

Attachment A: Penalty Methodology

Administrative Civil Liability Order No. R1-2023-0040 Factors Considered in Developing Civil Liability Ken Bareilles

This document provides a summary of factual and analytical evidence that support the findings in Administrative Civil Liability Order No. R1-2023-0040 (Order) issued to Ken Bareilles (Discharger) for: 1) failure to submit a report under Required Action No. 1 of the Regional Water Board Cleanup and Abatement Order No. R1-2022-0009 (Emergency CAO) in violation of Water Code section 13267; 2) failure to submit a report required by the deadline under Required Action No. 1 of the Regional Water Board Cleanup and Abatement Order No. R1-2022-0028 (Long-Term CAO) in violation of Water Code section 13267; and 3) discharges of waste to waters of the state in violation of the Categorical Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities On Non-Federal Lands in the North Coast Region Order No. R1-2014-0011 (Categorical Waiver) and the Water Quality Control Plan for the North Coast Region (Basin Plan).

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Background

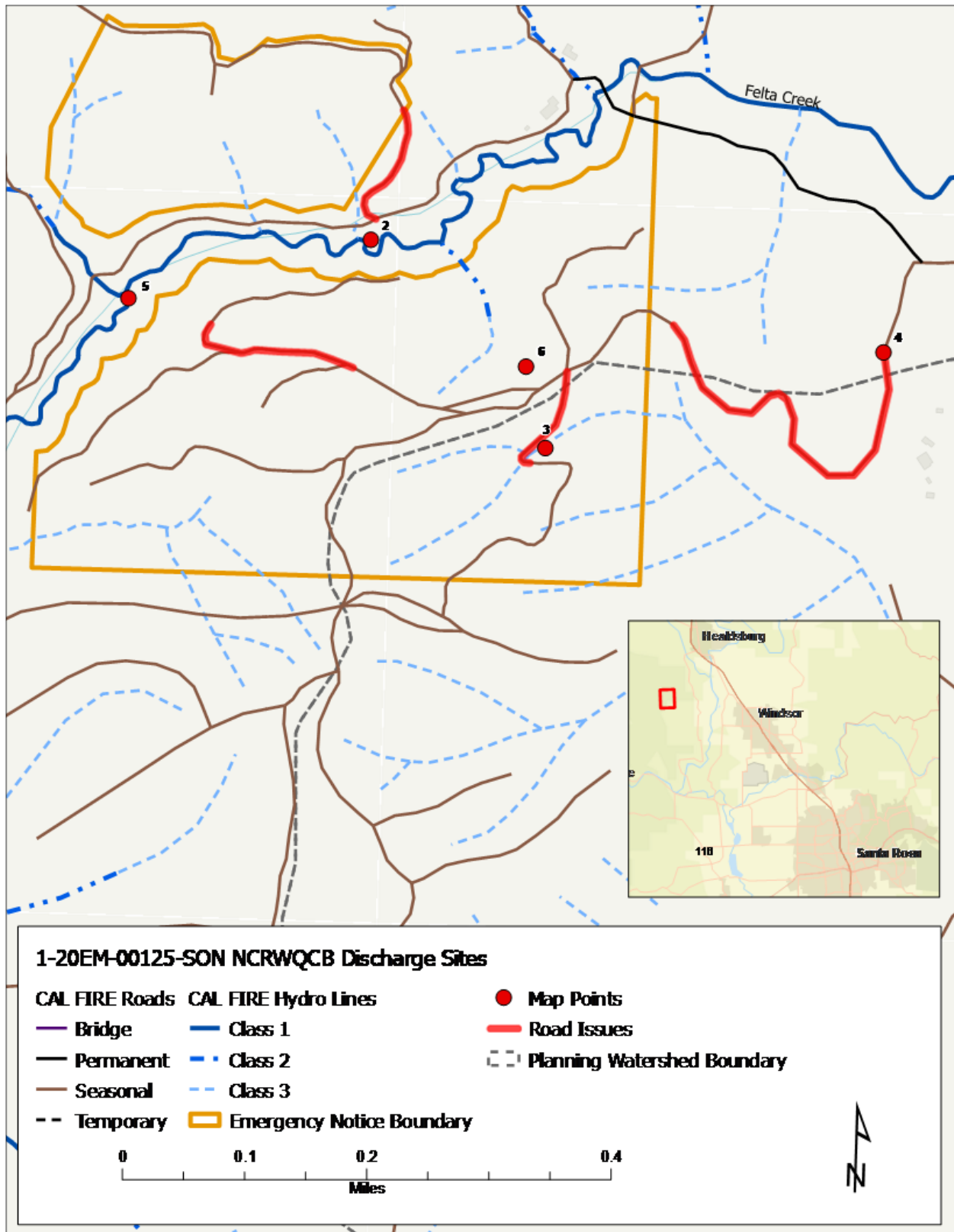
The Discharger initially submitted a proposed Timber Harvesting Plan (THP) 1-17-017 SON to the California Department of Forestry and Fire Protection (CAL FIRE) in February 2017. Following a lengthy review process by Californian Geological Society (CGS), California Department of Fish and Wildlife (CDFW), Regional Water Board, and CAL FIRE, CAL FIRE and the Board of Forestry and Fire Protection (BOF) ultimately denied approval of the THP.

In August 2020, a portion of the former Fox Meadows proposed THP 1-17-017 SON footprint burned in the Walbridge Fire. On October 14, 2020, Registered Professional Forester Randy Jacobszoon (RPF #2498) submitted a Notice of Emergency Timber Operations on behalf of the Discharger. The Notice of Emergency Timber Operations No. 1-20EM-00125-SON (Emergency Notice) was subsequently accepted by CAL FIRE on October 21, 2020. The Categorical Waiver relies on timber operators to maintain compliance with the Forest Practice Rules (FPR) for water quality protection. As such, Emergency Notices, being ministerial permits, are automatically enrolled under Categorical Waiver A for the benefit of the permittees.

The Emergency Notice Site (Site) covers 106 acres entirely within the footprint of the original THP 1-17-017-SON and included ground-based yarding methods only. The Site lies within the Middle Russian River Hydrologic Area and the Lower Russian River Hydrologic Area, mostly in the Felta Creek Planning Watershed, with a portion of the southeast corner lying within the Adam & Eve Redwoods Planning Watershed. Felta Creek (a tributary to the Russian River) bisects the Site, but is not within its boundaries, which are set back 100-feet from the channel.

The Emergency Notice includes timber harvest on steep slopes (over 65% slope, or roughly 30 degrees) and ridgetops that drain into Felta Creek and its tributaries, and, in the south-east corner of the Site, unnamed tributaries to the Russian River, which are all waters of the state.

Figure 1: Site Map



Overview of Threatened and Actual Discharges

Figure 1 is a map of the Site area which uses data from CAL FIRE's publicly accessible Forest Practice Geographic Information System, including the Emergency Notice boundary, permanent and seasonal roads, and perennial and intermittent watercourses. It should be noted that only the watercourses that have been mapped by CAL FIRE are included here, and there are other watercourses not shown. Figure 1 also displays five Map Points (indicated by the red dots) identifying the locations of discharges of sediment to watercourses observed by North Coast Regional Water Board staff (Staff). For four of the Map Points, segments of roads with inadequate erosion control measures, which resulted in discharges, are also highlighted on Figure 1 (indicated by the red lines) as "Road Issues."

- Map Point 2 is the location of a steep haul road that turns as it comes downhill towards Felta Creek. The road flattens as it approaches a landing located on a flat area, approximately 50 feet wide, adjacent to the north bank of the watercourse. The Discharger failed to construct drainage facilities on the 250' road segment uphill from the landing and Felta Creek. As a result, numerous rills formed on the road surface during the storm event on October 24, 2021, resulting in a discharge of sediment to Felta Creek.
- Map Point 3 is a complex site which includes a segment of haul road approximately 450' long, a ridgetop landing, and a road crossing of two Class III watercourses. There are two major discharge points and continuous discharges along the road segment between the ridgetop landing and the watercourse crossing. Concentrated sediment-laden runoff from the landing flowed approximately 150' down a disused skid trail, before discharging to a Class III watercourse. At the other end of this road segment two Class III watercourses converge just below the haul road. The Discharger's failure to construct a drainage structure to convey streamflow across the road resulted in a discharge of sediment to the watercourses. Spoils from road reconstruction had been placed at the crossing outlet and along the edge of the road at several points along the road segment adjacent to the crossing. Streamflow from the watercourse eroded a significant volume of the spoils, resulting in direct discharge and threatening further discharge to the watercourse.
- Map Point 4 is the location of a segment of haul road that runs approximately 1500' downhill to Felta Creek Road and a Class III watercourse. The Discharger failed to install drainage structures on this segment of road. Consequently, the road developed rilling resulting in a discharge of sediment to a Class III watercourse near the junction with Felta Creek Road.
- Map Point 5 is a location of a discharge that originated on a segment of road on the south side of the Site area, near the top of a ridge above Felta Creek. The Discharger failed to adequately implement erosion control measures along this segment of road, which resulted in the formation of gullies 6 to 12 inches deep in

the road surface and on the hillslope below the road. After exiting the road, the runoff flowed downhill incising a gully before diverting down an old skid trail where it flowed further downhill before discharging sediment into Felta Creek. The total slope distance from the source of the discharge on the ridgetop road to the channel of Felta Creek is approximately 500'.

- Map Point 6 is a skid trail built down a swale and terminating roughly 30' from a Class III watercourse, slightly upstream from the Class II / Class III break. Large amounts of unconsolidated mineral soil were deposited roughly 30 feet from the Class III watercourse. The swale is hydrologically connected to the road system above by a waterbar. During the rain events of late 2022 and early 2023, there was a discharge of sediment to the Class III watercourse.

History of Inspections and Regional Board Actions

On December 1, 2020, Staff conducted an inspection of the Site, along with CAL FIRE and CDFW personnel, and the Discharger's RPF, Randy Jacobszoon. No water quality issues were observed during this inspection.

On June 30, 2021, Staff were informed by CAL FIRE inspector Kim Sone of an unpermitted bridge installation associated with the Discharger's timber harvesting activities. On July 8, 2021, Staff attended an inspection of this site. The inspection team observed loose sediment on the road approaches leading up to the unpermitted bridge on both sides of Felta Creek. The sediment observed by Staff may have been the result of fire suppression activities not associated with the Discharger's timber operations; however, because the sediment threatened to discharge to Felta Creek, Staff told both the RPF and the Discharger that the loose sediment should be removed, and the road approaches should be hydrologically disconnected prior to the winter period. Staff told both the RPF and the Discharger that failure to remove the loose sediment and stabilize the road approaches prior to any winter rain event could result in a violation of water quality requirements.

On October 15, 2021, Staff attended an inspection of this site focusing on the bridge removal mitigation measures. The inspection team observed that two large water bars had been constructed on the road approach on the south side of Felta Creek. Additionally, straw mulch had been spread on the loose sediment on the south side of Felta Creek. The inspection team observed disturbed material in the channel of Felta Creek. The Discharger told staff that a tractor had been driven through the channel to perform the work on the south side of the watercourse. CAL FIRE and CDFW issued violations for the bridge installation and removal.

On October 21, 2021, the original Emergency Notice expired.

According to the National Oceanic and Atmospheric Administration (NOAA), approximately 10.6 inches of rain fell at the Santa Rosa Sonoma County Airport weather station (approximately 13 miles from the Site) between October 17 and 26,

2021.¹ On October 28, 2021, Kim Sone of CAL FIRE informed Staff via email that she had observed and documented sediment deposits in the Watercourse and Lake Protection Zone (WLPZ)² of Felta Creek due to inadequate waterbars on an adjacent road (Map Point 2). Ms. Sone's email included photographs depicting fresh sediment deposits on the watercourse bank.

On November 4, 2021, Staff inspected the Site to investigate the sediment discharges into the WLPZ observed by Ms. Sone. During this inspection, Staff discovered actual and threatened discharges to waters of the state at Map Points 2, 3, and 4 as described above.

On November 9, 2021, Staff conducted an additional inspection of the Site and further documented the actual and threatened discharges to waters of the state at Map Points 2, 3, and 4. Conditions had not changed substantially since the November 4 inspection.

On December 16, 2021, the Emergency Notice was extended by CAL FIRE for an additional year, until October 21, 2022, in response to the Discharger's request.

On January 4, 2022, Staff conducted an inspection to assess Site conditions. Since the previous inspection on November 9, 2021, the Discharger had installed erosion control measures of varying quality at Map Points 2, 3, and 4. The erosion control measures included additional waterbars at Map Points 2 and 4 and straw bales and straw mulch at Map Point 2. These erosion control measures appeared adequate to prevent immediate discharges but were insufficient as a long-term solution. At Map Point 3, the Discharger installed straw on the road surface, but that management practice was inadequate to prevent additional discharge of sediment as rilling was observed in the road surface beneath the straw mulch.

On January 10, 2022, the Regional Water Board issued Cleanup and Abatement Order R1-2022-0009 (Emergency CAO) to Ken Bareilles to stabilize the Site to prevent further discharges.³ The Emergency CAO directed the Discharger to submit an Interim Cleanup and Stabilization Plan (Interim Plan) to the Regional Water Board by January 25, 2022, (Required Action 1) and to complete implementation of the Interim Plan within 20 days of approval of the Interim Plan by the Regional Water Board (Required Action 3). In addition to the observed discharges and threatened discharges at Map Points 2, 3, and

¹ [National Oceanic and Atmospheric Administration Weather and Climate Access Tools:](https://www.ncei.noaa.gov/access/weather-climate-tools) (https://www.ncei.noaa.gov/access/weather-climate-tools).

² The 2022 Forest Practice Rules defines a Watercourse and Lake Protection Zone as "a strip of land, along both sides of a Watercourse or around the circumference of a lake or spring, where additional practices may be required for protection of the quality and beneficial uses of water, fish and Riparian wildlife habitat, other forest resources and for controlling erosion."

³ [January 10, 2022 Cleanup and Abatement Order for Ken Bareilles-Order No. R1-2022-0009](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/22_0009brllsTHPcao.pdf) (https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/22_0009brllsTHPcao.pdf).

4, throughout the Site there were additional areas with roads with insufficient waterbars and sidecast earthen material perched above watercourses which constituted threatened discharges to waters of the state, which the Emergency CAO was intended to address.

On February 14, 2022, representatives of the Discharger's RPF conducted a Site inspection during which they noted there were no waterbars on a segment of road between Maps Point 5 and Map Point 4 and noted breaches in the outboard berm of the road.

On March 3, 2022, the Regional Water Board issued a Notice of Violation to the Discharger for failure to furnish a technical report (the Interim Plan) to comply with Required Action 1 of the Emergency CAO.⁴

On March 4, 2022, the Regional Water Board received the Interim Plan from the Discharger's RPF, 38 days after the due date set in the Emergency CAO and began reviewing the submitted plan.

On March 28, 2022, Staff conducted an inspection of the Site, accompanied by CAL FIRE inspector Kim Sone and representatives of the Discharger's RPF, to verify the adequacy of the work proposed in the Interim Plan. Staff had several recommendations for modification of the Interim Plan, but overall, it adequately addressed the short-term threats to water quality. The Interim Plan was only intended to address potential sediment discharge during the winter period and was to be followed up by a long-term site stabilization and cleanup plan. To that end, the Emergency CAO established short time frames for submittal, approval by the Regional Water Board, and completion of work during the winter period. Since the Discharger failed to submit the Interim Plan until March 4, 2022, the implementation of the work could not reasonably be completed during the winter period, rendering the requirement for the Interim Plan ineffective in its essential functions. Conditions at the discharge Map Points were mostly unchanged since the January 4, 2022, inspection.

During the March 28, 2022, inspection, Staff discovered a new discharge into Felta Creek, at Map Point 5. where water exited a segment of haul road and flowed downhill to Felta Creek.

Also, during the March 28, 2022, inspection, Staff noted that the waterbars present on the roads on the south side of the Site, roughly between Map Point 5 and Map Point 4, had been removed. During the January 4, 2022, inspection these waterbars had been in place.

On April 9, 2022, Staff received a response to our inspection report for the March 28, 2022, inspection from the Discharger's RPF. The response letter states that, during their

⁴ [March 3, 2022 Notice of Violation for Ken Bareilles](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf) (https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf).

February 14, 2022, inspection, no waterbars were in place on a segment of road between Map Points 4 and 5, indicating that they had been removed on or before that inspection date. The response letter further noted breaches in the outboard berm of the road.

On June 6, 2022, Staff conducted an inspection of the Site. Site conditions at the Map Points 1-5 were mostly unchanged since the March 28, 2022, inspection, although one new area was discovered (Map Point 6) with potential to discharge sediment into waters of the state: a newly constructed skid trail built down a swale and terminating approximately 30' from a Class III watercourse, slightly upstream from the Class II / Class III break. Large amounts of unconsolidated mineral soil were deposited roughly 30 feet from the Class III watercourse, with potential for delivery during precipitation events.

On June 23, 2022, the Regional Water Board transmitted a draft version of the Cleanup and Abatement Order R1-2022-0028 (Long-Term CAO) to the Discharger, allowing 30 days to provide comments. The Long-Term CAO is intended to ensure that the Discharger clean up and abate the effects of discharging soil, sediment, and other earthen materials into Felta Creek and unnamed tributaries of the Russian River, eliminate the threat of future discharges to waters of the state and that long-term monitoring of cleanup and abatement actions is conducted. The Long-Term CAO directs the Discharger to submit to the Regional Water Board a Long-Term Restoration and Monitoring Plan (Long-Term Plan) which must 1) identify where sediment discharge to waters of the state has occurred, or threatens to occur, 2) determine the appropriate cleanup and restoration work to prevent or minimize sediment discharge, and 3) outline an implementation schedule that will guide the scope of work to clean up and abate the discharges and threats of discharge.

On July 13, 2022, the Regional Water Board received the Discharger's comments on the draft Long-Term CAO, and Staff revised the draft Long-Term CAO in response to specific comments by the Discharger. On September 13, 2022, the Regional Water Board issued the Long-Term CAO directing the Discharger to submit a Long-Term Plan to the Regional Water Board by October 13, 2022.⁵ Due to the Discharger's continuation of timber harvest operations, under the 1-year extension to the Emergency Notice granted by CAL FIRE on December 16, 2021, the work that had been planned under the Emergency CAO and the Interim Plan was incorporated into the requirements of the Long-Term CAO. Thus, the Long-Term CAO superseded the Emergency CAO except for enforcement purposes.

On September 13, 2022, Staff conducted an inspection of the Site. Site conditions at the Map Points addressed in this document were mostly unchanged since the June 6, 2022,

⁵ [September 13, 2022 Cleanup and Abatement Order for Ken Bareilles-Order No. R1-2022-0028](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/2228_bareilles_cao_rev.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/2228_bareilles_cao_rev.pdf)

inspection, although several new areas were discovered with potential to discharge sediment into waters of the state. The new sites of threatened discharge included:

1. A large (approximately 5 feet high by 7 feet in diameter) mound of mineral soil and other debris had been placed in a Class III channel as it exits onto the road surface at Map Point 3, that had not been present during previous inspections.
2. Sidecast material off the side of a haul road on steep slopes on the headwall swale of a Class III watercourse, which measured up to three feet deep in places.
3. A skid trail which terminates on steep slopes above a Class III watercourse. A large amount of mixed earthen and organic material from skid trail construction perched on the slopes, threatening to discharge to the watercourse during rain events. No waterbars or other erosion control measures were present at the time of the inspection.

On September 20, 2022, Staff conducted an inspection of the Site to assess conditions after a recent rainfall. Waterbars had been constructed throughout most of the Site. Though the waterbar construction was of varying quality and apparent effectiveness and there was still perched sidecast soil on the outboard edges of many roads, no discharges of sediment were observed.

On October 20, 2022, the Regional Water Board issued a Notice of Violation to the Discharger for failure to furnish a technical report (Long-Term Plan) to comply with Required Action 1 of the Long-Term CAO.⁶

On October 26, 2022, Staff conducted an inspection to assess Site conditions after the expiration of the Emergency Notice on October 21, 2022. In general, implementation of erosion control measures was adequate throughout the Site. The Discharger had constructed waterbars on all of the roads, and most of them appeared adequate to prevent concentration of flow and discharge of sediment to watercourses. Staff identified two remaining areas at the Site that required additional erosion control work, as specified in the inspection report dated October 27, 2022.

On December 2, 2022, Staff conducted an inspection in conjunction with CAL FIRE inspector Kimberly Sone following submittal by the Discharger of a Notice of Completion. In general, with the exception of the two areas in the inspection report identified during the October 26, 2022, inspection, implementation of erosion control measures on roads and skid trails was adequate throughout the Site and was functioning as intended. All roads had waterbars installed, and most of them appeared adequate to prevent concentration of flow and delivery of sediment to watercourses.

⁶ [October 20, 2022 Notice of Violation for Ken Bareilles](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf) (https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf).

On January 13, 2023, the Regional Water Board issued a Notice of Violation to the Discharger citing violations of the Categorical Waiver and Basin Plan for the two remaining areas with threatened discharges (including Map Point 6) identified during the October 26, 2022, and December 2, 2022, inspections.⁷

On January 24, 2023, Staff conducted a maintenance inspection in conjunction with CAL FIRE inspector Kim Sone. During this inspection an additional discharge was observed at Map Point 6. This area had previously been identified in the June 6, 2022, inspection and communicated to the Discharger as a threatened discharge. Staff also observed that there had been additional discharges from the landing at Map Point 3 during the December 2022 through January 2023 rain events despite the installation of erosion control measures.

Enforcement Policy

The State Water Resources Control Board's (State Water Board) *Water Quality Enforcement Policy* (Enforcement Policy) establishes a methodology for assessing administrative civil liability, including addressing the factors outlined in Water Code section 13327.⁸ Water Code section 13327 requires the Regional Water Board to consider several factors when determining the amount of civil liability to impose, including "...the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require."

The methodology for assessing Administrative Civil Liability consists of nine iterative steps. Steps 1 and 2 provide guidance on how to calculate per-day liability assessments for discharge violations (Violations 3 through 7), step 3 provides guidance on how to calculate per-day liability assessments for non-discharge violations (Violations 1 and 2), and steps 4-9 provide guidance on how to calculate and apply adjustment factors which apply to all violations (Violations 1-7). Each factor of the nine-step approach is discussed below, as is the basis for assessing the corresponding score in accordance with the Enforcement Policy.

⁷ [January 13, 2023 Notice of Violation for Ken Bareilles](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf).

⁸ [State Water Resources Control Board's Enforcement Policy \(2017\)](https://www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.shtml)

(https://www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.shtml).

Liability Methodology

Violation 1 (Emergency CAO) – Non-Discharge Violation

For 38 days, from January 25, 2022, through March 4, 2022, the Discharger violated Required Action No. 1 of the Emergency CAO by failing to submit an Interim Cleanup and Stabilization Plan, pursuant to Water Code section 13267(b)(1).

Basis of Violation:

Under Water Code section 13267(b)(1), a regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. Water Code section 13268 provides that a regional board may impose civil liability administratively for failure to submit reports as required under Water Code section 13267 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

The Regional Water Board issued the Emergency CAO to the Discharger on January 10, 2022. Required Action No. 1 of the Emergency CAO directed the Discharger to submit an Interim Cleanup and Stabilization Plan (Interim Plan) prepared by an appropriately licensed professional for the completion of short-term site cleanup and stabilization by January 25, 2022, pursuant to Water Code 13267.⁹

The Discharger violated Water Code section 13267 by failing to submit the Interim Plan by January 25, 2022, as required by Required Action No. 1 of the Emergency CAO. The Discharger did not submit the Interim Plan until March 4, 2022, which constituted 38 days of violation. Therefore, the Discharger is subject to 38 days of liability pursuant to Water Code section 13268.

Step 1. Actual or Potential for Harm for Discharge Violations

Step 1 is not applicable to Violation 1 because it is a non-discharge violation.

Step 2. Per-Day Assessments for Discharge Violations

Step 2 is not applicable to Violation 1 because it is a non-discharge violation.

⁹ [January 10, 2022 Cleanup and Abatement Order for Ken Bareilles-Order No. R1-2022-0009](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/22_0009brllsTHPcao.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/22_0009brllsTHPcao.pdf)

Step 3: Per-Day Assessments for Non-Discharge Violations

Days of Violation

Consistent with the Basis of Violation above, there are **38 days of violation** between January 25, 2022, and March 4, 2022, during the period when the Discharger failed to submit the Interim Plan required by the Emergency CAO.¹⁰

Potential for Harm

The Basin Plan designates beneficial uses and implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes a policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. This Site is located within the Middle Russian River and Lower Russian River Hydrologic Areas; the existing and potential beneficial uses of the of these Hydrologic Areas include: wildlife habitat (WILD); cold freshwater habitat (COLD); rare, threatened, or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPAWN); and commercial and sport fishing (COMM).¹¹ The Clean Water Act Section 303 (d)-list identifies the Russian River watershed as impaired by sedimentation/siltation and water temperature.

During inspections of the Site prior to the Regional Water Board issuance of the Emergency CAO, Staff documented actual and threatened sediment discharges to Felta Creek and its tributaries resulting from the Discharger’s timber harvesting activities, including failure to construct adequate erosion controls, placement of waste from road reconstruction in and adjacent to watercourses, and the use of heavy equipment in saturated soil conditions.

Sediment discharged into surface waters can cloud the receiving water, thereby reducing the amount of sunlight reaching aquatic plants, clog fish gills, and smother aquatic habitat and spawning areas. Sediment can also transport other materials such as nutrients, metals, and oils and grease which can cause toxicity to aquatic organisms. The Regional Water Board was unable to approve an Interim Plan as a pre-requisite to implementation of stabilization and abatement work required to prevent or minimize sediment discharge. Therefore, the delayed implementation of stabilization and

¹⁰ [January 10, 2022 Cleanup and Abatement Order for Ken Bareilles-Order No. R1-2022-0009](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/22_0009brllsTHPcao.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/22_0009brllsTHPcao.pdf)

¹¹ [The Water Quality Control Plan for the North Coast Region](#) (Basin Plan), Chapter 2, Page 11.

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/)

abatement work required to prevent or minimize sediment discharge posed a threat to Felta Creek and the relevant beneficial uses mentioned above.¹²

The Interim Plan was required to assess Site conditions to identify where discharge of sediment has occurred or threatens to occur, determine the appropriate stabilization and abatement work to prevent or minimize sediment discharge, and to stabilize the Site and cleanup and abate the discharges and threat of discharge on the Site. Failure to submit the Interim Plan by the date specified in the Emergency CAO created a condition where pollutants, specifically sediment, were more likely to be discharged into waters of the United States because of delayed implementation of stabilization and abatement work required to prevent or minimize sediment discharge. Therefore, this noncompliance wholly impaired the Regional Water Board's ability to perform its statutory and regulatory function, presents a particularly egregious threat to beneficial uses, and the circumstances of the violation indicate a very high potential for harm. According to the Enforcement Policy, "[n]on-discharge violations involving failure to comply with directives in cleanup and abatement orders, cease and desist orders, and investigative orders, involving reports relating to impaired water bodies and sensitive habitats, should be considered major." Therefore, the Potential for Harm for this violation is characterized as **Major**.

Deviation from Requirement

The Interim Plan was necessary to effectuate short-term cleanup and stabilization measures necessary to clean up wastes and to prevent further erosion and discharge of sediment to Felta Creek and its tributaries during the 2021-2022 winter period. The Discharger was required to submit the Interim Plan to Staff for approval by January 25, 2022, and implement the Interim Plan within 20 days of approval by the Regional Water Board. Since the Discharger failed to submit the Interim Plan until March 4, 2022, the implementation of the work could not reasonably be completed during the winter period, rendering the requirement for the Interim Plan ineffective in its essential functions. The Board has determined that a **Major** Deviation from Requirement is appropriate for this Violation.

Per-Day Factor for Non-Discharge Violations

The Enforcement Policy provides that the Regional Water Board shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. Table 3 of the Enforcement Policy provides that the Board may select a per-day factor for non-discharge violations with

¹² [The Water Quality Control Plan for the North Coast Region](#) (Basin Plan), Chapter 2, Page 11.

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/)

Major Potential for Harm and Major Deviation from Requirement from the following: 0.7, 0.85, or 1.0.

The Board finds the midpoint penalty factor of **0.85** for failing to submit an Interim Plan by January 25, 2022.

Initial Liability Amount Calculation for Violation 1

Violation 1: 38 (days) x 0.85 (per-day factor) x \$1,000/day = **\$32,300**

Step 4: Adjustment Factors – Discussion of Factors for Violation 1

There are three additional factors to be considered for adjustment of the amount of initial liability: the violator’s culpability, efforts to clean up or cooperate with regulatory authority, and the violator’s compliance history.

Degree of Culpability

Under the Enforcement Policy, the test for whether a discharger is negligent is what a reasonable and prudent person would have done or not done under similar circumstances prior to the violation. Adjustment should result in a multiplier between 0.75 and 1.5, with a higher multiplier for intentional misconduct and gross negligence, and a lower multiple for more simple negligence. A neutral assessment of 1.0 should be used when a discharger is determined to have acted as a reasonable and prudent person would have. A multiplier of less than 1.0 should only be used when a discharger demonstrates that it has exceeded the standard of care expected of a reasonably prudent person to prevent the violation.

The Emergency CAO was issued on January 10, 2022, and it included Required Action No. 1, which directed the Discharger to submit the Interim Plan by January 25, 2022. Beginning January 27, 2022, Staff made several attempts to contact the Discharger, finally speaking with him on February 2, 2022. Staff explained the importance of the Interim Plan, and the Discharger assured Staff that he would direct his consulting forester to prepare and submit the Interim Plan. On March 3, 2022, the Regional Water Board issued a Notice of Violation to the Discharger for failure to prepare and submit the Interim Plan to comply with Required Action No. 1 of the Emergency CAO.¹³ On March 4, 2022, Staff received the Interim Plan from the Discharger’s consulting forester and scheduled a site visit to verify the adequacy of the work proposed within the Interim Plan.

A reasonable and prudent person would have submitted the Interim Plan by deadline in the Emergency CAO or contacted staff to request an extension prior to the deadline. Here, the Discharger did not communicate with Staff about the submission of the Interim Plan until after the deadline has passed, and only agreed to submit the Interim Plan after Staff made several proactive efforts to communicate with the Discharger.

¹³ [March 3, 2022 Notice of Violation for Ken Bareilles](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/1-20EM125SON_nov.pdf)

Therefore, the Discharger acted negligently in not complying with the Interim Plan submittal deadline. The Board has assigned a Culpability Factor of **1.3** for negligent conduct.

History of Violations

According to the Enforcement Policy, where the discharger has no prior history of violations, this factor should be neutral, or 1.0.

The Enforcement Policy requires a history of violations within the last five years to assess a factor greater than 1.0. Because the Discharger does not have a history of similar violations within the last five years, the Board has determined that a **1.0** is appropriate.

Cleanup and Cooperation

As stated in the Enforcement Policy, cleanup and cooperation considers voluntary efforts to cleanup and/or to cooperate with regulatory authorities in returning to compliance after the violation. Any adjustment results in a multiplier between 0.75 to 1.5, using the lower multiplier where there is exceptional cleanup and cooperation compared to what can reasonably be expected, and higher multiplier where there is not. A reasonable and prudent response to a discharge violation or timely response to a Water Board order should receive a neutral adjustment as it is assumed a reasonable amount of cooperation is the warranted baseline.

The Discharger failed to submit the Interim Plan by January 25, 2022, as required in the Emergency CAO, issued on January 10, 2022. When Staff spoke to the Discharger after the deadline passed, the Discharger responded with the intention to comply with requirements, and eventually did submit the Interim Plan on March 4, 2022. A timely return to compliance would have been within the 15-day timeframe originally provided in the Emergency CAO. However, the Discharger did not submit the Interim Plan until 38 days after the initial deadline. Although the Interim Plan was eventually submitted late, the Discharger did not respond in a timely manner, thus, the Board finds that a Cleanup and Cooperation factor of **1.3** is appropriate.

Step 5. Total Base Liability Amount Calculations for Violation 1

Violation 1: [38 (days of violation) x 0.85 (per-day factor) x \$1,000/day = \$32,300] x 1.3 (culpability) x 1.0 (history of violations) x 1.3 (cleanup and cooperation) = **\$54,587**

By applying the values for the factors above the total base liability for Violation 1 is **\$54,587**.

Violation 2 (Long-Term CAO) – Non-Discharge Violation

For 158 days, from October 13, 2022, through March 20, 2023, the Discharger violated Required Action No. 1 of the Long-Term CAO by failing to submit a Long-Term Restoration and Monitoring Plan, pursuant to Water Code section 13267(b)(1).

Basis of Violation:

Under Water Code section 13267, a Regional Board may require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Board requires. Water Code section 13268 provides that the Regional Water Board may impose civil liability administratively to any person who fails to submit reports as required under Water Code section 13267 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

The Regional Water Board released a draft of the Long-Term CAO to the Discharger on June 23, 2022, and the Discharger submitted his response to the draft on July 13, 2022. The Discharger had no comments regarding the schedule of the Long-Term CAO. The Regional Water Board issued the Long-Term CAO”) to the Discharger on September 13, 2022. Required Action No. 1 of the Long-Term CAO directed the Discharger to submit a Long-Term Restoration and Monitoring Plan (Long-Term Plan) prepared by an appropriately licensed professional for the completion of long-term cleanup and restoration of the Site by October 13, 2022, pursuant to Water Code section 13267.¹⁴

The Discharger violated Water Code Section 13267 by failing to submit the Long-Term Plan by October 13, 2022, as required by the Long-Term CAO. The Discharger failed to submit the Long-Term Plan through March 20, 2023, the date of Administrative Civil Liability Complaint No. R1-2023-0026, which constituted 158 days of violation for Required Action No. 1 under Water Code section 13268(a)(1). Therefore, the Discharger is subject to 158 days of liability pursuant to Water Code section 13268, subdivision (b).

Step 1. Actual or Potential for Harm for Discharge Violations

Step 1 is not applicable to Violation 2 because it is a non-discharge violation.

Step 2. Per-Day Assessments for Discharge Violations

Step 2 is not applicable to Violation 2 because it is a non-discharge violation.

¹⁴ [September 13, 2022 Cleanup and Abatement Order for Ken Bareilles - Order No. R1-2022-0028](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/2228_bareilles_cao_rev.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/2228_bareilles_cao_rev.pdf)

Step 3: Per-Day Assessments for Non-Discharge Violations

Days of Violation

Consistent with the Basis of Violation above, there are **158 days** of violation between October 13, 2022, and March 20, 2023, during the period when the Discharger failed to submit the Long-Term Plan required by the Long-Term CAO.¹⁵

Potential for Harm

The Basin Plan designates beneficial uses and implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes a policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. This Site is located within the Middle Russian River and Lower Russian River Hydrologic Areas; a few of the existing and potential beneficial uses of these Hydrologic Areas include: wildlife habitat (WILD); cold freshwater habitat (COLD); rare, threatened, or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPAWN); and commercial and sport fishing (COMM).¹⁶ The Clean Water Act Section 303 (d)-list identifies the Russian River watershed as impaired by sedimentation/siltation and water temperature.

Sediment discharged into surface waters can cloud the receiving water, thereby reducing the amount of sunlight reaching aquatic plants, clog fish gills, and smother aquatic habitat and spawning areas. Sediment can also transport other materials such as nutrients, metals, and oils and grease which can cause toxicity to aquatic organisms. Therefore, the delayed implementation of stabilization and abatement work required to prevent or minimize sediment discharge posed a threat to Felta Creek and the relevant beneficial uses mentioned above.

The Long-Term Plan was required to assess Site conditions to identify where discharge of sediment has occurred or threatens to occur, determine the appropriate stabilization and abatement work to prevent or minimize long-term sediment discharge from the Site, and create a plan along with long-term implementation schedule to stabilize the Site and cleanup and abate the discharges and threat of discharge from the Site. Failure to submit the Long-Term Plan in the time specified in the Long-Term CAO created a condition where pollutants, specifically sediment, were likely to be discharged into waters of the United States because of delayed implementation of stabilization and

¹⁵ [September 13, 2022 Cleanup and Abatement Order for Ken Bareilles-Order No. R1-2022-0028](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/2228_bareilles_cao_rev.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/2228_bareilles_cao_rev.pdf)

¹⁶ [The Water Quality Control Plan for the North Coast Region \(ca.gov\)](#) (Basin Plan), Chapter 2, Page 11.

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/)

abatement work required to prevent or minimize sediment discharge. Due to this delay, there was an increased potential for additional sediment discharges to Felta Creek and other unnamed tributaries to the Russian River.

The Discharger’s failure to submit the Long-Term Plan rendered the Regional Water Board unable to approve a Long-Term Plan as a pre-requisite to implementation of stabilization and abatement work required to prevent or minimize sediment discharge on the Site. This noncompliance wholly impaired the Regional Water Board’s ability to perform its statutory and regulatory function, which presents a particularly egregious threat to beneficial uses, and the circumstances of the violation indicate a very high potential for harm. According to the Enforcement Policy, “[n]on-discharge violations involving failure to comply with directives in cleanup and abatement orders, cease and desist orders, and investigative orders, involving reports relating to impaired water bodies and sensitive habitats, should be considered major.” Therefore, the Potential for Harm for this violation is characterized as **Major**.

Deviation from Requirement

The Discharger was required to submit the Long-Term Plan to Staff for approval by October 13, 2022. The Discharger failed to submit the Interim Plan, rendering the requirement for the Long-Term Plan ineffective in its essential functions. The Board has determined that a **Major** Deviation from Requirement is appropriate for this Violation.

Per-Day Factor for Non-Discharge Violations

The Enforcement Policy provides that the Regional Water Board shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. Table 3 of the Enforcement Policy provides that the Board may select a per-day factor for non-discharge violations with major potential for harm and major deviation from requirement from the following: 0.7, 0.85, or 1.0.

The Board finds the midpoint penalty factor of **0.85** for failing to submit the Long-Term Plan by October 13, 2022.

Initial Liability Amount Calculations for Violation 2

Violation 2: 158 (days) x 0.85 (per-day factor) x \$1,000/day = **\$134,300**

Step 4: Adjustment Factors - Discussion of Factors for Violation 2

Degree of Culpability

The Long-Term CAO was issued on September 13, 2022, and it included Required Action No. 1, which directed the Discharger to submit the Long-Term Plan by October 13, 2022. During a Site inspection on September 13, 2022, in which the Discharger was present, Staff discussed the issuance of the Long-Term CAO and explained the requirements, including the need to submit the Long-Term Plan no later than October

13, 2022. Mr. Bareilles indicated to Staff that he understood and intended to comply with the Order's requirements.

A reasonable and prudent person would have submitted the Long-Term Plan by the deadline in the Long-Term CAO or contacted staff to request an extension prior to the deadline. Here, the Discharger, despite communicating to Staff that he intended to comply with the Long-Term CAO requirements, failed to submit the Long-Term Plan by the October 13, 2022, deadline. In addition, the Discharger failed to communicate with Staff that the Long-Term Plan would not be submitted on time or to ask for an extension. Further, the Discharger had a heightened awareness of the importance in complying with the submittal deadline because of his failure to submit the Interim Plan for the Emergency CAO by the required deadline earlier in the year, for which he received an NOV from the Regional Water Board.

The Board has assigned a Culpability Factor of **1.5** for intentional misconduct.

History of Violations

For the reasons discussed in Violation 1, a score of **1.0** has been applied.

Cleanup and Cooperation

After the Discharger failed to submit the Long-Term Plan by October 13, 2022, the Regional Water Board issued a NOV on October 20, 2022, to notify the Discharger of his violation of the Long-Term CAO requirement.¹⁷ The Regional Water Board issued a second NOV on January 13, 2023, to notify the Discharger of continued threatened discharges at the Site, which are required to be addressed by the Long-Term CAO.¹⁸ Since the violation occurred, the Discharger has ignored both NOVs and has not communicated with Staff concerning his intention to submit the Long-Term Plan. Thus, the Discharger has made no voluntary efforts to return to compliance.

Consequently, the Board finds that a Cleanup and Cooperation factor of **1.5** is appropriate.

Step 5. Total Base Liability Amount Calculations for Violation 2

Violation 2: [158 (days of violation) x 0.85 (per-day factor) x \$1,000/day = \$134,300] x 1.5 (culpability) x 1.0 (history of violations) x 1.5 (cleanup and cooperation) = **\$302,175**

By applying the factors to Violation 2, the Total Base Liability is **\$302,175**.

¹⁷ [October 20, 2022 Notice of Violation for Ken Bareilles](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/120EM00125SON_nov#2.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2022/120EM00125SON_nov#2.pdf).

¹⁸ [January 13, 2023 Notice of Violation for Ken Bareilles](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2023/bareilles_nov.pdf)

(https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2023/bareilles_nov.pdf)

Violations 3 – 7 – Discharge Violations

During the Period between October 24, 2022, and January 24, 2023, the Discharger discharged waste to waters of the state in violation of the Categorical Waiver Section I.3. In addition, Violations 3 and 6 include violations of Categorical Waiver Section I.1 and Prohibition 1 under Basin Plan section 4.2.1. The date range is based on an analysis of rainfall data which is further explained below.

Basis of Violations

Section I of the Categorical Waiver describes General Conditions that apply to all enrolled projects, including the following:¹⁹

1. The landowner shall comply with all applicable requirements, waste discharge prohibitions specified in the Basin Plan, and policies adopted by the State Water Board.

[...]

3. The landowner shall conduct timber harvest activities and erosion control maintenance in compliance with the [California Forest Practice Rules (FPRs) (Cal. Code Regs., tit. 14, §§ 895-1115.3)]. In addition, FPRs and THP conditions (including but not limited to FPR sections 896, 898, 914 (934), 916 (936), 923 (943) and mitigation measures identified and required by CAL FIRE) that are intended to protect the beneficial uses of water shall constitute enforceable conditions under this Order.

Basin Plan section 4.2.1 contains an Action Plan for Logging, Construction, and Associated Activities which includes a prohibition that applies to the threatened discharge of earthen materials or debris to surface waters:

Prohibition 1 – “The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.”²⁰

As noted in the Basis of Violation for each individual discharge violation below, the Discharger violated one or more of the following FPR provisions:

¹⁹ [Categorical Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region - Order R1-2014-0011](https://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/timber_waiver/)

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/timber_waiver/)

²⁰ [The Water Quality Control Plan for the North Coast Region \(ca.gov\)](https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/) (Basin Plan), Chapter 2, Page 11.

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/)

Section 914.6(a) of the FPRs, which is incorporated by reference into the Section I.3 of the Categorical Waiver, states:²¹

Waterbreaks shall be constructed on Tractor Roads, roads, Layouts, and Landings which do not have adequate natural drainage, drainage structures, or Surface Cover or Woody Debris to dissipate water flow and trap sediment to prevent soil loss.

Section 914.6(b)(1) of the FPRs, which is incorporated by reference into the Section I.3 of the Categorical Waiver, states:

All Waterbreaks shall be installed no later than the beginning of the Winter Period of the current year of Timber Operations.

Section 914.6(b)(2) of the FPRs, which is incorporated by reference into the Section I.3 of the Categorical Waiver, states:

Installation of Drainage Facilities and structures is required from October 15 to November 15 and from April 1 to May 1 on all constructed skid trails and Tractor Roads prior to sunset if the National Weather Service forecast is a “chance” (thirty (30) percent or more) of rain within the next twenty-four (24) hours.

Section 914.6(c) of the FPRs, which is incorporated by reference into the Section I.3 of the Categorical Waiver, states:

Waterbreaks shall be constructed concurrently with the construction of firebreaks and immediately upon conclusion of use of Tractor Roads, roads, Layouts, and Landings which do not have permanent and adequate Drainage Facilities, or Drainage Structures

Section 914.6(j) of the FPRs, which is incorporated by reference into the Section I.3 of the Categorical Waiver, states:

Waterbreaks or any other Erosion Controls on skid trails, Cable Roads, Layouts, firebreaks, Abandoned Roads, and Site Preparation areas shall be maintained during the prescribed maintenance period and during Timber Operations as defined in PRC §§ 4527 and 4551.5 so that they continue to function in a manner which minimizes soil erosion and slope instability and which prevents degradation of the quality and Beneficial Uses of water.

Section 923.5(j) of the FPRs, which is incorporated by reference into the Section I.3 of the Categorical Waiver, states:²²

²¹ [California Forest Practice Rules \(2020\)](https://bof.fire.ca.gov/media/9478/2020-forest-practice-rules-and-act_final_ada.pdf) – Title 14, California Code of Regulations, Chapter 4, Article 4, section 914.6, page 67. (https://bof.fire.ca.gov/media/9478/2020-forest-practice-rules-and-act_final_ada.pdf)

²² [California Forest Practice Rules \(2020\)](https://bof.fire.ca.gov/media/9478/2020-forest-practice-rules-and-act_final_ada.pdf) – Title 14, California Code of Regulations, Chapter 4, Article 12, section 923.5, page 133. (https://bof.fire.ca.gov/media/9478/2020-forest-practice-rules-and-act_final_ada.pdf)

All Logging Roads and Landings used for Timber Operations shall have adequate drainage upon completion of use for the year or by October 15, whichever is earlier. An exception is that drainage facilities and drainage structures do not need to be constructed on Logging Roads and Landings in use during the extended wet weather period provided that all such drainage facilities and drainage structures are installed prior to the start of rain that generates overland flow.

During the inspections from November 4, 2021, through January 24, 2023, Staff identified five locations in or adjacent to the Emergency Notice Site where discharges of sediment to Felta Creek and its tributaries and other unnamed tributaries to the Russian River occurred in violation of the Categorical Waiver section I.3. Two locations include additional violations of Categorical Waiver section I.1 and Basin Plan section 4.2.1, Prohibition 1. Each of these areas discussed below are referred to as “Map Points” in Figure 1, and each Map Point corresponds to one of the Discharge Violations 3 - 7.

Days of Discharge Calculations for Violations 3 through 7

Although Staff were only present on the Site on one day (November 9, 2021) with sufficient precipitation to cause a discharge of sediment into watercourses, it was clear from further inspections and observed site conditions that discharges of sediment occurred prior to November 9, 2021, and continued to occur at multiple Map Points throughout the Site. Therefore, analysis of rainfall intensity near the plan area was necessary to determine days of discharge.

A study of rainfall thresholds for runoff and sediment delivery in a post-fire forested environment conducted by Colorado State University (CSU) and the United States Forest Service (USFS) found that 60-minute hourly rainfall intensities of between 4 and 8 mm/h (0.15-0.3 in/h) were sufficient to initiate runoff.²³

A similar study, conducted by the United State Geological Survey (USGS), found that a 30-minute hourly rainfall intensity of 5 mm/h (0.2 in/h) showed an increased response in peak discharge.²⁴

Though the sites in the USGS and CSU/USFS studies were conducted in Colorado, New Mexico, Southern California, and the Sierra Nevada, the results are consistent despite the varying climate regimes and geology. Physical processes governing the relationship between precipitation, runoff and sediment transport are universal and therefore, the results from the studies cited are applicable to the North Coast region.

²³ [Rainfall Thresholds for Post-Fire Runoff and Sediment Delivery from Plot to Watershed Scales](#), Forest Ecology and Management, Wilson et al., 2018. (https://www.fs.usda.gov/psw/publications/wagenbrenner/psw_2018_wagenbrenner001_wilson.pdf)

²⁴ [An Analytical Method for Predicting Post-Wildfire Peak Discharges](#), US Geological Survey, Moody, 2011. (<https://pubs.er.usgs.gov/publication/sir20115236>)

Unpublished work conducted by CAL FIRE at the Boggs Demonstration State Forest in Lake County indicated a similar value of 0.2 inches/hour.²⁵

Given the body of research, a 30-minute hourly rainfall intensity of 0.2 inches/hour was used to as a baseline for the initiation of runoff and discharge of sediment from untreated roads, skid trails, landings, perched fill material, and other areas of exposed mineral soil in the Emergency Notice Area. The bomb-cyclone of October 24, 2021, was the first significant rainfall of water year 2021-2022, resulting in 10.19 inches measured in one day at the Division of Water Resources (DWR) rain gauge in Venado, approximately 13-miles to the northwest of the Site.²⁶ Though there were five days exceeding the 30-minute hourly rainfall threshold immediately preceding the October 24, 2021, event, the soils in the Site were likely not saturated and cannot be assumed to have initiated runoff and discharge of sediment. Therefore, our window for determination of runoff and days of discharge begins on October 24, 2021, and ends with the end of the 2021-2022 extended wet weather period²⁷, May 1, 2022. For each Map Point where discharge has been observed, any days with 30-minute hourly rainfall intensity of 0.2 inches/ hour or greater, where adequate erosion or sediment control measures were not in place at that Map Point, were alleged as a day of violation in the calculations below. Discussion of erosion and sediment control measures that would likely have prevented discharge at each Map Point will be discussed in the Per Day Penalty Calculations for the associated Violation.

Data used to calculate the 30-minute hourly rainfall intensity were obtained from the California Geological Survey (CGS). In 2020, the CGS Forest and Watershed Program installed a rain gauge in the Mill Creek watershed, roughly five miles northwest of the Site. The gauge was an Onset RG3-M HOBO Rain Gauge Data Logger with an integrated Onset UA-003-64 data logger. Data were exported using the HOBOWare desktop software and processed using R to convert bucket tips to accumulated precipitation and calculate 30-minute hourly rainfall intensities. The CGS data largely agree with the DWR Venado rain gauge and several nearby Weather Underground citizen science rain gauges.

Table 1. Potential Days of Discharge

Date	30-minute Hourly Rainfall Intensity (inches/hour)
10/24/2021	1.15
11/1/2021	0.33
11/8/2021	0.35

²⁵ Personal Communication from Drew Coe at CAL FIRE, August 28, 2022

²⁶ Department of Water Resources California Data Exchange Center – [Venado Rain Gauge: Rainfall Between September 24, 2021 and October 24, 2021.](https://cdec.water.ca.gov/jspplot/jspPlotServlet.jsp?sensor_no=3990&end=10/24/2021+00:00&geom=small&interval=30&cookies=cdec01)

(https://cdec.water.ca.gov/jspplot/jspPlotServlet.jsp?sensor_no=3990&end=10/24/2021+00:00&geom=small&interval=30&cookies=cdec01)

²⁷ Extended Wet Weather Period means the period from October 15 to May 1.

Date	30-minute Hourly Rainfall Intensity (inches/hour)
11/9/2021	0.30
12/13/2021	0.25
12/15/2021	0.47
12/23/2021	0.50
12/25/2021	0.65
12/27/2021	0.25
4/16/2022	0.35
4/18/2022	0.24
4/20/2022	0.24

Using the above method and dates, there were 12 total days between October 24, 2021, and May 1, 2022, which exceeded the 30-minute hourly rainfall intensity of 0.2 inches/ hour. These are the days used in the calculation of days of discharge for each violation, below. For Violations 3-5, all days in Table 1 during which sufficient erosion control measures were not installed at the relevant Map Point is considered a day of discharge.

For Violation 6 (Map Point 5), although there were likely multiple days of discharge during the 2022 water year, Staff were unable to determine the exact timing of the discharges. The fresh sediment deposits on the banks above Felta Creek indicate that the discharges occurred at some point between October 24, 2021, and the observations by Staff on March 28, 2022. Therefore, the Prosecution team chose to conservatively allege one day of discharge for Violation 6.

The CGS rainfall data is not available for the 2023 water year, therefore, the methodology applied for Violations 3-5 is not used for Violation 7 (Map Point 6). Although there were likely multiple days of discharge during the atmospheric river events spanning December 2022 and January 2023, the Prosecution Team chose to allege only one day of discharge based on the observed sediment discharges from the January 24, 2023, inspection due to the lack of rainfall data used for the 2022 water year in Table 1.

Violation 3 (Map Point 2) – Discharge Violation

On October 24, 2021, the Discharger discharged waste to waters of the state in violation of General Conditions I.1 and I.3 of the Categorical Waiver and Prohibition 1 of Basin Plan Section 4.2.1.

Basis of Violation

The Discharger's failure to adequately implement erosion controls in violation of FPRs 914.6(a), 914.6(c) and 923.5(j) at Map Point 2 uphill from, and adjacent to, Felta Creek, led to a discharge of sediment to waters of the state in quantities deleterious to fish, wildlife, or other beneficial uses on October 24, 2021. Thus, the Discharger was in violation of Categorical Waiver General Conditions I.1 and I.3, and Basin Plan Section 4.2.1, Prohibition 1.

Water Code section 13350(a)(2) states that a person who “...*in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state...shall be liable civilly.*”²⁸ Accordingly, the Regional Water Board is assessing a penalty for the discharge at Map Point 2.

Days of Violation

On October 28, 2021, Kim Sone of CAL FIRE notified Staff of sediment deposits in the Watercourse and Lake Protection Zone of Felta Creek due to inadequate waterbars on an adjacent road at Map Point 2. On November 4, 2021, Staff inspected the Site and observed rilling and gullying, 1 to 9 inches deep, on a haul road above Felta Creek. Staff also observed deposits of fresh sediment as deep as 10 inches on the banks above Felta Creek and evidence of deposition of sediment into Felta Creek itself. At the time of the inspection there were straw wattles and straw mulch installed above the banks of Felta Creek. These erosion control measures were installed on top of the freshly deposited sediment and were therefore installed sometime between October 28, 2021, and November 4, 2021.

During the Regional Water Board inspection on November 9, 2021, Staff observed several small waterbars on the gullied road above Felta Creek. These were not present during the November 4, 2021, inspection, and were therefore installed between November 4 and November 9, 2021. These erosion control measures may have been sufficient to prevent further discharge of sediment before full implementation of adequate erosion control measures on the road above.

On January 4, 2022, Staff conducted a follow-up inspection and observed that the gullied road that had discharged to Map Point 2 had waterbars of sufficient height and

²⁸ [Porter Cologne Water Quality Control Act, section 13350 \(a\)\(2\)](https://www.waterboards.ca.gov/laws_regulations/)
(https://www.waterboards.ca.gov/laws_regulations/)

spacing installed and that the road surface had been mulched with straw. In addition, a line of straw bales had been installed at the base of the slope. It is the opinion of staff that the erosion control measures that had been implemented were sufficient to prevent further sediment discharge for the remainder of the 2021-2022 winter period.

Consistent with the analysis of potential days of discharge, there was **1 day of violation** from Table 1, on October 24, 2021, when sufficient erosion control measures were not in place on a day with runoff-producing precipitation causing a sediment-laden discharge to Felta Creek.

Step 1. Actual or Potential for Harm for Discharge Violations

Actual or Potential for Harm for Discharge Violations is determined by the sum of the factors for 1) the degree of toxicity of the discharge; 2) actual or potential harm to beneficial uses; and 3) the susceptibility to cleanup or abatement.

Degree of Toxicity of Discharge

The Enforcement Policy states that the degree of toxicity considers the physical, chemical, biological, and thermal characteristics of the discharge or material involved in the violation and the risk of damage the discharge could cause to the receptors or beneficial uses. Evaluation of the discharged material's toxicity should account for all the characteristics of the material prior to discharge, including whether it is partially treated, diluted, concentrated, or a mixture of different constituents. Toxicity analysis should include assessment of both lethal and sublethal effects such as effects on growth and reproduction. A score between 0 and 4 is assigned based on a determination of the risk and threat of the discharged material, as outlined below:

0 = Discharged material poses a negligible risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material are benign and would not impact potential receptors).

1 = Discharged material poses only minor risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material are relatively benign and would not likely cause harm to potential receptors).

2 = Discharged material poses a moderate risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of threat to potential receptors).

3 = Discharged material poses an above-moderate risk or a direct threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material exceed known risk factors or there is substantial threat to potential receptors).

4 = Discharged material poses a significant risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material far exceed risk factors and pose a significant threat to potential receptor uses).

Sediment that is discharged into receiving waters is problematic in many ways. When suspended in the water column it causes elevated turbidity levels in the water column; clouding receiving waters and reducing the amount of sunlight reaching aquatic plants. Sediment can clog fish gills, reduce visibility making it difficult for fish to locate food, find mates, and seek cover and avoid predators.

Even short periods of elevated turbidity, or minimal increases to turbidity, can have significant impacts on aquatic species such as juvenile salmonids. Studies show that reactive distances, the area in which fish can detect and capture prey, changed significantly in rainbow trout from 80 percent to 45 percent respectively in 15 nephelometric turbidity units (NTU) and 30 NTU.²⁹

As sediment settles out of the water column, it impairs aquatic life through deposition of fine grain particles into spawning, rearing, and interstitial niche habitats in a stream's substrate. The filling in of interstitial niches reduces habitat availability; reduced habitat availability in turn affects habitat complexity and biodiversity of species, which affects available food sources in terms of available grazing, shredding, and prey species types.³⁰ The accumulation of sediment in the substrate also affects permeability and can result in less oxygen available in the substrate to support aquatic flora and fauna. Sediment deposition may also reduce the storage capacity of the stream and lead to shallower stream channels, causing flooding, stream bank scouring, and increases in stream temperature which in the short term can kill fish and other species and make the waterway unsuitable habitat to sensitive species in the long term.

Here, sediment-laden stormwater was discharged to Felta Creek, which is listed as a sediment-impaired receiving water system in the 2018 Clean Water Act section 303(d) List.³¹ Potential receptors in Russian River watershed and Felta Creek include anadromous fish (Steelhead Trout, and Coho Salmon), aquatic insects and plants, and domestic water users. The discharged sediment at the Site poses an above-moderate and direct threat to these potential receptors.

²⁹ Barrett, J. C., Grossman, G. D., Rosenfeld, J., [Turbidity Induced Changes in Reactive Distances of Rainbow Trout](https://www.tandfonline.com/doi/abs/10.1577/1548-8659%281992%29121%3C0437%3ATICIRD%3E2.3.CO%3B2?cookieSet=1), Transactions of the American Fisheries Society, 121:437-443, 1992. (<https://www.tandfonline.com/doi/abs/10.1577/1548-8659%281992%29121%3C0437%3ATICIRD%3E2.3.CO%3B2?cookieSet=1>).

³⁰ Bash, J., Berman, C., Bolton, S., [Effects of Turbidity and Suspended Solids on Salmonids](https://www.wsdot.wa.gov/research/reports/fullreports/526.1.pdf), Center of Streamside Studies, University of Washington, 22-23, 2001. (<https://www.wsdot.wa.gov/research/reports/fullreports/526.1.pdf>)

³¹ [The 2018 California Integrated Report \(Clean Water Act Section 303\(d\) and 305\(b\) Report](https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html)

(https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html)

The Board has assigned a score of **three (3)** for the Degree of Toxicity of Discharge factor, as sediment-laden stormwater posed an above-moderate risk or threat to potential receptors.

Actual or Potential for Harm to Beneficial Uses

The Enforcement Policy states that evaluation of the actual or potential for harm to beneficial uses considers the harm to beneficial uses in the affected receiving water body that may result from exposure to the pollutants or contaminants in the discharge. The Regional Water Board may consider actual harm or potential harm to human health and/or beneficial uses. The score evaluates direct or indirect actual harm or potential for harm from the violation. The harm or potential harm to beneficial uses ranges between 0 and 5 based on a determination of whether the harm or potential for harm to beneficial uses is negligible (0), minor (1), below moderate (2), moderate (3), above moderate (4), or major (5). The Enforcement Policy defines moderate as impacts that are observed or reasonably expected potential impacts, but harm or potential harm to beneficial uses is moderate and likely to attenuate without appreciable medium or long term acute or chronic effects.

The receiving water is listed on the Clean Water Act section 303(d) list as a sediment-impaired system³² thus indicating that there is no assimilative capacity for the system to take on additional sediment without adversely impacting water quality. The discharge of sediment-laden water from the Site into Felta Creek is a persistent condition that repeatedly impacted and continues to impact conditions of the watershed.

Discharges from the Site resulted in significant deposits of fine sediment in the Felta Creek stream channel as well as unnamed tributaries to the Russian River, impacting habitat while deposited, and available to become resuspended and transported farther downstream with each subsequent high flow event. Sediment discharges from the Site are reasonably expected to have a negative impact on the beneficial uses for the Middle and Lower Russian River Hydrologic Areas and Felta Creek, especially those related to aquatic beneficial uses which are present and include: wildlife habitat (WILD); cold freshwater habitat (COLD); rare, threatened, or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPAWN); and commercial and sport fishing (COMM).³³

³² [The 2018 California Integrated Report \(Clean Water Act Section 303\(d\) and 305\(b\) Report](#)

(https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html)

³³ [The Water Quality Control Plan for the North Coast Region \(ca.gov\)](#) (Basin Plan), Chapter 2, Page 11.

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/)

While impacts from high turbidity to beneficial uses are reasonably expected, it is likely that the turbidity and sediment discharged from the Site into receiving waters attenuated without appreciable medium or long term acute or chronic effects because exceedances were limited to storm events.

For this violation, the Board finds the Actual or Potential Harm to Beneficial Uses should be considered **Above Moderate (4)** given the actual or potential harm to beneficial uses, the importance of the Felta Creek watershed to Russian River Coho salmon populations, and the reasons otherwise identified above.

Susceptibility to Cleanup or Abatement

As described in the Enforcement Policy, the Susceptibility to Cleanup or Abatement factor is assessed as either 0 or 1. A score of 0 is assigned if the permittee cleans up 50 percent or more of the discharge within a reasonable amount of time, whereas a score of 1 is appropriate where less than 50 percent of the discharge is susceptible to cleanup or abatement, or if 50 percent or more of the discharge is susceptible to cleanup or abatement, but the Discharger failed to clean up 50 percent or more of the discharge within a reasonable time. A score of 1 should be assigned when a discharger cleans up 50 percent or less of the discharge in a reasonable amount of time.

The Board has assigned a factor of one (1) because less than 50 percent of the discharge is susceptible to cleanup or abatement. Most of the sediment-laden stormwater discharged to Felta Creek and unnamed tributaries of the Russian River has dispersed and dissipated in the watershed; thus, cleanup or abatement of the sediment was not possible.

Final Score – Potential for Harm is 8.

Step 2. Per-Day Assessments for Discharge Violations

The Prosecution Team recommended assessing liability on a per-day basis, rather than volume, for the discharge violations (Violations 3 through 6) because estimation of volume is infeasible due to the non-point nature of the discharges. Where there is a discharge, the Enforcement Policy requires that the Water Boards shall determine a per-day factor based on the Potential for Harm score and the extent of Deviation from Requirement of the violation.

Deviation from Requirement

The FPRs, and therefore by extension, the Categorical Waiver, requires sediment and erosion controls to be in place prior to October 15, 2021 (beginning of the Extended Wet Weather Period). Failure to remove loose sediment and stabilize the road prior to the beginning of the Extended Wet Weather Period resulted in a violation of Waiver Conditions. Additionally, the Discharger violated Prohibitions 1 & 2 in the Categorical Waiver for discharges or threatened discharges of organic and earthen material into any

stream, or watercourse in quantities deleterious to fish, wildlife, or other beneficial uses.³⁴

The Board has determined that a **Major** Deviation from Requirement is appropriate for these Violations because the requirement was rendered ineffective.

Per-Day Factor for Discharge Violation:

The Regional Water Board determines initial liability for discharge violations on a per-day basis using the Potential for Harm and Deviation from Requirement factors.

Using Table 2 of the Enforcement Policy, the per-day factor based on the Potential for Harm (8) and Deviation from Requirement (Major) is **0.6**.

Initial Liability Amount Calculation for Violation 3

Violation 3: 1 violation x 1 (day) x 0.6 (per-day factor) x \$5,000/day = **\$3,000**

Step 3. Per-Day Assessments for Non-Discharge Violations

Step 3 is not applicable to Violations 3-7 because they are discharge violations.

Step 4: Adjustment Factors - Discussion of Factors for Violation 3

Degree of Culpability

A reasonable Discharger conducting Timber Harvest Activities under the Categorical Waiver would fully implement the sediment and erosion control requirements on the Site in accordance with FPRs to reduce the likelihood of discharges and threatened discharges to receiving waters. The Discharger had an obligation to conduct Timber Harvest Activities according to the FPRs to ensure that the Site did not pose an undue risk to water quality.

The Discharger failed to implement sediment and erosion controls by October 24, 2021, which resulted in discharges from Map Point 2. Therefore, the Discharger acted negligently in not implementing proper erosion controls.

The Board has assigned a Culpability Factor of **1.3** for negligent conduct.

History of Violations

For the reasons discussed in Violation 1, a score of **1.0** has been applied.

³⁴ [Categorical Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region - Order R1-2014-0011](https://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/timber_waiver/)

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/timber_waiver/)

Cleanup and Cooperation

During the November 4, 2021, inspection, Staff observed that the Discharger had implemented short-term sediment and erosion controls at Map Point 2 at some point between October 24, 2021 and November 4, 2021. During the November 9, 2021 inspection, Staff notified the Discharger's RPF additional waterbars were required to effectively stabilize Map Point 2. Staff observed that the Discharger had implemented the additional waterbars during the January 4, 2022, inspection.

The Discharger's response to addressing the violation was reasonable and prudent. Consequently, a factor of **1.0** for Cleanup and Cooperation is appropriate.

Step 5. Total Base Liability Calculations for Violation 3

Violation 3: [1 (violation) x 1 (days of violation) x 0.6 (per-day factor) x \$5,000/day = \$3,000] x 1.3 (culpability) x 1.0 (history of violations) x 1.0 (cleanup and cooperation) = **\$3,900**

By applying the selected values to the factors above, the Total Base Liability for Violation 3 is **\$3,900**.

Violation 4 (Map Point 3) – Discharge Violation

Between October 24, 2021, and April 20, 2022, the Discharger discharged waste to waters of the state in violation of General Condition I.3 of the Categorical Waiver.

Basis of Violation

The Discharger's failed to adequately implement erosion controls in violation of FPRs 914.6(a), 914.6(b)(1), 914.6(c), and 923.5(j) at Map Point 3 at a segment of haul road that crossed two Class III watercourses. These actions led to discharges of sediment to waters of the state in quantities deleterious to fish, wildlife, or other beneficial uses between October 24, 2021, and April 20, 2022. Thus, the Discharger was in violation of Categorical Waiver General Condition I.3.

Water Code section 13350(a)(2) states that a person who “...*in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state...shall be liable civilly.*”³⁵ Accordingly, the Regional Water Board is assessing a penalty for the discharges at Map Point 3.

Days of Violation

During the inspection on November 4, 2021, Staff discovered the discharge at Map Point 3. No sediment or erosion control measures were in place on the landing, haul road, or watercourse crossing at that time. During a subsequent Staff inspection of the Site on November 9, 2021, Staff observed active discharges in several areas at Map Point 3. No erosion control measures were in place at that time.

On January 4, 2022, Staff conducted another follow-up inspection of the Site. At Map Point 3, Staff observed that straw mulch had been placed on the surface of the haul road where it crosses the two Class III watercourses, though neither the landing nor the segment of road between the crossing and the landing had any erosion control measures in place. The straw mulch was not effective as an erosion control measure and road-surface rilling was observed underneath the thin layer of straw. Earthen material with organics mixed in remained in the watercourse channel (except for where streamflow had transported it downstream) along the outboard edge of the road.

No additional erosion control measures were observed during any of Staff's subsequent inspections of the Site.

Consistent with the discussion above, there were **12 days** of violation of the days from Table 1 during which insufficient erosion control measures were in place.

³⁵ [Porter Cologne Water Quality Control Act, section 13350 \(a\)\(2\)](https://www.waterboards.ca.gov/laws_regulations/)
(https://www.waterboards.ca.gov/laws_regulations/)

Step 1. Actual or Potential for Harm for Discharge Violations

Actual or Potential for Harm for Discharge Violations is determined by the sum of the factors for 1) the degree of toxicity of the discharge; 2) actual or potential harm to beneficial uses; and 3) the susceptibility to cleanup or abatement.

Degree of Toxicity of Discharge

For the reasons discussed in Violation 3, Degree of Toxicity of Discharge score of **three (3)** has been applied, as sediment-laden stormwater poses an above moderate risk or threat to potential receptors.

Actual or Potential for Harm to Beneficial Uses

For the reasons discussed in Violation 3, an **Above Moderate (4)** assessment for the Actual or Potential Harm to Beneficial Uses has been applied.

Susceptibility to Cleanup or Abatement

For the reasons discussed in Violation 3, a Susceptibility to Cleanup or Abatement factor of **one (1)** has been applied, because less than 50 percent of the discharge is susceptible to cleanup or abatement. Most of the sediment-laden stormwater discharged to Felta Creek and unnamed tributaries of the Russian River has dispersed and dissipated in the watershed; thus, cleanup or abatement of the sediment was not possible.

Final Score – Potential for Harm is 8.

Step 2. Per-Day Assessments for Discharge Violations

Deviation from Requirement

For the reasons discussed in Violation 3, a **Major** assessment for the Deviation from Requirement has been applied.

Per-Day Factor for Discharge Violation:

The Regional Water Board determines initial liability for discharge violations on a per-day basis using the Potential for Harm and Deviation from Requirement factors. The Deviation from Requirement is **Major**.

Using Table 2 of the Enforcement Policy, the per-day factor based on the Potential for Harm (8) and Deviation from Requirement (Major) is **0.6**.

Initial Liability Amount Calculation for Violation 4

Violation 4: 1 violation x 12 (days) x 0.6 (per-day factor) x \$5,000/day = **\$36,000**

Step 4: Adjustment Factors - Discussion of Factors for Violation 4

Degree of Culpability

A reasonable Discharger conducting Timber Harvest Activities under the Categorical Waiver would fully implement the sediment and erosion control requirements on the Site in accordance with FPRs to reduce the likelihood of discharges and threatened discharges to receiving waters. The Discharger had an obligation to conduct Timber Harvest Activities according to the FPRs to ensure that the Site did not pose an undue risk to water quality.

The Discharger failed to implement sediment and erosion controls by October 24, 2021, which resulted in discharges from Map Point 3. Therefore, the Discharger acted negligently.

The Board has assigned a Culpability Factor of **1.3** for negligent conduct.

History of Violations

For the reasons discussed in Violation 1, a score of **1.0** has been applied.

Cleanup and Cooperation

During the January 4, 2022, inspection, Staff observed that the Discharger had implemented minimal short-term sediment and erosion controls by placing straw mulch at Map Point 3 between November 9, 2021, and January 4, 2022. However, the straw mulch was ineffective in preventing further discharges. A reasonable Discharger would have immediately done shovel-work to install waterbars and remove perched fill and fill in watercourses as a short-term stabilization measure, which would have been more effective than only placing straw mulch. During the November 9, 2021, inspection, Staff notified the Discharger's RPF that additional work was required including installation of additional waterbars to effectively stabilize Map Point 3. Staff observed that the Discharger had implemented the additional waterbars during the October 26, 2022, inspection.

The Discharger's response to addressing the violation was negligent. Consequently, a factor of **1.3** for Cleanup and Cooperation is appropriate.

By applying the factors to Violation 4, the final adjusted liability is **\$60,840**.

Step 5. Total Base Liability Calculations for Violation 4

Violation 4: [1 (violations) x 12 (days of violation) x 0.6 (per-day factor) x \$5,000/day = \$36,000] x 1.3 (culpability) x 1.0 (history of violations) x 1.3 (cleanup and cooperation) = **\$60,840**

By applying the factors to Violation 4, the final adjusted liability is **\$60,840**.

Violation 5 (Map Point 4) – Discharge Violation

On October 24, 2021, the Discharger discharged waste to waters of the state in violation of General Condition I.3 of the Categorical Waiver.

Basis of Violation

The Discharger's failure to adequately implement erosion controls in violation of FPRs 914.6(a), 914.6(c) and 923.5(j) at Map Point 4 on a segment of haul road uphill from a Class III watercourse led to a discharge of sediment to waters of the state in quantities deleterious to fish, wildlife, or other beneficial uses on October 24, 2021. Thus, the Discharger was in violation of Categorical Waiver General Condition I.3.

Water Code section 13350(a)(2) states that a person who “...*in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state...shall be liable civilly.*”³⁶ Accordingly, the Regional Water Board is assessing a penalty for the discharge at Map Point 4.

Days of Violation

During the inspection of the Site on November 4, 2021, Staff observed a large amount of fresh sediment deposited in a Class III watercourse directly downhill from a segment of appurtenant haul road. The haul road showed evidence of rilling and gullying, ultimately delivering sediment-laden stormwater to the Class III watercourse.

Waterbars had been installed on this segment of road, sometime after October 24, 2021, and before the inspection on November 4, 2021, leading to a Notice of Violation from CAL FIRE for operation of heavy equipment in saturated soil conditions. These waterbars, though constructed in violation of the Forest Practice Rules (FPRs) during saturated soil conditions, seem to have been sufficient to prevent further discharge of sediment to the Class III watercourse after their installation.

Consistent with the discussion above, there was **1 day** of alleged violation from Table 1, October 24, 2021, when sufficient erosion control measures were not in place.

Step 1. Actual or Potential for Harm for Discharge Violations

Degree of Toxicity of Discharge

For the reasons discussed in Violation 3, Degree of Toxicity of Discharge score of **three (3)** has been applied, as sediment-laden stormwater poses an above moderate risk or threat to potential receptors.

³⁶ [Porter Cologne Water Quality Control Act, section 13350 \(a\)\(2\)](https://www.waterboards.ca.gov/laws_regulations/)
(https://www.waterboards.ca.gov/laws_regulations/)

Actual or Potential for Harm to Beneficial Uses

For the reasons discussed in Violation 3, an **Above Moderate (4)** assessment for the Actual or Potential Harm to Beneficial Uses has been applied.

Susceptibility to Cleanup or Abatement

For the reasons discussed in Violation 3, a Susceptibility to Cleanup or Abatement factor of **one (1)** has been applied, because less than 50 percent of the discharge is susceptible to cleanup or abatement. Most of the sediment-laden stormwater discharged to Felta Creek and unnamed tributaries of the Russian River has dispersed and dissipated in the watershed; thus, cleanup or abatement of the sediment was not possible.

Final Score – Potential for Harm is 8

Step 2. Per-Day Assessments for Discharge Violations

Deviation from Requirement

For the reasons discussed in Violation 3, a **Major** assessment for the Deviation from Requirements has been applied.

Per-Day Factor for Discharge Violation:

The Regional Water Board determines initial liability for discharge violations on a per-day basis using the Potential for Harm and Deviation from Requirement factors. The Deviation from Requirement is **Major**.

Using Table 2 of the Enforcement Policy, the per-day factor based on the Potential for Harm (8) and Deviation from Requirement (Major) is **0.6**.

Initial Liability Amount Calculation for Violation 5

Violation 5: 1 violation x 1 (days) x 0.6 (per-day factor) x \$5,000/day = **\$3,000**

Step 4: Adjustment Factors - Discussion of Factors for Violation 5

Degree of Culpability

A reasonable Discharger conducting Timber Harvest Activities under the Categorical Waiver would fully implement the sediment and erosion control requirements on the Site in accordance with FPRs to reduce the likelihood of discharges and threatened discharges to receiving waters. The Discharger had an obligation to conduct Timber Harvest Activities according to the FPRs to ensure that the Site did not pose an undue risk to water quality.

The Discharger failed to implement sediment and erosion controls by October 24, 2021, which resulted in discharges from Map Point 4. Therefore, the Discharger acted negligently in not implementing proper erosion controls.

The Board has assigned a Culpability Factor of **1.3** for negligent conduct.

History of Violations

For the reasons discussed in Violation 1, a score of **1.0** has been applied.

Cleanup and Cooperation

During the November 4, 2021, inspection, Staff observed that the Discharger had implemented sediment and erosion controls at Map Point 4 at some point between October 24, 2021, and November 4, 2021. During the November 9, 2021, inspection, Staff notified the Discharger's RPF that additional waterbars were required to effectively stabilize Map Point 4. Staff observed that the Discharger had constructed the additional waterbars during the inspection on January 4, 2022.

The Discharger's response to addressing the violation was reasonable and prudent. Consequently, a factor of **1.0** for Cleanup and Cooperation is appropriate.

By applying the factors to Violation 5, the final adjusted liability is **\$3,900**.

Step 5. Total Base Liability Calculations for Violation 5

Violation 5: [1 (violation) x 1 (days of violation) x 0.6 (per-day factor) x \$5,000/day = \$2,050] x 1.3 (culpability) x 1.0 (history of violations) x 1.0 (cleanup and cooperation) = **\$3,900**

By applying the factors to Violation 5, the final adjusted liability is **\$3,900.00**.

Violation 6 (Map Point 5) – Discharge Violation

Between October 24, 2021, and March 28, 2022, the Discharger discharged waste to waters of the state in violation of General Conditions I.1 and I.3 of the Categorical Waiver and Prohibition 1 of the Basin Plan Section 4.2.1.

Basis of Violation

The Discharger's failed to adequately implement erosion controls in violation of FPR sections 914.6(a), 914.6(b)(1), 914.6(c) and 923.5(j) at a segment of road on a ridge above Felta Creek at Map Point 5. As a result, several gullies six to twelve inches deep were formed in the road surface, which carried sediment-laden runoff downslope to Felta Creek. These actions led to discharges of sediment to waters of the state in quantities deleterious to fish, wildlife, or other beneficial uses between October 24, 2021, and March 28, 2022. Thus, the Discharger was in violation of Categorical Waiver General Conditions I.1 and I.3, and Basin Plan Section 4.2.1, Prohibition 1.

Water Code section 13350(a)(2) states that a person who “...*in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state...shall be liable civilly.*”³⁷ Accordingly, the Regional Water Board is assessing a penalty for the discharges at Map Point 5.

Days of Violation

The discharge at Map Point 5 was discovered by Staff during the March 28, 2022, Interim Plan inspection. No Staff had previously been to this part of the Site prior to the March 28, 2022, inspection.

The discharge originated on a segment of road on the south side of the Site near the top of a ridge above Felta Creek. Erosion control measures along this segment of road were not adequately implemented and several gullies, six to twelve inches deep, were formed in the road surface. After exiting the road prism, the runoff flowed downhill incising a gully in places before diverting down an old skid trail and flowing further downhill and depositing sediment into Felta Creek. The total slope distance from the source of the discharge on the ridgetop road to the channel of Felta Creek is approximately 500 feet.

On April 9, 2022, Staff received a response to our inspection report for the March 28, 2022, inspection from the Discharger's RPF. The response letter states that, during their February 14, 2022, inspection, no waterbars were in place on a segment of road above

³⁷ [Porter Cologne Water Quality Control Act, section 13350 \(a\)\(2\)](https://www.waterboards.ca.gov/laws_regulations/)
(https://www.waterboards.ca.gov/laws_regulations/)

Map Point 5 and noted breaches in the outboard berm of the road, indicating that the waterbars had been removed prior to the RPF's inspection.

During a follow-up inspection on September 20, 2022, adequate waterbars had been installed on the segment of road diverting water to Felta Creek. Despite the waterbar construction, there was still perched sidecast material on the outboard edge of the road, and the gully from the road to Felta Creek had not been hydrologically disconnected.

Although there were likely multiple days of discharge, Staff were unable to determine the exact timing of the discharges because the exact date that the waterbars were removed is unknown. The fresh sediment deposits on the banks above Felta Creek indicate that the discharges occurred at some point between October 24, 2021, and the observations by Staff on March 28, 2022. Therefore, the Prosecution team chose to allege one day of discharge for Violation 6.

Consistent with the discussion above, the Board found **1 day** of violation for the days between October 24, 2021, and March 28, 2022.

Step 1. Actual or Potential for Harm for Discharge Violations

Degree of Toxicity of Discharge

For the reasons discussed in Violation 3, Degree of Toxicity of Discharge score of **three (3)** has been applied, as sediment-laden stormwater poses an above moderate risk or threat to potential receptors.

Actual or Potential for Harm to Beneficial Uses

For the reasons discussed in Violation 3, an **Above Moderate (4)** assessment for the Actual or Potential Harm to Beneficial Uses has been applied.

Susceptibility to Cleanup or Abatement

For the reasons discussed in Violation 3, a Susceptibility to Cleanup or Abatement factor of **one (1)** has been applied, because less than 50 percent of the discharge is susceptible to cleanup or abatement. Most of the sediment-laden stormwater discharged to Felta Creek and unnamed tributaries of the Russian River has dispersed and dissipated in the watershed; thus, cleanup or abatement of the sediment was not possible.

Final Score – Potential for Harm is 8.

Step 2. Per-Day Assessments for Discharge Violations

Deviation from Requirement

For the reasons discussed in Violation 3, a **Major** assessment for the Deviation from Requirement has been applied.

Per-Day Factor for Discharge Violation:

The Regional Water Board determines initial liability for discharge violations on a per-day basis using the Potential for Harm and Deviation from Requirement factors. The Deviation from Requirement is **Major**.

Using Table 2 of the Enforcement Policy, the per-day factor based on the Potential for Harm (8) and Deviation from Requirement (Major) is **0.6**.

Initial Liability Amount Calculation for Violation 6

Violation 6: 1 violation x 1 (days) x 0.6 (per-day factor) x \$5,000/day = **\$3,000**

Step 4: Adjustment Factors - Discussion of Factors for Violation 6

Degree of Culpability

A reasonable Discharger conducting Timber Harvest Activities under the Categorical Waiver would fully implement the sediment and erosion control requirements on the Site in accordance with FPRs to reduce the likelihood of discharges and threatened discharges to receiving waters. The Discharger had an obligation to conduct Timber Harvest Activities according to the FPRs to ensure that the Site did not pose an undue risk to water quality.

At a minimum, the Discharger acted negligently by failing to implement proper erosion controls as evidenced by the discharge at Map Point 5. While the removal of the waterbars was a violation of FPRs and a major departure from industry standards, it is unknown whether the discharges at Map Point 5 occurred after the waterbars were removed. Thus, the Board cannot be certain that the discharge was the result of intentional conduct or gross negligence.

The Board has assigned a Culpability Factor of **1.3** for negligent conduct.

History of Violations

For the reasons discussed in Violation 1, a score of **1.0** has been applied.

Cleanup and Cooperation

The Discharger reconstructed the waterbars at Map Point 5 in September 2022; however, the Discharger left perched sidecast material on the outboard edge of the road and the gully from the road to Felta Creek, where the discharges occurred, and the road had not been hydrologically disconnected.

A reasonable Discharger would not have left perched sidecast material on the road which threatened to discharge to Felta Creek and would have hydrologically disconnected the gully from the road. Thus, the Discharger's response to addressing the violation was negligent.

Consequently, the Board has assigned a Cleanup and Cooperation factor of **1.3**.

Step 5. Total Base Liability Calculations for Violation 6

Violation 6: [1 (violation) x 1 (days of violation) x 0.6 (per-day factor) x \$5,000/day = \$3,000] x 1.3 (culpability) x 1.0 (history of violations) x 1.3 (cleanup and cooperation) = **\$5,070**

By applying the factors to Violation 6, the final adjusted liability is **\$5,070.00**.

Violation 7 (Map Point 6) – Discharge Violation

On January 24, 2023, the Discharger discharged waste to waters of the state in violation of General Condition I.3.

Basis of Violation

The Discharger's failed to adequately implement erosion controls in violation of FPRs 914.6(a) and 914.6(b)(1) on a segment of skid trail constructed in a swale and terminating approximately 30 feet from a Class III watercourse. As a result, water from the road above and from the swale carried sediment from the bare skid trail surface and spoils from skid trail construction downslope to the Class III watercourse, a tributary to Felta Creek. These actions led to a discharge of sediment to waters of the state in quantities deleterious to fish, wildlife on January 24, 2023. Thus, the Discharger was in violation of Categorical Waiver General Condition I.3.

Water Code section 13350(a)(2) states that a person who “...*in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state...shall be liable civilly.*”³⁸ Accordingly, the Regional Water Board is assessing a penalty for the discharge at Map Point 6.

Days of Violation

The discharge at Map Point 6 was discovered by Staff during the January 24, 2023, inspection.

The discharge was caused by a skid trail down a swale which originates at the landing at Map Point 3 and terminates roughly 30 feet above a Class III watercourse, just upstream from the Class II/Class III break. Water from the road above the swale is conveyed into the swale by a waterbar, flowing down the erodible surface of the skid trail. There are several water breaks installed on the skid trail surface, but these were only effective at slowing the surface runoff and did not prevent a discharge. Fresh sediment was observed at least 300 feet downstream from the swale, well past the Class II/Class III break.

On June 6, 2022, Staff conducted an inspection of the Site and discovered the newly constructed skid trail at Map Point 6. No skid trail had been observed by Staff at this location during any of the previously inspections. The surface of the skid trail had been partially covered by slash pack, though there was still bare mineral soil at the bottom of the skid trail, near the watercourse.

³⁸ [Porter Cologne Water Quality Control Act, section 13350 \(a\)\(2\)](https://www.waterboards.ca.gov/laws_regulations/)
(https://www.waterboards.ca.gov/laws_regulations/)

On June 7, 2022, CAL FIRE issued an NOV to the Discharger for constructing a skid trail in Equipment Limitation Zone of a Class III watercourse in violation of FPR 916.3c and directing the Discharger to immediately stop using the skid trail and install erosion control.

On September 20, 2022, Staff conducted an inspection with the Discharger. Staff gave verbal direction to the Discharger that the threatened discharges at Map Point 6 must be addressed in the Long-Term Plan.

During the October 26, 2022, inspection, Staff observed that the partial slash cover on the skid trail had been removed exposing bare mineral soil on the majority of the skid trail surface, and on October 27, 2022, Staff again informed the Discharger that the threatened discharge Map Point 6 must be addressed in the Long-Term Plan.

On January 13, 2023, the Regional Water Board issued a Notice of Violation to the Discharger citing violations of the Categorical Waiver and Basin Plan for two remaining areas with threatened discharges, including Map Point 6. The transmittal of the Notice of Violation included inspection reports for the October 26, 2022, and December 6, 2022, inspections, both of which describe the threatened discharges at Map Point 6. The CGS rainfall data is not available for the 2023 water year, therefore, the methodology applied for Violations 3-6 is not used for Violation 7. Although there were likely multiple days of discharge during the atmospheric river events spanning December 2022 and January 2023, the Prosecution team chose to allege one day of discharge based on the observed sediment discharges from the January 24, 2023, inspection.

Consistent with the discussion above, there was **1** day of violation at Map Point 6.

Step 1. Actual or Potential for Harm for Discharge Violations

Degree of Toxicity of Discharge

For the reasons discussed in Violation 3, Degree of Toxicity of Discharge score of **three (3)** has been applied, as sediment-laden stormwater poses an above moderate risk or threat to potential receptors.

Actual or Potential for Harm to Beneficial Uses

For the reasons discussed in Violation 3, an **Above Moderate (3)** assessment for the Actual or Potential Harm to Beneficial Uses has been applied.

Susceptibility to Cleanup or Abatement

For the reasons discussed in Violation 3, a Susceptibility to Cleanup or Abatement factor of **one (1)** has been applied, because less than 50 percent of the discharge is susceptible to cleanup or abatement. Most of the sediment-laden stormwater discharged to Felta Creek and unnamed tributaries of the Russian River has dispersed and dissipated in the watershed; thus, cleanup or abatement of the sediment was not possible.

Final Score – Potential for Harm is 8.

Step 2. Per-Day Assessments for Discharge Violations

Deviation from Requirement

For the reasons discussed in Violation 3, a **Major** assessment for the Deviation from Requirement has been applied.

Per-Day Factor for Discharge Violation:

The Regional Water Board determines initial liability for discharge violations on a per-day basis using the Potential for Harm and Deviation from Requirement factors. The Deviation from Requirement is **Major**.

Using Table 2 of the Enforcement Policy, the per-day factor based on the Potential for Harm (8) and Deviation from Requirement (Major) is **0.6**.

Initial Liability Amount Calculation for Violation 7

Violation 6: 1 violation x 1 (days) x 0.6 (per-day factor) x \$5,000/day = **\$3,000**

Step 4: Adjustment Factors - Discussion of Factors for Violation 7

Degree of Culpability

A reasonable Discharger conducting timber harvest activities under the Categorical Waiver would fully implement the sediment and erosion control requirements on the Site in accordance with FPRs to reduce the likelihood of discharges and threatened discharges to receiving waters. The Discharger had an obligation to conduct timber harvest activities according to the FPRs to ensure that the Site did not pose an undue risk to water quality.

Since June 7, 2022, Staff informed the Discharger several times regarding the requirement to install erosion control measures due to threatened discharges from the construction of a skid trail at Map Point 6. In addition, the Discharger was aware of the requirements to investigate and remediate threatened discharges throughout the Site to comply with the Long-Term CAO. The Discharger was aware of the threatened discharge at Map Point 6 but chose not to install erosion control measures prior to atmospheric river events spanning December 2022 and January 2023, which led to an actual discharge from the skid trail.

For the one day of discharge, the Board has assigned a Culpability Factor of **1.5** for gross negligence and intentional misconduct.

History of Violations

For the reasons discussed in Violation 1, a score of **1.0** has been applied.

Cleanup and Cooperation

To date, there has been no communication from the Discharger regarding the discharge observed by Staff at Map Point 5. In addition, the Discharger has not submitted the Long-Term Plan as required by the Long-Term CAO which would address any remaining discharges and threatened discharges at the Site.

The Discharger's failure to install sediment and erosion control measures at Map Point 6 or comply with the Long-Term CAO that were in place prior to the discharges was a major departure from what cleanup efforts can reasonably be expected. Consequently, the Board has assigned a Cleanup and Cooperation factor of **1.5**.

Step 5. Total Base Liability Calculations for Violation 7

Violation 7: [1 (violation) x 1 (days of violation) x 0.6 (per-day factor) x \$5,000/day = \$3,000] x 1.5 (culpability) x 1.0 (history of violations) x 1.5 (cleanup and cooperation) = **\$6,750**

By applying the factors to Violation 7, the final adjusted liability is **\$6,750**.

Step 6: Ability to Pay and Ability to Continue in Business

The Regional Water Board is required to assess a discharger's ability to pay the ACL amount and consider the effect the ACL amount has on a discharger's ability to continue in business. Importantly, the Regional Water Board is under no obligation to ensure that a permittee has the ability to pay an ACL amount; the Regional Water Board must only consider these factors when imposing an ACL amount. The ability of a discharger to pay an ACL amount is determined by its income (revenue minus expenses) and net worth (assets minus liabilities). If staff makes an initial showing that a discharger has sufficient income or net worth to pay the proposed liability, then the burden of proof on this factor shifts to the discharger to produce sufficient evidence that it lacks an ability to pay.

In this case, the Discharger is a landowner, timber operator, and practicing attorney. According to county assessor records, the Discharger owns the following 27 parcels with a total assessed value of **\$2,438,708**.

Assessor Parcel Number	County	2022 Assessed Value
140-106-003-000	Del Norte	\$2,291
140-130-023-000	Del Norte	\$18,000
140-150-002-000	Del Norte	\$61,888
018-091-007-000	Humboldt	\$264,017
018-121-030-000	Humboldt	\$120,574
316-243-005-000	Humboldt	\$101,555
316-243-004-000	Humboldt	\$23,734
316-171-012-000	Humboldt	\$117,365
316-176-006-000	Humboldt	\$206,472
316-191-015-000	Humboldt	\$67,191
316-201-002-000	Humboldt	\$166,777
316-201-003-000	Humboldt	\$40,815

Assessor Parcel Number	County	2022 Assessed Value
316-243-001-000	Humboldt	\$47,204
316-243-003-000	Humboldt	\$65,205
533-074-002-000	Humboldt	\$6,141
037-280-18-00	Mendocino	\$36,267
037-280-19-00	Mendocino	\$7,350
037-280-21-00	Mendocino	\$160,768
037-280-23-00	Mendocino	\$72,433
037-290-18-00	Mendocino	\$409,085
037-290-21-00	Mendocino	\$15,880
037-290-22-00	Mendocino	\$3,920
037-290-23-00	Mendocino	\$20,645
037-290-24-00	Mendocino	\$27,259
037-300-09-00	Mendocino	\$7,773
022-160-160	Siskiyou	\$13,930
110-190-001-000	Sonoma	\$354,169

The Discharger is engaged in the business of commercial timber harvesting and is a practicing attorney. Staff cannot determine the income derived from the Discharger's businesses because they do not have access to the Discharger's business records. However, the collective assessed value of the Discharger's properties of \$2,599,476 provide a sufficient basis to believe that Discharger has a net worth sufficient to cover the ACL amount. The Discharger would need to provide additional information for staff to perform a more complete analysis of the Discharger's ability to pay. Based on the currently available information, the Board has determined the Discharger has the ability to pay the ACL amount and continue in business.

Step 7: Economic Benefit

The Enforcement Policy (pages 20-21) requires that the adjusted Total Base Liability Amount be at least 10 percent higher than any economic benefit realized by the discharger. Because it is unfair to dischargers that voluntarily incur the costs of regulatory compliance, the Regional Water Board should only impose civil liabilities in an amount less than the economic benefit to the violator for violations of other provisions of the Water Code in exceptional circumstances where not doing so would be against public policy, have a disproportionate effect on a disadvantaged community or group, or be patently unjust. As discussed throughout the Enforcement Policy, to be fair to dischargers that voluntarily incur the costs of regulatory compliance, the Regional Water Board should impose civil liabilities 10 percent greater than the economic benefit to the violator to help ensure that they are not viewed merely as a cost of doing business.

The Enforcement Policy provides that the economic benefit of noncompliance should be calculated using the USEPA Economic Benefit Model (BEN)³⁹ penalty and financial modeling program unless it is demonstrated that an alternative method of calculating the economic benefit is more appropriate. For this case, BEN was determined to be the appropriate method. Using standard economic principles such as time-value of money and tax deductibility of compliance costs, BEN calculates a permittee's economic benefit derived from delaying or avoiding compliance with environmental statutes.⁴⁰ "The economic benefit is equal to the present value of the avoided costs plus the 'interest' on delayed costs."⁴¹

For Violations 1 & 2, the requirements for development of the Interim Plan (Interim Cleanup and Stabilization Plan) and a Long-Term Plan (Long-Term Restoration and Monitoring Plan) (i.e., field inspection and report preparation) are comparable to that of preparing a combined Site Management Plan and Site Erosion and Sediment Control Plan as presented in the State Water Resources Control Board, October 2017, Direct Cost Analysis for the Proposed Cannabis Cultivation Policy (2017 Direct Cost Analysis) which is estimated to cost between \$2,760 and \$9,920.⁴²

³⁹ [Economic Benefit Model available for download](https://www.epa.gov/enforcement/penalty-and-financial-models)

(<https://www.epa.gov/enforcement/penalty-and-financial-models>)

⁴⁰ [State Water Resources Control Board's 2017 Enforcement Policy](https://www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.shtml), page 20

(https://www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.shtml;))

⁴¹ [State Water Resources Control Board's 2017 Enforcement Policy](https://www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.shtml), page 21:

(https://www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.shtml)

⁴² [Direct Cost Analysis for the Proposed Cannabis Cultivation Policy](https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy/20171017_cannabis_cultivation_policy_cost_analysis.pdf)

(https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy/20171017_cannabis_cultivation_policy_cost_analysis.pdf)

Using the EPA Ben model to determine the economic benefit from delayed expenditures associated with Violations 1 & 2, Staff identified the cost of both the Interim Plan and Long-Term Plan as \$9,920, one-time non-depreciable expenditures, requiring \$0 in capital investment, and \$0 in annual recurring fees.

- The noncompliance date for the Interim Plan was January 25, 2022. The resulting economic benefit from delaying the Interim Plan expenditures to March 4, 2022, is \$57.
- The noncompliance date for the Long-Term Plan was October 13, 2022. The resulting economic benefit from delaying the Long-Term Plan expenditures to March 20, 2023, is \$116.

For Violations 3-7, the Discharger delayed implementation of the erosion controls necessary comply with the FPRs and Categorical Waiver, which not only resulted in the discharge of sediment-laden storm water to waters of the state, but also provided cost savings to the Discharger. For Violations 3-7, the requirements for implementation of adequate erosion controls (corresponding to Map Points 2-6) consisted of winterizing road surfaces on the Site to minimize sediment transport to surface waters. Staff obtained estimates of road winterization from three licensed RPFs in the North Coast Region and determined that the cost of road winterization to be between \$13 and \$33 for every 100 feet of road surface on the Site. Staff took an average of the cost estimates and determined the cost of road winterization is approximately \$23.67/ 100 feet. Staff determined the length of road winterization required to minimize sediment transport to surface waters at each Map Point by using ArcGIS Pro with an overlaid CAL FIRE road layer (see the portions of road surfaces highlighted red in Figure 1), and estimated the cost of road winterization for each separate Map Point (Map Points 2-6) below.

- Staff determined that 838 feet of road winterization was required at Map Point 2 to minimize sediment transport to surface waters. The estimated the cost of road winterization for 838 feet of road on the Site is \$198 with a noncompliance date of October 15, 2021. The resulting economic benefit from delaying the winterization of road surface at Map Point 2 to November 4, 2021, is \$1.
- Staff determined that 983 feet of road winterization was required at Map Point 3 to minimize sediment transport to surface waters. The estimated the cost of road winterization for 938 feet of road on the Site is \$233 with a noncompliance date of October 15, 2021. The resulting economic benefit from delaying the winterization of road surface at Map Point 3 to November 4, 2021, is \$1.
- Staff determined that 1,449 feet of road winterization was required at Map Point 4 to minimize sediment transport to surface waters. The estimated the cost of road winterization for 1,449 feet of road on the Site is \$343 with a noncompliance date of October 15, 2021. The resulting economic benefit from delaying the winterization of road surface at Map Point 4 to November 4, 2021, is \$1.

- Staff determined that 656 feet of road winterization was required at Map Point 5 to minimize sediment transport to surface waters. The estimated the cost of road winterization for 656 feet of road on the Site is \$155 with a noncompliance date of October 15, 2021. The resulting economic benefit from delaying the winterization of road surface at Map Point 5 to November 4, 2021, is \$0.
- Staff determined that 300 feet of road winterization was required at Map Point 6 to minimize sediment transport to surface waters. The estimated the cost of road winterization for 300 feet of road on the Site is \$71 with a noncompliance date of October 15, 2021. The resulting economic benefit from delaying the winterization of road surface at Map Point 6 to November 4, 2021, is \$0.

Although the Discharger will still be required to complete implementation of an approved Long-Term Plan, he has not done so yet, so the costs estimated above are considered delayed. Staff evaluated the delayed actions that the Discharger should have taken to avoid the violations and estimated the total cost of these actions to be \$175. Based on the foregoing analysis, the total economic benefit for Violations 1 through 7 is \$175.

Consistent with the Enforcement Policy, the Total Base Liability Amount must be at least ten percent higher than the economic benefit derived from the violations. Economic benefit plus ten percent is calculated to be $\$175 + \$17 = \mathbf{\$192}$ in this instance, which the Total Base Liability Amount exceeds.

Step 8: Other Factors as Justice May Require

If the Regional Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for “other factors as justice may require,” but only if express findings are made to justify this adjustment. The Regional Water Board may exercise its discretion to include some of the costs of investigation and enforcement in a total administrative civil liability.

Step 9: Maximum and Minimum Liability Amounts

The Enforcement Policy directs the Regional Water Board to consider maximum and minimum liability amounts set forth in the applicable statutes.

Pursuant to Water Code section 13268(b)(1), “[c]ivil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

Pursuant to Water Code section 13350(e)(1), “civil liability on a daily basis shall not exceed five thousand dollars (\$5,000) for each day the violation occurs.”

The Enforcement Policy requires the Regional Water Board to recover, at a minimum, the economic benefit plus 10%.

Statutory Maximum Liability Amount for Violation 1

Violation 1: The Discharger failed to submit the required Interim Plan for 38 days from January 25, 2022, to March 4, 2022. Pursuant to Water Code section 13268(b)(1), the statutory maximum liability for Violation 1 is **\$38,000** [(\$1,000/day) x 38 days].

The total base liability of **\$54,587** is above the statutory maximum liability. Thus, the proposed liability amount for Violation 1 is adjusted downward to **\$38,000**.

Statutory Maximum Liability for Violation 2

Violation 2: The Discharger failed to submit the required Long-Term Plan for 158 days from October 13, 2022, to March 20, 2023. Pursuant to Water Code section 13268(b)(1), the statutory maximum liability for Violation 2 is **\$158,000** [(\$1,000/day) x 158 days].

The total base liability of **\$302,175** is above the statutory maximum. Thus, the proposed liability amount for Violation 2 is adjusted downward to **\$158,000**.

Statutory Maximum Liability for Violation 3

Violation 3: The Discharger discharged waste to waters of the state in violation of the Categorical Waiver and Basin Plan which resulted in direct discharges to Felta Creek for one day on October 24, 2021. Pursuant to Water Code section 13350(e)(1), the statutory maximum liability for Violation 3 is **\$5,000** [\$5,000/day) x 1 day].

The total base liability of **\$3,900** is below the statutory maximum liability. No adjustment is necessary.

Statutory Maximum Liability for Violation 4

Violation 4: The Discharger discharged waste to waters of the state in violation of the Categorical Waiver which resulted in direct discharges to unnamed tributaries to the Russian River on twelve days between October 24, 2021, and April 20, 2022. Pursuant

to Water Code section 13350(e)(1), the statutory maximum liability for Violation 4 is **\$60,000** [(\$5,000/day) x 12 days].

The total base liability of **\$60,840** is above the statutory maximum liability. Thus, the liability amount for Violation 4 is adjusted downward to **\$60,000**.

Statutory Maximum Liability for Violation 5

Violation 5: The Discharger discharged waste to waters of the state in violation of the Categorical Waiver which resulted in direct discharges to unnamed tributaries to the Russian River for one day on October 24, 2021. Pursuant to Water Code section 13350(e)(1), the statutory maximum liability for Violation 5 is **\$5,000** [(\$5,000/day) x 1 day].

The total base liability of **\$3,900** is below the statutory maximum liability. No adjustment is necessary.

Statutory Maximum Liability for Violation 6

Violation 6: The Discharger discharged waste to waters of the state in violation of the Categorical Waiver and Basin Plan which resulted in direct discharges to Felta Creek for one day between October 24, 2021, and March 28, 2022. Pursuant to Water Code section 13350(e)(1), the statutory maximum liability for Violation 6 is **\$5,000** [(\$5,000/day) x 1 day].

The total base liability of **\$5,070** is above the statutory maximum liability. Thus, the liability amount for Violation 6 is adjusted downward to **\$5,000**.

Statutory Maximum Liability for Violation 7

Violation 7: The Discharger discharged waste to waters of the state in violation of the Categorical Waiver which resulted in direct discharges to a tributary of for one day on January 24, 2023. Pursuant to Water Code section 13350(e)(1), the statutory maximum liability for Violation 7 is **\$5,000** [\$5,000/day) x 1 days].

The total base liability of **\$6,750** is above the statutory maximum liability. Thus, the liability amount for Violation 7 is adjusted downward to \$5,000.

Statutory Minimum Liability Amount for Violations 1 - 7

There is no statutory minimum liability amount for Violations 1-7.

The economic benefit for Violations 1-7 is approximately \$175. The minimum liability, under the Enforcement Policy, that may be imposed is the economic benefit plus 10%, which is equal to \$192.

Total Maximum and Minimum Liability Amounts

Maximum Liability Amount = Max Violation 1 + Max Violation 2 + Max Violation 3 + Max Violation 4 + Max Violation 5 + Max Violation 6 + Max Violation 7 = \$38,000 + \$158,000 + \$5,000 + \$60,000 + \$5,000 + \$5,000 + \$5,000 = **\$276,000**

The minimum liability based on the economic benefit amount is **\$192**.

Step 10: Final Liability Amount

The Final Liability for Violations 1 – 7 is **\$276,000**.