
North Coast Regional Water Quality Control Board

February 7, 2018

Mr. Douglas Cole et. al.
92520 Highway 96
Somes Bar, CA 95568
guestranch@marblemountainranch.com

Dear Douglas and Heidi Cole:

Subject: **Notice of Violation No. 4 of Order No. R1-2016-0031** and Response to your June 30, 2017 and September 13, 2017 letters

File: Douglas and Heidi Cole, Marble Mountain Ranch, 92520 Highway 96, Somes Bar, Siskiyou County APN 026-290-200, Klamath River Watershed WDID No. 1A15024NSI

The purpose of this letter is to notify you that you remain in violation of the Cleanup and Abatement (Water Code section 13304) and Water Code section 13267 Order No. R1-2016-0031 (Order) issued by the North Coast Regional Water Quality Control Board Executive Officer on August 4, 2016. This letter also responds to your letters, dated June 30, 2017 and September 13, 2017 (Attachment 1), in which you refute Regional Water Board requirements and decline to comply with Order directives based primarily upon holding an established pre-1914 water right for the Marble Mountain Ranch (MMR). In addition, you request the status of our review of the Form 200, provided to us with your June 30, 2017 correspondence (Progress Report) (Attachment 2). The Form 200 reiterates a scope of work previously put forward to address erosion at the Irving Creek outfall, which had been rejected with the reason stated in Notice of Violation (NOV) No. 3 (Attachment 3). As you brought up the issue again, we will provide a review of the Form 200 and analyze the deficiencies as compared to the requirements of the Order. Our response is provided in the following order: 1) We briefly address the Water rights Hearing and CAO Compliance requirements. 2) We address your lack of compliance with CAO Directive No. 1, which is a required deliverable not affected by the outcome of the recent Water Rights Hearing, the results of which would facilitate compliance. Although you claim you have complied with

Directive No. 1 we point out that the information we have received does not fully address the Directive No. 1 requirements. 3) We respond to your June 30 2017 progress report.

In summary, it appears you have determined that you do not need to comply with the Order requirements. This is of concern to the Regional Water Board and we encourage you to cooperate; cooperation is taken into consideration in assessing penalties on delayed compliance or failures to comply, both of which we find to be relevant to analyzing this case for further enforcement efforts.

This NOV No. 4 puts you on notice that the Regional Water Board continues to find Marble Mountain Ranch in violation of Order Directives as listed in the attached NOV No. 3. Violation of Order directives may lead to enforcement action and administrative or judicial civil liability. These penalties can be assessed on a per day basis for each day a directive due date has passed without the Regional Water Board receiving an adequate response. At this time, the Executive Officer has not granted an extension to deliverable due dates.

State Water Resources Control Board Hearing-November 13-17, 2017

The State Water Resources Control Board hearing team held a water right hearing that addressed your water diversion. The key issues in the Notice of Public Hearing were:

1. Does the past or current diversion or use of water by Douglas and Heidi Cole and Marble Mountain Ranch constitute a waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, particularly in light of any impacts to public trust resources?
2. If the past or current diversion or use of water by Douglas and Heidi Cole and Marble Mountain Ranch constitutes a waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, what corrective actions, if any, should be implemented, and with what time schedule should they be implemented?
 - a. How should the implementation time schedule for any corrective actions be coordinated with the requirements of the Cleanup and Abatement Order issued by the North Coast Regional Water Quality Control Board?

While a final decision from the State Water Resources Control Board remains pending, Directive No. 1 of the Order is not affected by the outcome of the hearing, and is long overdue. Directive No. 1 requires the submission of a report to evaluate alternatives and recommend a method to increase water and energy efficiency and to reduce the volume of water diversion.

Order Directive No. 1

Directive No. 1 remains in effect and requires compliance to address the scope of the issues relevant to the Order. As of December 13, 2017, **Marble Mountain Ranch is 424 days late in complying with Directive No. 1. The Directive remains in effect.** Directive No. 1 states:

1. *Retain an appropriately licensed and experienced California Licensed Professional(s) to evaluate, and provide recommendations on the following:*

Evaluate the operation of the Pelton wheel to determine if there are methods of diversion operation that would increase efficiency and reduce the required volume of the diversion, such as piping the diversion flow for example. Provide a report including recommendations based upon this evaluation. The evaluation shall consider the following:

- a. *Water balance – in vs. out;*
- b. *Water quality review – in vs. out;*
- c. *Review onsite water needs and usage, and hydropower generation;*
- d. *Review opportunities to optimize water needs and usage for power generation;*
- e. *Review opportunities to reduce water loss or head loss; and*
- f. *Design a delivery system that optimizes water conservation.*

*In the event that this evaluation concludes that a piped delivery system is appropriate, develop a plan to decommission the ditch by removing the outboard berm and restoring all affected watercourses. In addition, provide design standards for slope restoration and outsloping to ensure evenly distributed surface flows. All bare soils shall be stabilized with erosion controls and replanted with native vegetation. **Submit all information and recommendations as described above on or before 5:00 pm October 15, 2016.***

In your September 13, 2017, letter to Kenneth Petruzzelli, you indicate that the scope of work required by Directive No. 1 is complete, will not be repeated, and that no additional work will be done. We reviewed our record and do not find a comprehensive report covering the requirements of Order Directive No. 1. We are willing to review the information you reference in the September 13, 2017, letter; however, we have not received the reports or data. The information we have listed and summarized below does not meet all of the requirements specified in Directive No. 1. In addition, in item 3 described below, this scope of work does not appear to have been completed as referred to in an email forwarded by Craig Tucker to Taro Murano (Attachment 4). In the email, Will Harling discusses funding for a similar scope of work as a prelude to scheduling a stakeholder meeting. In the email, Will Harling recognizes that the items 1 and 2 below do not address the issue of energy and water efficiency in the context of assessing alternatives for compliance. In Item 4, we find a discussion clarifying diversion flows but not an answer to Directive No. 1 requirements.

Identifying the best alternative for the diversion and energy needs of Marble Mountain Ranch additionally facilitates compliance with the National Marine Fisheries Service recommended bypass flows (Attachment 3 E).

1. Marble Mountain Ranch Stanshaw Creek Water Rights Report (Lennihan Report) (Attachment 6)
2. Marble Mountain Ranch Water Rights Investigation: Water Use Technical Memorandum- Prepared for the Mid Klamath Watershed Council Prepared by Cascade Stream Solutions. A supporting document to the Lennihan Report. (Attachment 7)
3. WR-81 2014-11-12 Email CTucker@Karuk to TMurano@SWRCB re MMR physical solutions (Attachment 5 includes Will Harling discussing energy and water efficiency analysis)
4. WR-28 Letter 1995-05-05 Letter Mgoss to Van Dyke flow measurements (Attachment 7)

Discussion of the Lennihan Report

The Lennihan Report does not provide information relevant to Order Directive No. 1; the report is primarily a review of the Water Right you are claiming. There is no analysis of potential alternatives for utilizing the water actually put to beneficial use for domestic purposes and for power generation in the context of assessing the MMR operations to determine if there are alternative methods to provide equal or greater benefit to correcting violations and protecting beneficial uses. Having such information allows us to work with you to identify the most effective alternative considering the competing beneficial uses. The Lennihan report states that you replaced the 100 kw Pelton Wheel installed in 1965 to obtain greater efficiency, stating "Mr. Cole estimates that 30-35 kW is produced when the volume diverted from Stanshaw Creek is approximately 3 cfs." We know from your testimony and the testimony of others at the hearing that your operation of the Pelton Wheel is not necessarily an efficient system as you testified and the Lennihan Report describes that you have to heat water with the excess electricity when operating the Pelton Wheel. This indicates that there is waste occurring and there are likely alternatives to increase water and energy efficiency at MMR (reference Attachment 9). As there are clearly competing beneficial uses and ongoing erosional problems with the current system of diversion operation and maintenance and MMR water utilization, the Directive No. 1 report is necessary. In addition, we note that at some point you did some sort of analysis of your power needs and the water needed to run the Pelton Wheel when you decided to replace the existing Pelton Wheel. This is based upon the commentary of Douglas Cole discussed in the Lennihan Report (Attachment 5 page 002424) and in the MMR Water Rights Technical Memorandum by Cascade Stream Solutions (Attachment 6 page 002448). The decision to install and replace an existing 100 kW Pelton Wheel with a different Pelton Wheel, must have required some analysis.

Discussion of the MMR Water Rights Investigation: Water Use Technical Memorandum (Technical Memorandum) - Prepared for the Mid Klamath Watershed Council by Cascade Stream Solutions

The Technical Memorandum provides base line information regarding water use for power generation and some discussion of energy needs and provides rating curves for various flows through a Pelton Wheel and the potential power produced. The Technical Memorandum assumes that the operation of the Pelton Wheel by Douglas Cole is at 80% efficiency based upon information provided to Cascade Stream Solutions by Douglas Cole. In the Technical Memorandum, it is not clear how this 80% efficiency was calculated or derived; we find no basis for this statement. The Technical Memorandum also fails to identify potential operational periods for diverting flows in the context of the National Marine Fisheries Service (See Attachment E in NOV No. 3) recommended diversion and return flow requirements, as well as the seasonal variation in power production needs¹.

To conclude, the Technical Memorandum developed does not analyze alternatives based upon the operational parameters available to MMR today, nor does it provide that analysis for the situation existing at the time that the Technical Memorandum was published. These parameters are: 1) operational periods for diverting flows in the context of the National Marine Fisheries Service recommended diversion and return flow requirements; 2) the report required by Order Directive No. 1 requires discussion of seasonal variation in power production needs. This discussion requires framing in the context of the Directive No. 1 report requirements and identifying the range of feasible alternatives available to MMR to comply with the Regional Water Board, and NMFS recommendations in so far as applicable.

Letter 1995-05-05 Letter Mgoss to Van Dyke flow measurements

In this letter, we find the clarification of diversion flows addressed in the subject correspondence and a history of the diversion operations mentioned. This letter does not satisfy Directive No. 1 requirements. However, the letter does provide additional insight into the time the diversion ditch has likely been causing water quality problems through personal discussion describing observations of ditch berm overtopping occurring in the 1970's.

Please submit a complete report to comply with Directive No. 1 of the Order within 45 days. This shall not be construed as extension to the compliance date in the Order. The Regional Water Board may take enforcement action resulting in the assessment of administrative or judicial civil liability for failure to meet Order requirements.

¹ On August 3, 2016 the Division of Water Rights and Regional Water Board received the NMFS bypass flow recommendation letter on August 4, 2016 the RWB issued the Final Cleanup and Abatement Order R1-2016-0031. All assessments required by the CAO would inherently require analysis of the NMFS bypass flows recommendation in the context of assessing compliance.

June 30, 2017 Doug and Heidi Cole Progress Report

In your June 30, 2017 Progress Report and at the Water Rights Hearing you raise the following issues and request our response to these items.

Ability to Pay

The Progress Report reiterates that you do not have the financial resources to comply and are seeking funding opportunities. As you are aware, the Water Rights Hearing on this matter covered your ability to pay in the rebuttal. Please refer to Attachment 9, for our consideration of your ability to pay.

Form 200

We previously reviewed much the same project in NOV #3. We acknowledge that you have provided a bit more detail and will again point out what is required to comply with the applicable directive for the scope of work. To initiate this discussion, we identify that the Form 200 submitted is in direct response to requirements specified in Directive No. 2 of the CAO. We provide Directive No. 2 below for purposes of discussion.

Order Directive No. 2

Requires a Restoration and Monitoring Plan; the due date for the plan was September 10, 2016. The Progress Report form 200 does not adequately address Directive No. 2. As of December 13, 2017, we have not received a plan meeting Directive requirements. **Marble Mountain Ranch is 460 days late in meeting this requirement.** The Directive remains in effect. Directive No. 2 states:

2. *Retain an appropriately licensed and experienced California- licensed professional to evaluate, assess, and develop a Restoration and Monitoring Plan (RMP) to restore and stabilize the head cut and slope at the outlet of the Stanshaw Creek diversion to the unnamed tributary of Irving Creek. Submit the plan by **September 10, 2016**, to the Executive Officer for review and approval.*
 - a. *The RMP shall (1) restore the vegetative and hydrological functions of the damaged streams to ensure the long term recovery of the affected streams; and (2) replant the slopes and streamside areas with native vegetation to prevent erosion and sediment delivery to streams.*
 - b. *The RMP shall include and apply best management practices for all current and planned work associated with construction activities affecting, or having the potential to impact, the ditch outfall, unnamed tributary and Irving Creek. The RMP shall contain, at a minimum, design and construction standards, specifications, and designs for stream restoration, surface drainage controls, erosion control methods and standards for unanticipated precipitation during restoration, compaction standards, an implementation schedule, a monitoring and reporting plan, and success criteria meeting the requirements specified herein.*

- c. *The RMP shall include map(s) and/or project designs at 1:12000 or larger scale (e.g., 1:6000) that delineate existing site conditions including existing channels, the projected restored slopes and stream channels, illustrating all restoration plan work points, spoil disposal sites, re-planting areas, and any other factor that requires mapping or site construction details to complete the scope of work.*
- d. *The RMP shall include a time schedule for completing the work including receiving any necessary permits from State, County and/or federal agencies that may be required. The time schedule must adhere to any regulatory deadlines prescribed by the State Water Resource Control Board or North Coast Regional Water Quality Control Board.*
- e. *To ensure a successful re-vegetation/earthen stabilization effort, site restoration and mitigation, the Discharger shall monitor and report for five years. All tree and shrub plantings must have a minimum of 85% success of thriving growth at the end of five years with a minimum of two consecutive years (two growing seasons) of monitoring after the removal of irrigation. Planting shall be adequately spaced to ensure adequate vegetative cover to control surface erosion and increase soil stability. In the event the re-planting fails, re-planting is required and the monitoring shall be extended for another five years until the 85% success rate of vegetation re-establishment is accomplished. The Dischargers are responsible for replacement planting, additional watering, weeding, invasive/exotic eradication, or any other practice to achieve the success criteria.*
- f. *The RMP must include a time schedule for completing the work, including receiving any necessary permits from State, County and/or federal agencies that may be required. The time schedule must describe and include installing temporary erosion control measures prior to October 15, 2016, and completion of slope and ditch outlet restoration by October 15, 2017.*
- g. *A monitoring plan is required for all site restoration and replanting to determine the success of stream restoration efforts and re-vegetation. The monitoring plan must include regularly scheduled inspections, and established monitoring photo points of sufficient number to document the site recovery for five years or until the Site is restored, mitigation is complete, vegetation is reestablished, erosion is no longer ongoing and meets the success criteria in the approved RMP. These photo-documentation points shall be selected to document the stability of the tributaries. The Dischargers shall prepare a site map with the photo-documentation points clearly marked. Prior to and immediately after implementing the restoration and/or mitigation, the Dischargers shall photographically document the pre- and post-conditions of the tributaries at the pre-selected photo-documentation points. The Dischargers shall submit the pre-restoration photographs, the post-restoration photographs, and the map with the locations of the photo-documentation points to the Water Board as part of the as-built report as defined below;*

The monitoring plan must include regularly scheduled inspection dates. We recommend October 15, January 5, and March 1 of each year, and a monitoring report is required within 30 days of each inspection. Monitoring Reports shall summarize monitoring results; describe any corrective actions made or proposed to address any

*failures of the Site and restoration measures (features to be assessed for performance and potential failure include, but are not limited to, erosion controls, stream bed and bank erosion, sediment discharges, work, and re-vegetation); and include narrative and photo documentation of any necessary mitigation and evidence of successful restoration and Site recovery for five years, or until Site recovery meets the approved success criteria. At the conclusion of restoration work, when the site is stable and the monitoring program has been fulfilled, submit a Summary report by **January 1, 2021, or the year that site remediation and replanting meets the approved success criteria.** The Executive Officer or designee will review the report and determine if the site meets all the requirements and the Order can be terminated.*

As stated in NOV No. 3, we recognize that in your April 10, 2017, correspondence you submitted a brief narrative description developed by ECORP Consulting requesting permission to conduct work in the Irving Creek Drainage to stabilize the outfall, claiming that due to having equipment on site this was an opportune time to do the work.

On June 30, 2017, in the Progress Report you submitted a Form 200 addressing the same Directive and reiterating the scope of work with some minor variations. The Form 200 is inadequate in design details, project scope, and specifics required by Directive No. 2. In addition, to reiterate, the Regional Water Board identifies the Irving Creek outfall as a violation of the Water Code, as such the remedy available to you is to provide a scope of work that fits the criteria provided in Directive No. 2 above. The plan submitted lacks adequate project designs for us to review and approve for implementation. The primary emphasis of the Directive No. 2 mitigation of the diversion discharge at Irving Creek outfall is structural designs. We do not consider this a site where installing a silt fence or straw wattle will provide remedies. These are measures we expect applied to the site post construction to control erosion of exposed soils. The following bullets provide a summary of our review of the Form 200 you submitted for compliance with Directive No. 2. Any plan you submit must meet the requirements of Directive No. 2 to correct the violations.

1. Stating the head cut may be sloped back without specifics is inadequate. Provide specific designs developed by a licensed professional for how you will slope back the outfall, stabilize the discharge point, and revegetate exposed soils. In addition, you must also provide a description of how and when you will inspect the work through the following five years to ensure the work is effective at controlling erosion, and that vegetation is recovering, and survival of planted vegetation is successful at a rate of 85%. This is in addition to adequately monitoring the water quality of your discharge.
2. Showing a drawing of a root wad and stating this is what will be used to stabilize the head cut without any design details is inadequate. CAO Directive No. 2 requires that you provide a diagram to scale that shows how you intend to structurally resolve the violation.

3. The pictures and narrative had no scale, no diagram, and no clear plan. There is no design provided.
4. The Form 200 narrative did not identify what permits would be required or what agencies you would consult with on the projects scope and permitting requirements.
5. Generally, we only permit work during the dry season of the year. The construction period generally occurs from June 15- October 15. Your proposal has no temporal discussion of when the work will occur.
6. A general discussion of potentially installing silt fences and straw wattles as appropriate is insufficient in terms of addressing application of best management practices to control erosion.
7. In terms of installing a culvert to remedy this violation there are no designs or culvert sizing or routing details provided for us to review. We reiterate that a licensed professional is required to develop stamp and sign the scope of work you provide to remedy CAO violations. In addition, we generally recommend professional oversight during the course of implementation of repairs.

We also want to iterate that regardless of the ultimate water delivery solution for the conveyance and the return flows from the diversion; work will be required to stabilize the head cut at the Irving Creek outfall to prevent erosion and sedimentation. Returning flows to Stanshaw Creek may reduce your scope of work depending upon how the outfall of the pond on your property may be managed, and we recognize that designing the return flow system to Stanshaw Creek would require similar measures and design controls in order to allow us to implement the Water Code.

Please be aware that you may be subject to administrative or judicial civil liabilities for failure to comply with the Order. In an administrative action, the liabilities can be up to \$5,000 per day pursuant to Water Code section 13350 for each day the violation occurs. When there is a discharge, the liabilities can be up to \$10,000 per day and \$10 per gallon of waste discharged pursuant to Water Code sections 13385.

As stated previously, please submit information to comply with Directive No. 1 of the Order within 45 days of receipt of this letter.

If you have any questions, please contact Stormer Feiler of my staff by email at Stormer.Feiler@waterboards.ca.gov, or by phone at (707) 543-7128.

Sincerely,

Joshua Curtis
Assistant Executive Officer

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Enclosures:

- Attachment 1-2017.09.13 Letter BBRenner to KPetruzzelli re NOV3 (1)
- Attachment 2-2017.06.30 Doug & Heidi Cole Progress Report
- Attachment 3-170627_SRF_dp_MarbleMountain_NOV3
- Attachment 3-A-170424_SRF_RWB 4-24-17 response letter
- Attachment 3-B-2015.01.28 Email from TSoto to SAnderson fish kill
- Attachment 3-C-Ross Taylor and Associates_Findings Report_Stanshaw Ck_habitat-flow assess_JAN 2015
- Attachment 3-D-Stanshaw Creek Coho Habitat Enhancement Project FRGP Grant #P1110319_Final Report_3-31-14
- Attachment 3-E-20160803Stanshaw NMFS final recommendation letter
- Attachment 3-F. -Appendix 9 Klamath TMDL Thermal Refugia Locations
- Attachment 3-G-a-R1-2014-0006_Att_1 temperature policy
- Attachment 3-G-bR1-2014-0006_Att_2 temperature policy
- Attachment 3-H- RWB Staff Inspection Report
- Attachment 4-WR-141 2016.08.03 Letter NMFS to BEvoy re Stanshaw Creek Bypass Flow Recommendations
- Attachment 5-WR-81 2014.11.12 Email CTucker @Karuk to TMurano @SWRCB re MMR physical solutions
- Attachment 6-WR-80 2014.09.01 MMR Water Rights Report (Lennihan Report)
- Attachment 7-WR-82 2014.11.18 Cascade Water Rights Investigation Tech Memo
- Attachment 8-WR-28 1995.05.05 Letter MGoss to Van Dyke @SWRCB re flow measurements
- Attachment 9-mmr_cole_wr194 B. Elder

Certified-Return Receipt Requested

cc: Barbara Brenner
Churchwell White LLP
1414 K Street, 3rd Floor
Sacramento, CA 95814
Barbara@churchwellwhite.com

Konrad Fisher
100 Tomorrow Road
Somes Bar, CA 95568
k@omrl.org

California Sportfishing Protection Alliance

Bill Jennings, bjennings@calsport.org

United States Forest Service

LeRoy Cyr, lcyr@fs.fed.us

Jon Grunbaum, jgrunbaum@fs.fed.us

Department of Fish and Wildlife

Donna Cobb, Donna.Cobb@wildlife.ca.gov

Janae Scruggs, Janae.Scruggs@wildlife.ca.gov

Stephen Puccini, Stephen.Puccini@wildlife.ca.gov

Caitlin Beane, Caitlin.Bean@wildlife.ca.gov

Nathan Voegeli, nathan.voegeli@wildlife.ca.gov

National Oceanic Atmospheric Administration

Margaret Tauzer, margaret.tauzer@noaa.gov

Bob Pagliuoco, bob.pagliuoco@noaa.gov

Natural Resource Policy Advocate

Craig Tucker, Karuk Tribe, ctucker@karuk.us

Mid Klamath Watershed Council

Will Harling, will@mkwc.org

North Coast Regional Water Quality Control Board

Diana Henriouille, Diana.Henriouille@waterboards.ca.gov

Stormer Feiler, Stormer.Feiler@waterboards.ca.gov

State Water Resources Control Board

Michael Buckman, Michael.Buckman@Waterboards.ca.gov

Taro Murano, Taro.Murano@waterboards.ca.gov

Skyler Anderson, Skyler.Anderson@waterboards.ca.gov

Kathy Mrowka, Kathy.Mrowka@waterboards.ca.gov

John O'Hagan, John.O'Hagan@waterboards.ca.gov

Kenneth Petruzzelli, Kenneth.Petruzzelli@waterboards.ca.gov

Heather Mapes, Heather.Mapes@waterboards.ca.gov

Nathan Jacobsen, Nathan.Jacobsen@waterboards.ca.gov