creek, and their tributaries
	The Control of Mark 45 St.		
Names & Titles of Property Owner at Time of Inspection	Address		Notified of Inspection

Names & Titles of Property Owner at Time of Inspection	Address	Notified of Inspection?	
John R. Kimball and Edna L. Kimball	843 Mallard Loop Logan, UT 84321	Consent Provided?	
Michael Linarte	12537 Mitchell Ave. Los Angeles, CA 90066-4805	Administrative Warrant	
Vada Trott	4088 D ST	Notified of Inspection?	
Horacio Cufre-Urrutia	Eureka, CA 95503-6025	No	

Inspector Name & Title²

Erin Mustain, Senior Water Resource Control Engineer, State Water Resources Control Board (State Water Board) Office of Enforcement (OE)

Attending Agency Representatives

Derek Magnuson, Engineering Geologist, North Coast Regional Water Quality Control Board (RWQCB)

Adona White, Water Resource Control Engineer, RWQCB

Tobi Freeny, Staff ES, California Department of Fish and Wildlife (CDFW)

Scott Bauer, Staff ES, CDFW

Kason Grady, WRCE, RWQCB

CDFW Wardens

Prepared By: Erin Mustain on January 24, 2017

Foot Notes:

- 1. The inspection was conducted under an administrative warrant in the absence of the owners of the parcels noted above.
- 2. All photographs have been resized and have the photographer and direction noted. Callouts/arrows are provided in some of the photos for emphasis.

I. Background

The property identified as Trinity County Assessor's Parcel Numbers 015-180-06-00, 015-180-38-00, 015-170-39 and 015-170-31-00 (Property) is located in the Indian Creek watershed. Indian Creek is tributary to the Middle Fork Trinity River and located in the Douglas City Hydrologic Subarea of the Upper Middle Trinity Hydrologic Area near Douglas City, California. The Middle Fork Trinity River is listed as impaired due to sediment pursuant to Clean Water Act section 303(d). On December 20, 2001, the United States Environmental Protection Agency approved a Total Maximum Daily Load (TMDL) for sediment that indicates "Cold Water Fishery" as a beneficial use currently impaired in the watershed. The TMDL also indicates that populations of several anadromous salmonid species present in the Trinity River and its tributaries are in severe decline.

As part of the statewide pilot cannabis regulation and enforcement initiative, the Water Boards and the California Department of Fish and Wildlife (CDFW) identified Indian Creek as a sub-watershed with critical resources that are or may be cumulatively adversely impacted as a result of cannabis cultivation. The Water Boards and CDFW inspected private parcels with cannabis cultivation throughout the watershed in April 2015. During those inspections, one of the land owners denied consent to inspect his property. On October 5, 2015, State Water Board staff obtained an

investigative warrant, which was executed on October 7, 2016 by staff from the State Water Board, the North Coast Regional Water Quality Control Board (Regional Water Board), and CDFW.

During the April 9-10, 2015 and October 7, 2015 inspections State and Regional Water Board and CDFW staff also investigated threats to water quality associated with the assess road, which is part of several easements and which provided access to the parcels sites in the warrants. This report focuses on the access road where it is not mentioned in site-specific inspection reports.

II. Site information

The Property is located near Douglas City. Frietas Gulch, tributary to Indian Creek, and other unnamed tributaries to Indian Creek run through Property.

The inspection area surficial geology 1 was mapped as $Ogb\ Qt$, Dhs, and Qal. Trinity ophiolitic assemblage of the Ordovician age or Ogb is comprised of gabbro. Quaternary High-level surficial deposits or Qt is comprised of alluvial sand and gravel, which are generally remnants of high-level terraces and not necessarily related to present-day streams. Devonian Salmon Horneblende Schist or Dhs is comprised of Hornblende schist and gneiss, probably derived from mafic volcanic rocks. The Mule Gulch and Indian Creek channel beds are mapped as Holocene and Pleistocene Alluvium or Qal, which is comprised of sand, silt, and gravel in beds of present-day streams and on low terraces related to present-day streams; it includes debris from placer mining and dredging for gold.

Approximately 1000 feet west of the Property, there is thrust fault that runs roughly north south and crosses Frietas Gulch. There is a fault that is located east of the Property that is approximately located. It runs north-northwest to south-southwest and then from northeast to the southwest.

Based on the Web Soil Survey², the Property falls mostly in map unit 146 or Goulding-Vitzthum-Vanvor Complex, 50 to 75 percent slopes. Goulding makes up 30 percent of the unit; Vitzthum, 25 percent; Vanvor, 20 percent; Riverwash, 2 percent; and xerofluvents, 2 percent. Goulding consists of gravelly loam; Vitzthum of extremely gravelly loam; and Vanvor of very gravelly, sandy, clay loam (Source: SoilWeb³). Goulding and Vitzthum are categorized as soil hydrologic group D. Vanvor is categorized as soil hydrologic group C.

Group C soils have moderately high runoff potential when thoroughly wet and Group D soils have high runoff potential when thoroughly wet⁴.

Figure 1 (below) shows a portion of the watershed just north of Indian Creek, specifically APNs 015-180-06 and 015-180-38. Figure 2 shows a portion of the watershed including the upper reach of Frietas Gulch, specifically, APNs 015-170-39 and 015-170-31. Parcel lines are provided by the County Assessor's Office and are approximate.

¹ United States Geological Survey. *Scientific Investigations Map 3095: Geologic Map of the Weaverville 15' Quadrangle, Trinity County, California.* William P. Irwin. 2009. https://pubs.usgs.gov/sim/3095/sim3095-map.pdf.

² Web Soil Survey is a tool provided by the United States Department of Agriculture's Natural Resources Conservation Service

³ University of California at Davis, Agriculture and Natural Resources SoilWeb

⁴ Part 630 Hydrology National Engineering Handbook, Chapter 7 – Hydrologic Soil Groups. United States Department of Agriculture, Natural Resources Conservation Service. January 2009.

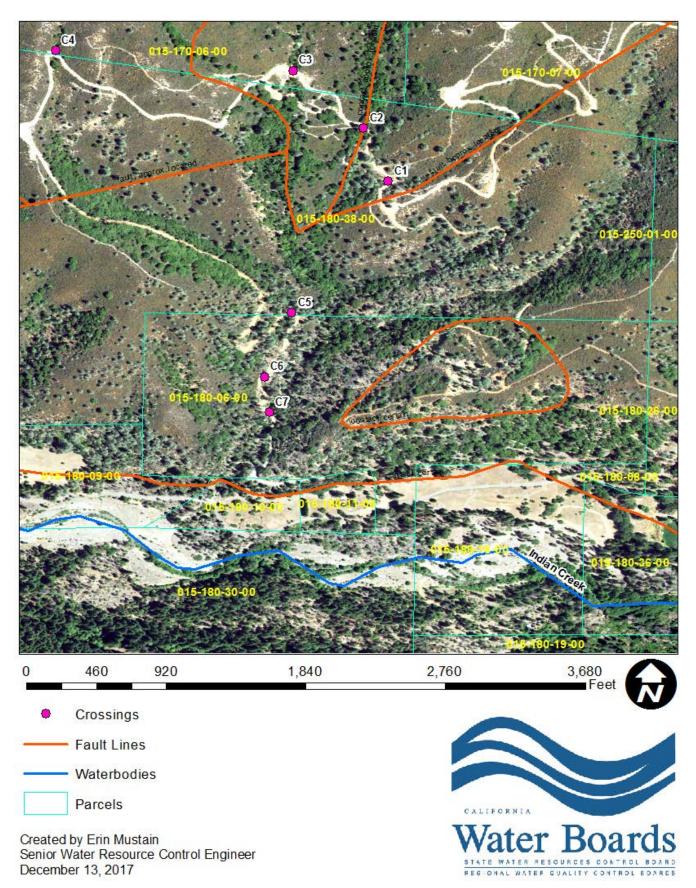


Figure 1 – Kimball Parcels (015-180-06-00 and 015-180-38-00) **Source:** U.S. Department of Agriculture's National Agricultural Imagery Program (NAIP) 2016

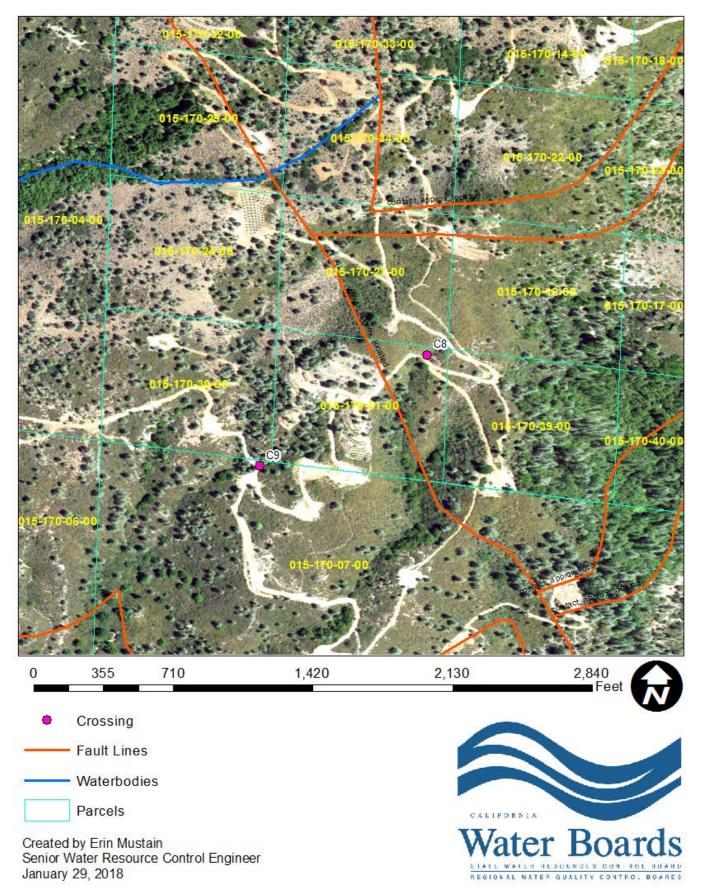


Figure 2 – Linarte Parcel (015-170-31) and Trott/Cufre-Urrutia Parcel (015-170-39) **Source:** U.S. Department of Agriculture's National Agricultural Imagery Program (NAIP) 2016

III. Inspection Observations

Throughout the inspections, I observed significant gullies on the road. Some were several feet deep and approximately a foot wide. I also observed erosion on the inboard and outboard slopes of the road. The roads did not have any best management practices (BMPs) to dissipate flow, promote sheet runoff, or reduce the velocity of runoff. Mr. Magnuson and I attempted to see where these gullies and eroded areas were transporting the soil, much of it ended up in the surrounding vegetation. While the chaparral might trap some sediment, the road had the potential for mass wasting.

We also observed and took measurements of each crossing, which are detailed below:

Kimball Parcels:

<u>Crossing 1 (C1) – Photos 1 - 3</u>

The crossing denoted as C1 on Figure 1 consisted of at least two pipes. The inlet was a 20-inch diameter, corrugated, black plastic pipe. The outlet had an 18-inch diameter, corrugated metal pipe. The inlet was in line with the channel, but the outlet was at a steeper angle and may not have been connected to the inlet pipe. The outlet was plugged. The road's side slope had numerous gullies, indicative of sediment transport. Photo 1 shows the gullies and the angle of the culvert. We also observed netting on the fill slope.

The crossing also was receiving sediment delivery from the road's inboard ditch. The road upslope on the north had a ditch relief culvert that was completely buried (Photo 4).

Crossing 2 (C2) Photo 5

This crossing was a large wet, rocked ford with large substrate. We measured the channel upstream to be approximately 7 feet wide. Some of the flow is being directed down the road toward C1, via the inboard ditch.

Crossing 3 (C3) - Photos 6 - 8

The culvert was a half round, corrugated metal pipe. At the inlet Mr. Grady and I measured the pipe width to be 4 feet wide and 30 inches high. The outlet was partially buried and plugged; we measured its height to be 12 inches. We measured the upstream channel width to be approximately four to five feet wide.

The length of the pipe appeared to be poorly aligned. The fill prism was eroding into the channel at the outlet and fill was failing on the outboard edge of the road. Additionally, the road's inboard ditch was being directed to the inlet so the roads drainage was being directed to the stream.

I observed and documented evidence of sedimentation downstream.

Crossing 4 (C4) – Photos 9 and 10

This crossing consisted of a corrugated metal pipe that was 18 inches in diameter and 60 feet long. Its inlet was at grade, but its outlet was below grade. Mr. Grady and I measured the channel above the culvert to be approximately 3 feet wide. We measured the fill prism to be approximately 8 feet deep, 50 feet in length, 44 feet top width, and 10 feet bottom width. We observed erosion on the outboard fill slope.

<u>Crossing 5 (C5) – Photos 11 and 12</u>

This crossing consisted of a 46-inch diameter, half round, corrugated metal pipe. Mr. Grady and I measured its length to be approximately 36 feet long. I observed daylight as I looked into the outlet, but the pipe was partially plugged with rocks and sediment. Mr. Grady and I measure the channel

width to be approximately 2.5 feet wide upstream and 4 feet downstream. We measured the depth of fill to be 2 feet at the inlet and 5 feet at the outlet.

Crossing (C6) – Photos 13 and 14

This crossing was a large, wet ford that Mr. Grady and I measured to be 20 feet wide, with a 4 feet high pile of rock at the outlet and 22 feet of fill placed in the crossing. The upstream channel width was approximately 5 feet. Mr. Bauer observed what he believed to be a significant amount of native rock in the channel.

Crossing (C7) – Photos 15 and 16

This crossing had water at the time of inspection. It consistent of a half round, 64-inch diameter, corrugated metal pipe that Mr. Grady and I measured to be approximately 45 feet long. We measured the depth of fill to be 6 feet at both the inlet and outlet and the channel width to be approximately 8 feet both up and downstream of the crossing. We observed debris in the inlet and the pipe appeared to be slightly bent. Mr. Grady and I measured the depth of the pipe at the outlet to be 42 inches. Both inlet and outlet were armored with rock.

Linarte Property:

Crossing (C8) – Photos 17 and 18

This crossing did not have a ford or culvert. Mr. Magnuson estimated approximately one half of a cubic yard of sediment had eroded from the outboard slope directly into the watercourse. He classified the soil as brown, clayey sand. Ms. White estimated that approximately 300 feet of the road upslope of the crossing was hydrologically connected to this watercourse.

Trott/Cufre-Urrutia Property:

Crossing (C9) – Photos 19 and 20

This crossing was a 14-inch, black, plastic pipe. Mr. Magnuson and I measured the length to be approximately 25 feet, the upstream channel to be 4.5 feet wide and 6 inches deep. We measured the length of the fill slope to be approximately 112 inches, just over 9 feet. Mr. Magnuson classified the soil to be light brown, gravelly sand.

Note: C9 is actually on APN 015-17-39 due to a 2013 lot line adjustment that isn't reflected in Figure 2.

IV. Photos



Photo 1 (Magnuson) –Crossing C1 Culvert's Outlet is on the Right (Facing South)



Photo 2 (Magnuson) – Standing in the streambed upstream of inlet at C1 (Facing West-southwest)



Photo 3 (Mustain) - Inlet of C1



Photo 4 (Mustain) – Buried Ditch Relief Culvert



Photo 5 (Mustain) - Ford Crossing C2 (Facing Southeast)

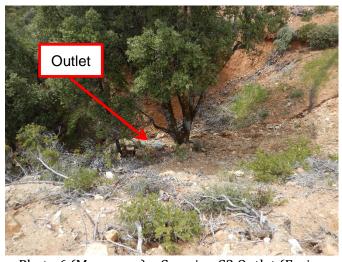


Photo 6 (Magnuson) - Crossing C3 Outlet (Facing Southwest)



Photo 7 (Magnuson) - Inlet of C3 (Facing Northnortheast)



Photo 8 (Mustain) - C3 Plugged/buried Outlet (Facing Northeast)



Photo 9 (Mustain) – C4 Outboard Slope Above Outlet (Facing North)



Photo 10 (Mustain) - C4 Partially Plugged Outlet



Photo 11 (Magnuson) – Outlet of Crossing C5 (Facing East)



Photo 12 (Magnuson) – Inlet of Crossing C5 (Facing Southwest)



Photo 13 (Mustain) – Ford Crossing C6 (Facing Southwest)



Photo 14 (Mustain) - C6 Rock Fill at Outlet



Photo 15 (Magnuson) – Outlet of Crossing C7 (Facing North-northeast)



Photo 16 (Mustain) - Inlet of C7 (Facing South)



Photo 17 (Magnuson) – Crossing C8 (Facing West)



Photo 18 (Magnuson) -C8 (Facing East)



Photo 19 (Magnuson) - Crossing C9 (Facing East)



Photo 20 (Magnuson) -C9 (Facing South)

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.