Complaint Inspection Memo

To: Stephen Bargsten, Senior Environmental Scientist, Non-point Source and 401 Certification Unit

From: Scott Gergus, Engineering Geologist, Non-point Source and 401 Certification Unit

Date: November 13, 2016

Subject: October 20, 2016, 7204 Geysers Road sediment discharge to Cold Creek inspection.

File: Cold Creek Ranch, Black Mountain Developers, LLC, 7205 Geysers Road, Geyserville, Sonoma County

Background

On October 18, 2016, the North Coast Water Quality Control Board (Regional Water Board) received a complaint from Dan Cahill with the Sonoma County Permit and Resource Management Department (PRMD) regarding the discharge of sediment to Cold Creek from illegal grading of roads at 7205 Geysers Road (Site), east of Healdsburg in the Maycamas Mountains. Google Earth satellite imagery shows the Site to be located on very steep, chaparral-covered mountain side, approximately 2,000 feet east of Little Sulphur Creek.

Inspection

On October 20, 2016, I participated in a multi-agency inspection of the Site. Inspection participants rendezvoused at the Jim Town General Store at 1300 hours. Mr. Cahill explained that we would be inspecting the Cold Creek Ranch for sediment discharges to Cold Creek resulting from the recent rains (see CoCoRaHS.org Table 1).

Inspection team participants included:

Dan Cahill, Senior CE Inspector, Permit and Resource Management Department, Code Enforcement Section, 2550 Ventura Avenue, Santa Rosa, CA 95403, (707) 565-3716, Dan.Cahill@sonoma-county.org

Lorie Hammerli, Wetlands Biologist, California Department of Fish and Wildlife, 7329 Silverado Trail, Napa, CA 94558, (707) 576-2880, lorie.hammerli@wildlife.ca.gov

James Reed, Warden, California Department of Fish and Wildlife, 7329 Silverado Trail, Napa, CA 94558, (707) 239-9438, James.Reed@wildlife.ca.gov
Scott Gergus, Engineering Geologist, North Coast Regional Water Quality Control Board, 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403, Scott.Gergus@waterboards.ca.gov

Mr. Cahill had been working with Cold Creek Ranch since July 22, 2016, when the Site was red-tagged with a Stop Work Order by the Permit and Resource Management Department (PRMD). He explained Cold Creek Ranch had not obtained a grading permit; or a NPDES Construction General Permit; and had not submitted an Erosion Control Plan. Warden Reed explained that he had received a complaint on October 16 or 17, 2016, from a worker commuting to The Geysers regarding a large volume of muddy water discharging from the Site into the inside ditch of Geysers Road. Warden Reed indicated that he verified the complaint on October 17, 2016.

At the conclusion of the conversations with Mr. Cahill and Warden Reed, we proceeded up to 7205 Geysers Road.

We arrived at the Site at 1400 hours and inspected the Cold Creek cross-culvert outlet for a sediment discharge. The 4-foot diameter, cast concrete pipe (CCP), cross-culvert (Photograph 1) is located under Geysers Road and receives storm water runoff from construction areas on the Site to the east. The culvert discharges to a large basin rimed with boulders forming a natural energy dissipation outlet pool (Photograph 2). A significant amount of red-brown sediment had been deposited in the outlet pool. I hand dug into the discharged sediment, however, I could not dig through the sediment and did not encounter bedrock (Photograph 3). I determined the sediment deposited in the outlet pool was over a foot thick (Photograph 4). I concluded the upper 2 inches of fine sediment seen in Photograph 4 resulted from the recent rain events. Sediment deeper than 2 inches were coarse and rocky and were probably related to previous rain events. I was unable to determine if the entire volume of sediment deposited in the outlet pool resulted from recent storm events.

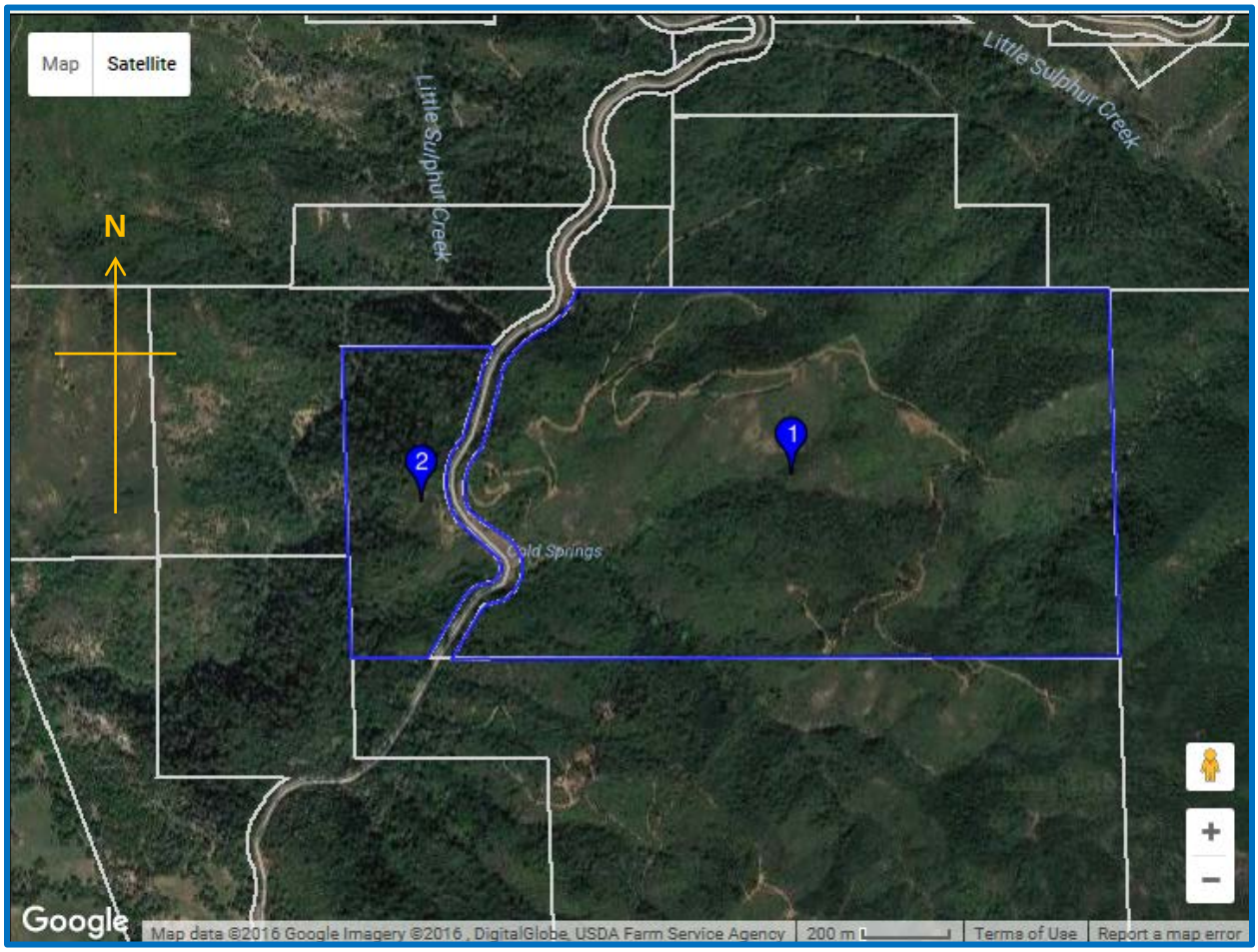
Photograph 1. The 4-foot diameter, Cold Creek cross-culvert is a CCP that carries stormwater runoff from the Site and under Geysers Road. The cross-culvert discharges into an energy dissipation outlet pool to the left.

Photograph 2. The Cold Creek cross-culvert discharges to a large basin rimed with boulders forming an energy dissipation outlet pool. A significant amount of red-brown sediment had been deposited in the outlet pool.

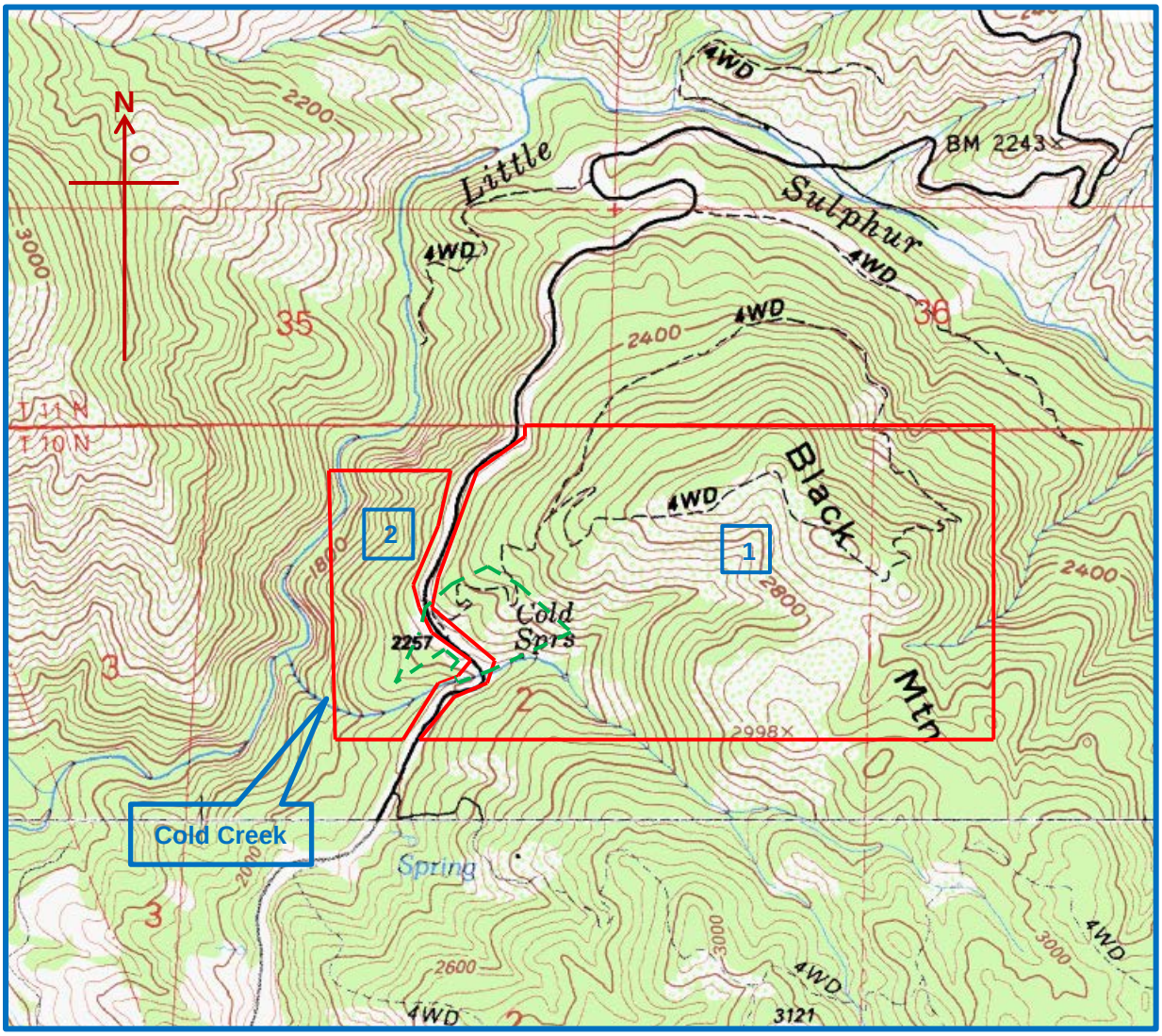
Photographs 3 and 4. Photographs 3 and 4 show sediment deposited in the cross-culvert outlet pool in Cold Creek. The notebook and pen are used as scale to show the extent and depth of the sediment. The depth of the sediment deposit could not be determined.

The inspection team was led by Mr. Cahill and we met with Clint Gerber at the front gate (Google Earth Map 1). Mr. Gerber explained that the property owner purchased the former Cold Springs Ranch and renamed it the Cold Creek Ranch (Photograph 5). The original owner installed a sign at the Site entrance reading "Cold Creek Ranch." Mr. Gerber stated that he is the project manager and controls all development work that is being performed, including obtaining all necessary permits.

Mr. Gerber reported the Site is currently under development to grow cannabis and develop house pads. Mr. Gerber was unable to provide information on the Site including the Assessor's Parcel Number, owner, acreage, or date of purchase. I queried ParcelQuest.com and identified two parcels. As shown in the ParcelQuest.com Map 1 satellite image and SARTopo.com Map 1, the Cold Creek Ranch parcels are located east and west of Geysers Road. Additionally, the Site was purchased by Black Mountain Developers, LLC, and they are located at 67 Luke Drive in Napa, CA, 94558, (no phone number given).



ParcelQuest.com Map 1. ParcelQuest.com satellite map shows 2 parcels outlined in blue, denoted as 1 and 2, and located on either side of Geysers Road. The earthen roads are used to access various areas of the Site including cannabis grow pads. The roads and grow pads can be seen on the satellite image in earthen-brown. Mr. Gerber indicated that additional existing roads had been opened as well.



SARTopo.com Map 1. This topographic map was downloaded from SARTopo.com and shows the two Cold Creek Ranch parcels approximately outlined in red and denoted as 1 and 2 in blue as well the surrounding areas and the watercourses that drain the ranch. Parcel boundaries were drawn by comparing ParcelQuest terrain map to the SARTopo map. Dashed green lines show the extent of the inspection. As previously stated, the Site consists of two parcels shown on ParcelQuest.com Map 1 and SARTopo.com Map 1 with the following information obtained from ParcelQuest:

Parcel 1: APN 131-010-011, 7205 Geysers Road, Geyserville, 226.5 acres
Parcel 2: APN 131-010-012, [7205] Geysers Road, Geyserville, 40.0 acres

Photograph 5. The front gate is marked with a sign reading Cold Creek Ranch with the former owner's last name of "Spaletta" and address posted on it.

The inspection team continued inside the front gate. The entire area immediately inside the gate has been constructed of fill material placed on top of the 4-foot diameter CCP that runs under Geysers Road. It appeared that when Geysers Road was reconstructed for The Geysers over 40 years ago, the 4-foot diameter CCP was placed in Cold Creek and extended an additional 200 feet upstream where fill was placed over it. The fill was graded out and Cold Creek Ranch uses this area as a parking area and equipment storage area. A contractor's trailer, excavator, and 20-foot long wheeled trailer filled with potting mix and many small cannabis plants were stored there (Photograph 6).

Mr. Cahill observed additional earthwork that had been performed since a Stop Work Order had been issued to the Site back on July 22, 2016, for lack of grading permits. PRMD had not issued Cold Creek Ranch a grading permit to date for lack of approved plans. Mr. Cahill explained to Mr. Gerber that earthwork cannot proceed without a grading permit from PRMD and Cold Creek Ranch was in violation of the Stop Work Order. Mr. Gerber insisted earthwork had not occurred on the Site since last July when the Stop Work Order was issued.

Mr. Gerber explained to Mr. Cahill that his equipment operators, TDE Construction, had not performed any earthwork on the Site except for placing an earthen berm near the front gate to prevent sediment and runoff from leaving the Site. In addition, his crew had installed erosion control inside the front gate including straw mulch on disturbed soils and straw mats on a very steep graded road (Road 1) (Photograph 7). Mr. Gerber explained that Randy Jacobszoon with Jacobszoon and Associates in Redwood Valley had prepared an Erosion Control Plan (ECP) for the Site. Mr. Gerber later stated that LACO Associates in Santa Rosa had developed an ECP for the entire Site before Black Mountain Developers, LLC, had applied for grading permits from PRMD. Mr. Cahill explained that he did not have a complete set of plans that he could approve and is waiting for the submittal of an ECP.

Lorie Hammerli explained to me that, during the July 22, 2016 Site inspection, Cold Creek Ranch was illegally diverting water from Cold Spring to irrigate their cannabis plants

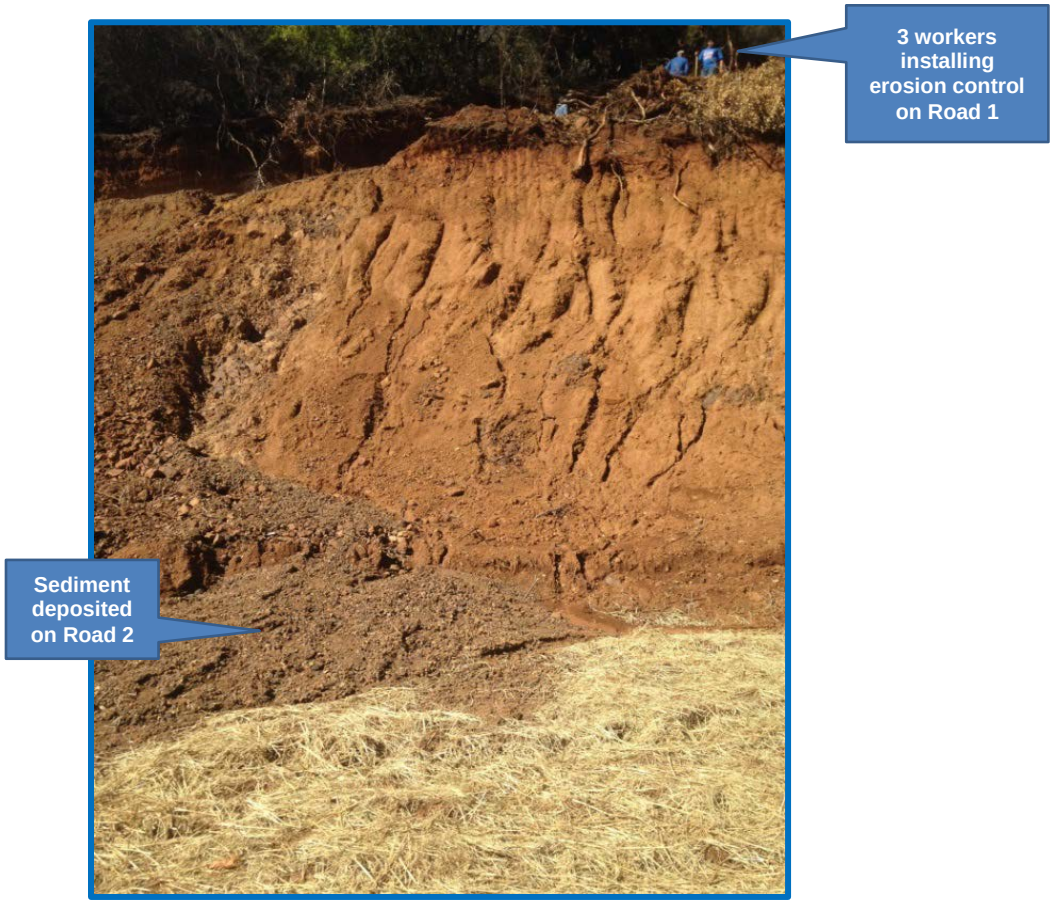
located on grow pads farther up on the mountainside. Ms. Hammerli hiked up Cold Creek to determine if the Cold Spring diversion had been stopped. Ms. Hammerli reported the diversion of Cold Spring had ceased. Warden Reed explained that Cold Creek Ranch was also diverting water from Little Sulphur Creek where Geysers Road crosses Little Sulphur Creek and this diversion had ceased as well. Warden Reed indicated that irrigation water was now being trucked in from an unknown Healdsburg location.

Photograph 6. This photograph shows the graded area and is looking towards Geysers Road. The front gate is located to the right. The exposed soil at the far right is the base of a steep road with a slope of up to 44% that continues up the mountain side. Mr. Gerber said the road was too steep to drive. A contractor's trailer and Caterpillar excavator can be seen in the distance and a trailer loaded with potting soil and small cannabis plants can be seen at the far left. The Cold Creek 4-foot diameter CCP is buried beneath the graded area.

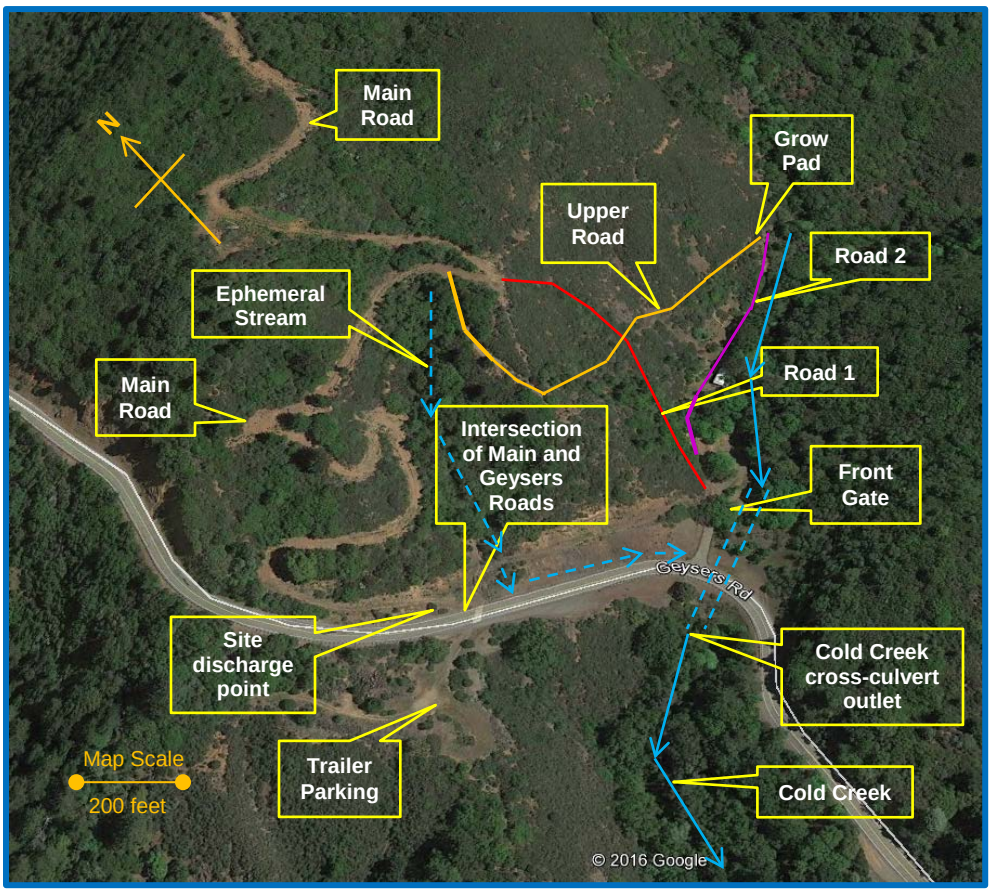
Mr. Cahill observed that two new roads starting from the front gate area had been constructed since the Stop Work Order was issued and made Mr. Gerber aware that this was a violation of the Stop Work Order (Google Earth Map 1). The first road (Road 1) started on the north side of the graded area, or on the right side of Photograph 6 and extended up the mountainside as shown in Photograph 7 (Google Earth Map 1). Mr. Gerber said that after Road 1 was constructed he found it was too steep to drive up or down so he abandoned it. The slope of this road was measured to be 44%. This measurement was taken from the Upper Road (Google Earth Map 1). Mr. Gerber did not have a name for the upper road so I named it the Upper Road for clarity purposes. The County of Sonoma Fire Safe Standards for Roads, Section 12-31(a) states that "No road or driveway shall have a maximum grade in excess of fifteen percent (15%)… A road or driveway may include

grades up to twenty percent (20%) for distances not exceeding three hundred feet (300')' within any one thousand feet (1,000') of road or driveway." It appeared that stormwater runoff would flow off Road 1, out the front gate and onto Geysers Road, and ultimately discharge to Cold Creek.

Three workers were spreading straw on Road 1 (Photograph 7) and two workers from Jacobszoon and Associates were pinning straw matting to the road surface. Mr. Gerber stated this was an existing road that he reopened prior to the July 22, 2016, Stop Work Order, however, he had no documentation to substantiate this and my review of Google Earth Map 1 indicates no evidence a pre-existing road was present. Mr. Gerber stated that Jacobszoon and Associates recommended applying erosion control to Road 1 and abandoning it.



Photograph 7. This photograph shows a large cut in the hillside below Road 1 that extends up the mountain side. The cut is approximately 12 to 15 feet high and workers can be seen spreading straw on the road (note the size of the workers for scale). Recent heavy rains have eroded a large volume sediment off the surface of Road 1 and deposited it as a large fan on the lower road (Road 2) to the left side of the photograph. This area drains towards the Cold Creek cross-culvert inlet.



Google Earth Map 1. The satellite imagery was taken from Google Earth, imagery date March 27, 2015, and shows a small portion of the Cold Creek Ranch that was inspected by the multi-agency inspection team on October 20, 2016. Road 1 is shown in red and was the new road that was later abandoned because it was too steep to safely drive. Road 2 is shown in violet and appeared to be a reopened historic road. Mr. Gerber reported Road 2 was also too steep to safely drive. The Upper Road is shown in orange and appears to be a new road on its eastern end in the area of the grow pad and continues west where a primitive historic road was reopened. Also shown on the map is the Cold Creek cross-culvert outlet, front gate, grow pad, Main Road, Site discharge point, trailer parking, and Cold Creek and an unnamed ephemeral stream. The Main Road continues to the top of the mountain where Mr. Gerber reported several large grow pads have been cleared of vegetation.

The second road (Road 2) started from the graded area and proceeded up Cold Creek canyon along Cold Creek for an estimated distance of 400 feet (Google Earth Map). Mr. Gerber said that this was also an existing road that he had reopened prior to the July 22, 2016 Stop Work Order. Review of Google Earth satellite imagery showed a linear break in the vegetation that may indicate this was a pre-existing road. However, the cut bank and disturbed soils on the road were fresh and had been very recently disturbed within the last 2 to 3 days (Photographs 8 and 9).

The Site received approximately 2.09 inches of rain between October 14, and 17, 2016 (CoCoRaHS.org Table 1). I observed fresh heavy equipment tracks on the earthen surface

of Road 2 and I did not observe any erosion or damage of Road 2 despite the recent rains (Photographs 8 and 9). These tracks would not have survived the recent rains undamaged. Therefore, roadwork occurred on Road 2 after the 2.09 inches of rain fell between October 14 and 17, 2016, not prior to July 22, 2016 as Mr. Gerber had reported. Erosion control was not applied to Road 2 and the road was an estimated 75 to 100 feet from Cold Creek. Any road runoff would discharge to Cold Creek.

Mr. Gerber said that since Road 1 was too steep to drive and had to be abandoned, Jacobszoon and Associates recommended that he reopen Road 2 to access a small grow pad (Photograph 10). Road 2 has a slope of 33% and Mr. Gerber said it was also too steep to safely drive. The County of Sonoma Fire Safe Standards for Roads, Section 12-31(a) states that "No road or driveway shall have a maximum grade in excess of fifteen percent (15%)… A road or driveway may include grades up to twenty percent (20%) for distances not exceeding three hundred feet (300')' within any one thousand feet (1,000') of road or driveway." Mr. Gerber provided the following reasons why Road 2 was reopened, then closed, and erosion control was not in place.

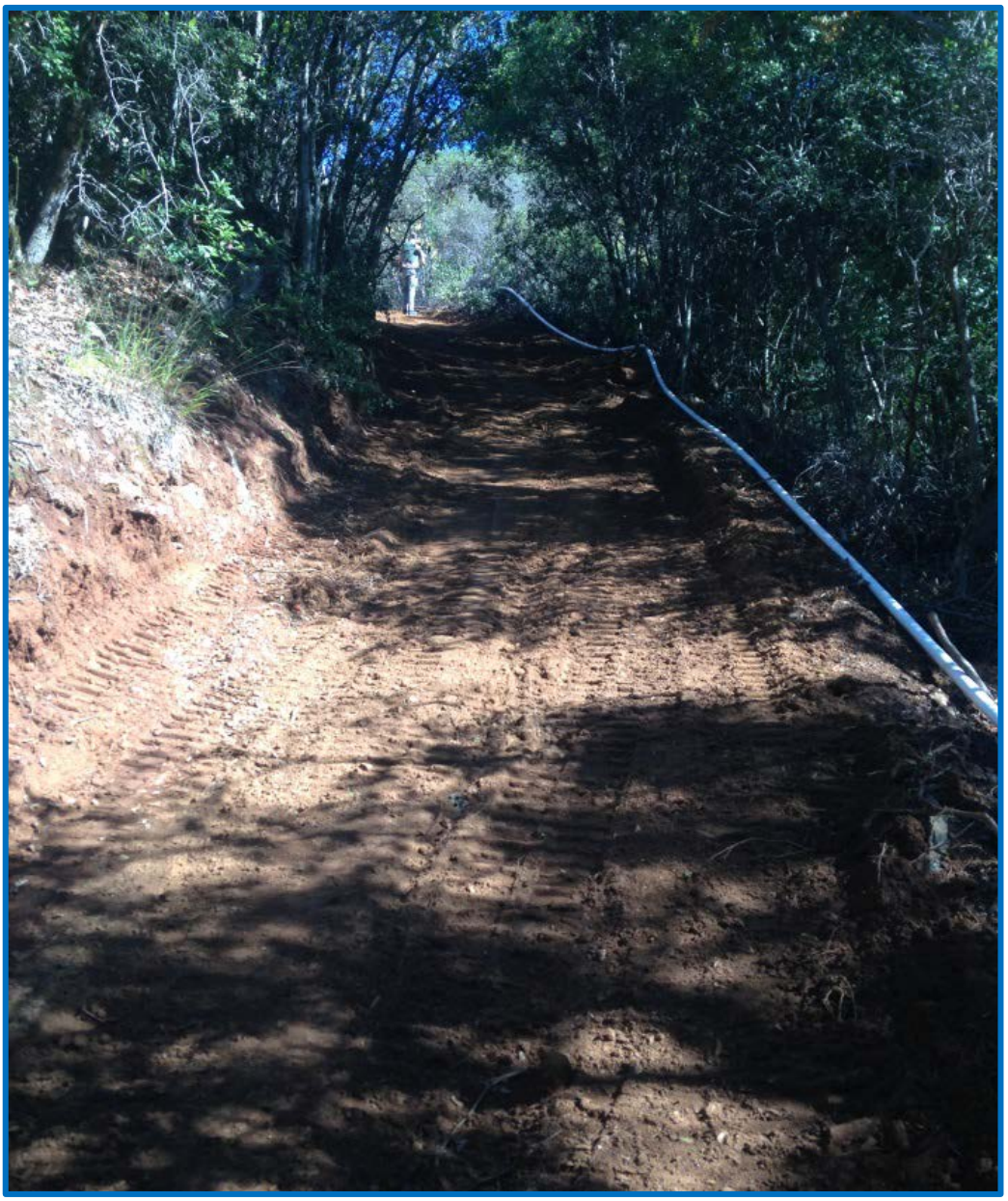
1. The re-opening and grading of Road 2 was done at the direction of Jacobszoon and Associates.
2. Road 2 was being closed at the direction and guidance of Jacobszoon and Associates because it was too steep to drive.
3. Jacobszoon Associates developed an ECP for the Site.
4. LACO Associates developed an ECP for the entire Site.
5. LACO Associates developed grading plans for the Site calling for Roads 1 and 2 to be constructed.
6. A grading plan is currently being developed for the Site by LACO Associates.
7. LACO Associates has never visited the Site and developed the grading plans and ECP using Google Earth and LIDAR imagery.
8. Mr. Gerber is only re-opening existing historic roads.
9. Grading has not occurred on Site since the Stop Work Order was posted July 22, 2016.
10. Site grading has occurred since the Stop Work Order was posted on July 22, 2016, but only at the direction of Jacobszoon and Associates.
11. TDE Construction performed the earth work and they are responsible for the road.

I told Mr. Gerber that he had provided several different and conflicting answers to the inspection team's questions and I would draw my conclusions from the information Mr. Cahill has provided and the Site observations I made during the inspection.

Date	Time	Station Number	Station Name	Total Precip. Inches	State	County
10/20/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/19/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/18/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.11	CA	Sonoma
10/17/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.50	CA	Sonoma
10/16/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.73	CA	Sonoma
10/15/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.14	CA	Sonoma
10/14/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.72	CA	Sonoma
10/13/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/12/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/11/2016	6:48 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/10/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/9/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/8/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/7/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/6/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/5/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma
10/4/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.17	CA	Sonoma
10/3/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.23	CA	Sonoma
10/2/2016	7:00 AM	CA-SN-29	Cloverdale 3.2 ESE	0.00	CA	Sonoma

CoCoRaHS.org Table 1. Rainfall data obtained from the Community Collaborative Rain, Hail & Snow (CoCoRaHS) Network for weather station CA-SN-29 located 3.2 miles east-southeast of Cloverdale, California. This is the closest weather station to the Site with available on-line rainfall data. The rainfall dates of October 14, 15, 16, and 17, 2016, are highlighted in yellow.
http://cocorahs.org/ViewData/ListDailyPrecipReports.aspx.

Photograph 8. The photograph shows Road 2. Mr. Gerber is on the right, Warden Reed is in the center, and Mr. Cahill is on the left. Mr. Gerber said the re-opening and grading of Road 2 was done at the direction of Jacobszoon and Associates. The road had been re-opened within the last few days and the cut bank and disturbed soils on the road were fresh. Fresh heavy equipment tracks can be seen on the surface of earthen Road 2. Any heavy equipment tracks would have been eroded or otherwise damaged by the recent rains. This is an indication that roadwork occurred on Road 2 after the 2.09 inches of rain fell between October 14 and 17, 2016, not prior to July 2016 as Mr. Gerber had reported. In addition, Mr. Gerber reported that Randy Jacobszoon directed the erosion control work performed on the road. However, there was no erosion control performed on the road as shown in this photograph and Photograph 9.



Photograph 9. Warden Reed is standing near the top of Road 2. The 2-inch white PVC water pipe leads to a grow pad at the end of Road 2 near Warden Reed. The road had been re-opened within the last few days and the cut bank and disturbed soils on the road were fresh. Additionally, fresh heavy equipment tracks can be seen on the road. These tracks would not have survived the recent rains undamaged.

A narrow grow pad occupied a portion of an apparent pre-existing segment of road excavated into the mountain side at the top of Road 2 with the cutbank appearing to have been squared off earlier in the year (Photograph 10). Mr. Gerber could not provide any information on the grow pad. A poorly maintained 5-foot high wire field fence surrounded the grow pad. The grow pad contained approximately 50, 2-gallon black plastic pots filled with potting soil. Cut cannabis stalks could be seen in some of the pots indicating this was an active grow pad earlier in the year and the plants had been harvested.

A new road (Upper Road) had been cut into the dense chaparral-covered hillside immediately below the grow pad (Google Earth Map 1 and Photograph 11). This short section of the Upper Road was narrow, approximately 7 feet wide and appeared to to have been constucted within the last few days. The cutbank was fresh and the road surface consisted of dry pulverized yellow-brown soil with fresh heavy equipment tracks. Many cubic yards of dry pulverized soil had been pushed over the fill slope and were resting on the steep hillside. There was no erosion control applied to the road surface or the fill slope soils. Mr. Gerber stated that he did not construct a new road, rather he had reopened a historic road and this work was done prior to the issuance of the Stop Work Order on July 22, 2016. However, the observed fresh heavy equipment tracks would not have survived the recent rains. Therefore, roadwork occurred on the Upper Road after the 2.09 inches of rain fell between October 14 and 17, 2016, not prior to July 22, 2016 as Mr. Gerber had reported. Additionally, it appeared the old road was occupied by the grow pad and the new Upper Road was cut into the hillside below the grow pad.

Approximately 3 ½ feet above the surface of the new Upper Road it appeared there were remnants of a historic road surface. Approximately 150 feet down the new Upper Road, a small bulldozer was parked on the road (Photograph 12). A short distance past the area of the bulldozer it appeared that the new Upper Road merged with the driving surface of the reopened historic road. Reopening a historic road normally entails removing vegetation from the road surface and removal of slough from the cut bank. However, in this case, it appearred an entirely new road was constructed from the top of Road 2 to a short distance past the bulldozer.

Photograph 10. This photograph shows a long narrow grow pad install on a portion of an apparent pre-existing segment of road excavated into the mountain side at the upper end of Road 2 and the eastern end of the Upper Road. The cutbank appears to have been squared off earlier in the year. A 5-foot high field fence, white PVC waterline, and numerous 2-gallon grow pots were scattered about the grow pad. I observed cut cannabis stalks in many of the grow pots.

Photograph 11. This photograph shows a new section of the Upper Road had been cut into the hillside immediately below the grow pad. The grow pad is located to the upper right out of the photograph. This section of road was approximately 7 feet wide and constucted within the last few days. The cutbank was fresh and the road surface consisted of dry pulverized yellow-brown soil with fresh heavy equipment tracks. The fresh heavy equipment tracks would not have survived the recent rains. Many cubic yards of dry pulverized soil had been pushed over the fill slope and was resting on a steep hillside. Erosion control has not been installed.

Photograph 12. This photograph shows the new portion of the Upper Road. The grow pad can be seen on the upper right side of the photograph. From left to right, Warden Reed, Mr. Cahill, and Mr. Gerber can be seen standing on the road. Although Mr. Gerber maintained earthwork had not occurred on Site since the Stop Work Order was posted on July 22, 2016, I observed recent bulldozer tracks on the road with the bulldozer parked on the road and freshly disturbed soil in front of the bulldozer's blade. Bright yellow straw matting can be seen in the background on the now abandoned Road 1. Road 1 had a measured slope of 44%.

A short distance past the bulldozer on the Upper Road, it appeared the historic road had been reopened with vegetation removed from the road surface and cutbank slough removed and pushed over the side of the road (Photograph 13). The road surface was crudely graded with an outer berm along most of its length preventing the road surface from properly draining. Grading work on the Upper Road appeared to have been performed recently because the cutbank, road surface, and side cast materials were still fresh and had not been "settled" or eroded by the recent rains. In addition, fresh heavy equipment tracks were observed on the Upper Road, including a small tracked bulldozer with a pile of scraped soil in front of its blade (Photographs 12 and 13). The Upper Road intersected the now abandoned Road 1 (Photograph 12).

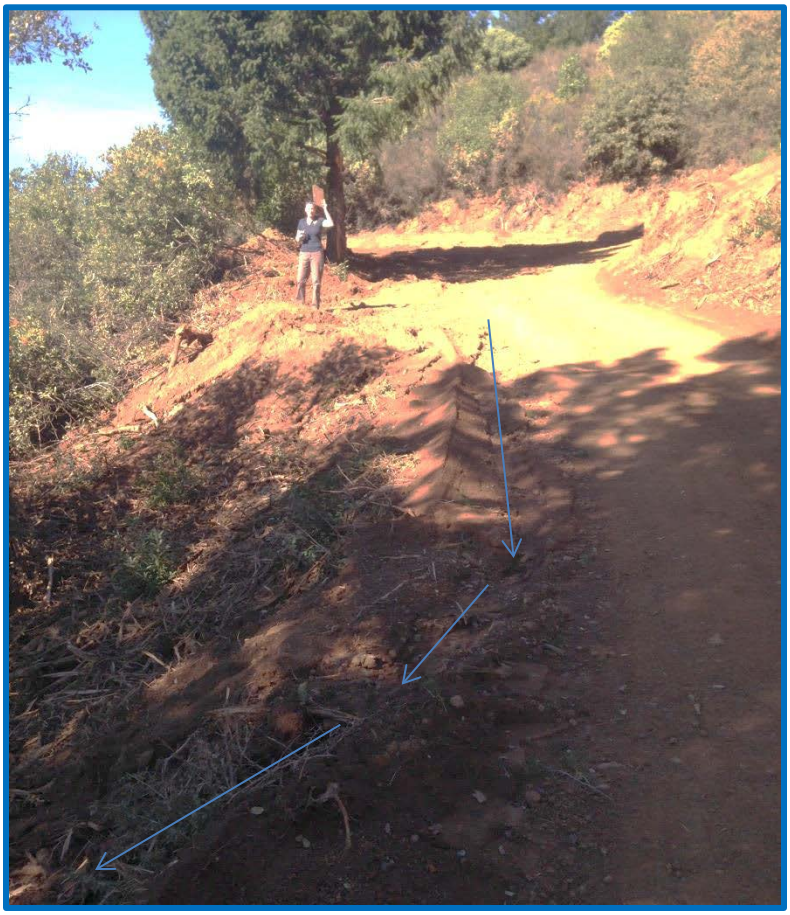
At the intersection of the Upper Road and abandoned Road 1, I spoke to two Jacobszoon and Associates employees who were installing straw matting to exposed soils on Road 1. They reported that a significant amount of soil erosion had taken place during the last several days of rain and said the soil was discharged to Cold Creek. I told them that I had inspected the Cold Creek cross-culvert outlet pool and observed a significant amount of sediment in it. I took a slope measurement of Road 1 and determined it to be 44%. The inspection team walked the Upper Road to its intersection with the Main Road and continued up the Main Road an additional 500 feet before turning back.

Photograph 13. This photograph was taken approximately 300 feet west of Photograph 12. The photograph shows an apparent historic road that had been reopened with vegetation removed from the road surface and cutbank slough removed and pushed over the side of the road. The road surface was crudely graded with an outer berm along most of its length. Grading work on the Upper Road appeared to have been performed recently because the cutbank, road surface, and side cast materials were still fresh and had not been "settled" or eroded by the recent rains. The eastern half of the Upper Road is located above Road 2 and from 150 to 300 feet away from Cold Creek.

The Main Road starts on the east side Geysers Road opposite the entrance to the trailer parking area (Google Earth Map 1). The recently graded earthen road winds its way up the side of the mountain using several switchbacks (stacked road). Mr. Gerber said the road had several grow pads along its 2.4 mile length (ParcelQuest.com Map 1, SARTopo.com Map 1, and Google Earth Map 1). The inspection team started approximately 500 feet past the intersection of the Upper Road and the Main Road and walked an estimated 2,000 feet down the Main Road to Geysers Road. The inspection team found the Main Road was roughly graded earth with poor drainage and intended for year-round use. Graded soil and brush was side cast and a majority of the road had an outside berm preventing drainage from flowing off the road except in isolated areas resulting in concentrated flow and sediment transport into dense chaparral (Photograph 14). The road surface was experiencing significant soil erosion and the sediment runoff discharged down the mountainside an unknown distance. The Site chaparral was a dense impenetrable thicket preventing access to determine the extent of sediment deposition (Photograph 15). Mr.

Gerber was advised by the inspection team to properly engineer the road to drain and surface the road with rock to minimize erosion of the running surface and allow vehicle traffic to safely access their grow pads during all weather conditions without sediment discharges. Mr. Gerber indicated that Jacobszoon and Associates and LACO Associates where developing an ECP for all the roads on the Site.

The Main Road was quickly inspected because of time constraints. One ephemeral stream was identified at the intersection of the Upper Road and Main Road (Google Earth Map 1) and continued down the mountain side where it entered a culvert and discharged to the inside ditch of Geysers Road (Google Earth Map 1). Concentrated runoff from sections of the Main Road will discharge to the ephemeral stream. I explained to Mr. Gerber the discharge of muddy stormwater off the Main Road to any stream draining the Site including Little Sulphur Creek would be in violation of the California Water Code. I also told Mr. Gerber that concentrated flow crossing the roads would require adequately sized culverts or other engineered alternatives that might require permits from our agency as well as CDFW and the US Army Corps of Engineers.



Photograph 14. Ms. Hammerli is shown standing on side cast soils and brush typically observed along the Main Road. The bright yellow color seen on the Main Road's running surface is exposed soil and not scattered straw. The color of this photograph has been modified to show erosion of the road surface. Road surface erosion shown here includes an erosion rill following the outside berm along the road and a small gully running down the side cast soils. Blue arrows indicate the direction of concentrated flow and soil erosion.

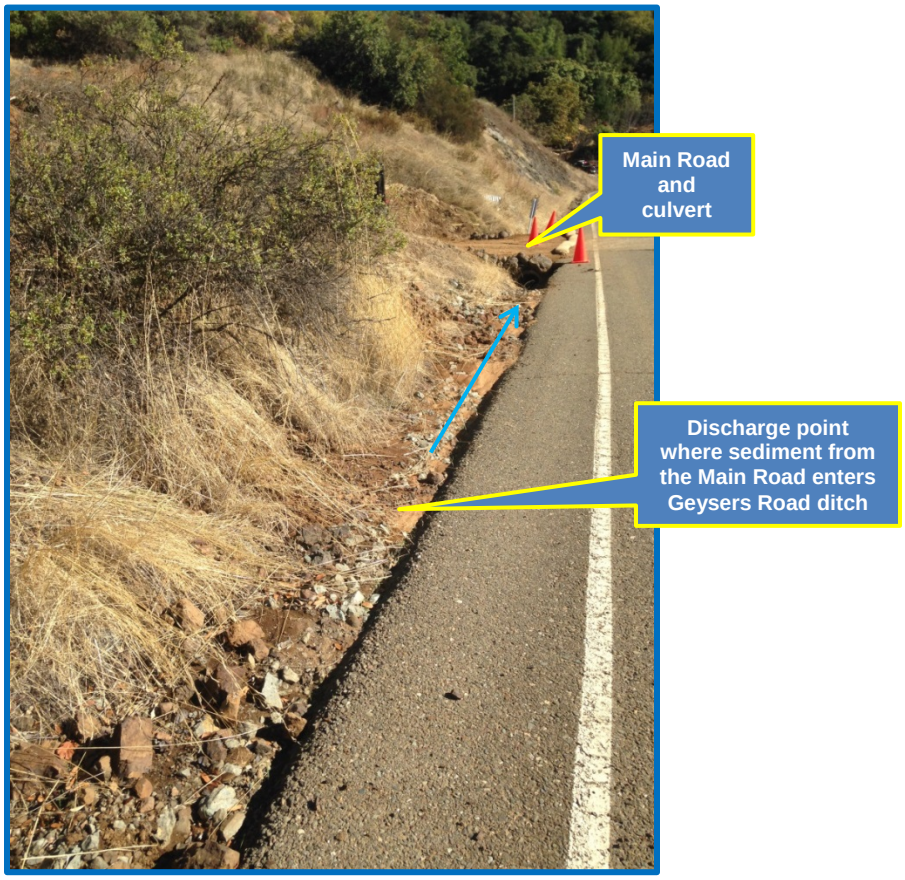
Photograph 15. The Main Road was experiencing significant soil erosion. This photograph shows sediment discharged off the road and deposited into the chaparral duff by concentrated stormwater runoff. The Site chaparral was a dense, impenetrable thicket preventing access to determine the extent of sediment deposition.

I observed sediment discharge from the Main Road to the inside ditch of Geysers Road near the intersection of the two roads (Google Earth Map and Photograph 18). A majority of the Main Road was constructed with an outside berm preventing stormwater runoff from draining off the road except in isolated areas. The lowermost switchback immediately above Geysers Road was constructed with an outside berm that retained road drainage until stormwater runoff eroded through the road's outside berm and flowed down slope into the inside ditch along Geysers Road (Photographs 16 and 17).

A significant amount of orange-brown sediment was deposited in the Geysers Road inside ditch (Photograph 18). The Geysers Road inside ditch entered a culvert under the Main Road (Photograph 18) and continued to flow down the inside ditch of Geysers Road for an estimated 500 feet where it entered a second culvert near the road leading to the front gate. It appeared the second culvert was connected to a large drop inlet that flowed into the 4-foot diameter CCP that runs under Geysers Road. The Geysers Road inside ditch was dry at the time of the inspection.

Photograph 16. This photograph show the Main Road's deeply eroded outside berm and the location where concentrated stormwater road runoff eroded through berm and flowed down slope into the inside ditch along Geysers Road. The blue arrows show the location of concentrated stormwater road runoff and direction of flow. I did not observe runoff at this location during the inspection.

Photograph 17. The author is standing on the Main Road and looking towards the eroded outside berm of the Main Road. At this location, stormwater road runoff flowed down slope and into the inside ditch of Geysers Road. Warden Reed and Ms. Hammerli can be seen on Geysers Road. The blue arrows show the location of concentrated road runoff and direction of flow. I did not observe runoff at this location during the inspection.



Photograph 18. A significant amount of orange-brown sediment from the Main Road was deposited by stormwater runoff in the Geysers Road inside ditch (Photograph 18). The Geysers Road inside ditch entered a cross-culvert just past the intersection of the Main Road and Geysers Road. The blue arrow shows the direction of flow.

The inspection team met Darrel Crawford while walking down the Main Road. Mr. Crawford said that he was one of the Cold Creek Ranch owners and he was a part owner of Black Mountain Developers, LLC. Mr. Crawford did not appear to be familiar with the Site and said he left all site development responsibilities to Mr. Gerber. I told Mr. Crawford that the muddy discharge of stormwater off the Main Road to any stream draining the Site including Little Sulphur Creek was prohibited and would be in violation of the California Water Code as well as the Water Quality Control Plan of the North Coast Region. I explained to Mr. Crawford that Little Sulphur Creek contained threatened steelhead (*Oncorhynchus mykiss*) and this discharge of sediment could be considered a violation of the Endangered Species Act. Mr. Crawford said he was aware of our concerns regarding the discharge of muddy stormwater road runoff to Cold Creek and Little Sulphur Creek. Mr. Crawford stated that he was aware that muddy stormwater discharge to waterways was considered pollution and said he had developed several vineyards in Napa Valley and understood the inspection team's concerns. Mr. Crawford also said he is familiar with the NPDES Construction General Permit and said Cold Creek Ranch had obtained the permit because he had received an auto-response e-mail from the State Water Resources Control Board stating they had receipt of his permit application and Cold Creek Ranch was now covered by the permit. Mr. Crawford could not provide a date when he received the e-mail from the State Water Resources Control Board.

The inspection team continued down to a trailer parking area where Mr. Crawford had parked three large recreational vehicles and indicated several of his workers lived there (Photograph 19). Approximately 100 feet below the trailer parking area, a second equipment storage area is located. Two large steel ocean cargo containers were stored here and Mr. Crawford indicated they were used to store Site supplies (Photograph 20). Both of these areas had exposed earth with concentrated stormwater runoff flowing off-site and down a 200-foot long trail that leads down the mountainside into dense, impenetrable thicket of chaparral preventing further access (Photograph 21). The stormwater runoff transported sediment off Site and into dense chaparral.

Photograph 19. The trailer parking area is located on the west side of Geysers Road (Google Earth Map). Mr. Crawford had parked three large recreational vehicles and indicated several of his workers live here.

Photograph 20. This photograph shows the steel cargo container and miscellaneous equipment storage area. This storage area is located approximately 100 feet below the trailer parking area. Mr. Crawford indicated the cargo containers are used to store Site supplies. The equipment storage yard was unprotected earth and its surface is experiencing soil erosion. The equipment storage yard was dry at the time of the inspection although I observed evidence of runoff flowing off-site and down a trail blazed through the dense chaparral.

Photograph 21. This photograph shows the 200-foot long trail that leads down the mountainside into a dense, impenetrable thicket of chaparral. Concentrated stormwater runoff from the equipment storage area has eroded a rill into the trail and transported sediment into the chaparral.

Inspection Conclusion Meeting

At the conclusion of the inspection, the inspection team met with Mr. Gerber and Mr. Crawford in the trailer parking area to discuss our observations. Mr. Cahill explained to both Mr. Gerber and Mr. Crawford the Site was red-tagged with a Stop Work Order on July 22, 2016, for violating the County's grading ordinance because the Site had no grading permit. Mr. Cahill explained that Site grading had continued and they had now violated the Stop Work Order. Mr. Cahill explained that a complete set of grading plans had not been submitted for plan review, there was no Erosion Control Plan, and no evidence of a NPDES General Construction Permit had been submitted to the County.

Mr. Cahill made it clear to Mr. Gerber and Mr. Crawford that they were in violation of the Sonoma County Grading Ordinance and were violating the Stop Work Order. Mr. Gerber provided several reasons why grading had been performed after the Stop Work Order was posted as well as stating grading did not occur after the Stop Work Order was posted along with several more explanations regarding the Erosion Control Plan. Mr. Cahill excused Mr. Gerber from the meeting several times because of inconsistent and conflicting statements.

Warden Reed told Mr. Gerber and Mr. Crawford to remove all mechanized construction equipment from the Site to prevent further earthwork.

Warden Reed and I explained to Mr. Crawford that the road work was substandard and discharged sediment to ephemeral waterways tributary to Cold Creek and Little Sulphur Creek. Discharging sediment to surface waters was prohibited and they must follow their Erosion Control Plan and upgrade their road system. I told Mr. Crawford and Mr. Gerber the discharge of sediment to streams was prohibited and they would be in violation of the California Water Code as well as the Water Quality Control Plan of the North Coast Region. Additionally, Little Sulphur Creek is a known steelhead (*Oncorhynchus mykiss*) stream. In addition, steelhead are listed as a threatened species under the Endangered Species Act and by discharging sediment to Little Sulphur Creek, they were inhibiting the recovery of a threatened species and therefore, in violation of the Endangered Species Act.

I advised Mr. Crawford to contact Diana Henrioulle of our office and enroll in the Cannabis Cultivation Waste Discharge Requirements regulatory program. I explained to him that all cultivators of cannabis of 2,000 square feet in area or more are required to obtain this state permit and comply with it.