

Gualala River Sediment TMDL Action Plan
California Environmental Quality Act (CEQA)
Draft Environmental Checklist

The TMDL Action Plan for the Gualala River will be presented to the Regional Water Board in a public hearing as a proposed amendment to the Basin Plan. Because the basin planning process is certified as an exempt regulatory program, meeting the requirements of Public Resources Code section 21080.5 (Cal. Code Regs., tit.14, § 15251), the Regional Water Board is not required to prepare an initial study, a Negative Declaration, or an Environmental Impact Report. Instead, the basin planning process uses substitute environmental documentation (SED). This Draft Environmental Checklist has been prepared in accordance with the Board's regulations that apply to substitute environmental documentation. (Cal. Code Regs., tit.23 § 3777.)

A. Project Title

Gualala River Sediment TMDL Action Plan

B. Agency Name and Address

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D. Project Location

The Gualala River Sediment Total Maximum Daily Load (TMDL) Action Plan (project) is located within the draining boundary of the Gualala River watershed (Figure 1). The Gualala River watershed flows into the Pacific Ocean near the Town of Gualala approximately 114 miles north of San Francisco. The Gualala River drains approximately 299 square miles, or 191,200 acres, of mostly mountainous and rugged terrain in both Sonoma and Mendocino Counties. The Mendocino-Sonoma County boundary runs down the center of the Mainstem Gualala River and through the Rockpile Creek subwatershed. The primary population centers are the towns of Gualala, Sea Ranch, Stewards Point, Annapolis and Plantation and are concentrated along the Pacific coastline. According to 2020 U.S. Census data, population within the watershed is estimated to be less than 5,000.

Gualala River Watershed Boundary (Project Boundary)



Figure 1: Gualala River watershed boundary and project boundary.

The Gualala River watershed consists of a complex network of streams characterized by rugged terrain. The San Andres Fault cuts through the west side of the watershed and straddles the mainstem which flows to the northwest. The watershed experiences high rates of natural erosion and landslides due to its unstable geological conditions, steep gradients, and significant precipitation. This makes the land highly susceptible to activities that exacerbate erosion.

Land Cover in the Gualala River watershed assessed using the National Land Cover Database (NLCD) (USGS, 2022), is primarily dominated by forests (75%) followed by herbaceous grass and shrub land (22%). There is minimal developed land cover (2.5%), and wetlands (0.3%) are mainly found in the lower reaches of tributaries, the mainstem of the south fork, and the estuary near the mouth of the watershed. One of the dominant land uses in the watershed is logging. Approximately 39% (~75,500 acres) of the watershed is owned by timber companies. Another notable landscape characteristic of the watershed is the extent of rural roads and their connectedness with the watershed's complex stream network. There are approximately 1,511 miles of roads in the

watershed which equates to a road density of about five miles per square mile. There are approximately 1,064 miles of streams within the watershed and 1,554 stream crossing points where a road and stream intersect with each other.

E. Problem Statement

Migration, spawning, reproduction, and early development of cold-water fish such as Coho salmon and steelhead trout are some of the beneficial uses in the Gualala watershed most sensitive to high sediment loads. Sediment coming off a landscape can transport fine sediment (e.g., silt and/or sand) particles to the substrate of a stream, filling interstitial spaces of gravels and cobbles used by salmonids to hold and incubate their eggs. This situation can also cause embeddedness of gravels and cobbles by fine sediment which cements them into the channel bottom, reducing permeability in the egg pocket which can slow growth and cause mortality. Excessive sediment loads can also cause high turbidity in the water column which can have a variety of negative effects on salmonids, including avoidance response, reduced feeding rates, reduced growth rates, damage to fish gills, and fatality.

The Gualala River Sediment Technical Support Document (TSD), used to develop the Gualala TMDL, assessed historical information dating back to the 1950s, including angler surveys, spawner surveys, electrofishing, species composition surveys, and snorkel surveys to assess the health of salmonid populations in the area. Data analyzed in the TSD indicates that declines in steelhead populations began in the 1970s. Coho salmon data is more limited, but it appears the Coho that were once plentiful have all but vanished. Coho salmon and steelhead trout surveying has continued in the watershed since the development of the Gualala TMDL through the Gualala River Watershed Council (GRWC) monitoring program.

Coho salmon were last recorded in the North Fork Gualala River subwatershed in 2004 and have not been identified in monitoring surveys since. Steelhead continue to be observed throughout the watershed, however, species abundance has steadily declined throughout the years of surveying. Adult steelhead population estimates in the Gualala watershed were conducted by the Gualala River Watershed Council (GRWC). Table 1 (below) displays the population estimate results compared to the National Oceanic and Atmospheric Administration (NOAA) recovery target and the 1960's California Department of Fish and Wildlife (CDFW) population estimate.

Source	Adult Steelhead Population Estimate
NOAA Recovery Target	7,900
2016 – 2017 GRWC Survey	885
2017 – 2018 GRWC Survey	1184
1960's CDFW Estimate	16,000

The decline in salmonid numbers has led to listings under the Federal Endangered Species Act and California State Endangered Species Act. Coho salmon within the Gualala River watershed were listed as endangered in 2005 for both federal and state statuses. Steelhead salmon within the Gualala River watershed were listed as threatened in 2006 for both federal and state statuses, meaning they are at risk of becoming endangered in the foreseeable future. In 2022, the steelhead summer run state status was upgraded to endangered.

F. Project Description

F.1. Project Background and Existing Permits

The Gualala River watershed was placed on the Section 303(d) list of impaired waters due to elevated sedimentation in 1993. The listing led to the development of the Gualala River Sediment Total Maximum Daily Load, (Gualala TMDL) which was established by the United States Environmental Protection Agency (U.S. EPA) in December 2001. The North Coast Regional Water Quality Control Board (North Coast Water Board or Board) established the [Sediment TMDL Implementation Policy](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/sediment_tmdl_implementation/) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/sediment_tmdl_implementation/) in 2005 (R1-2004-0087), which was incorporated in the Basin Plan and, declares that the Board shall use all of its existing authorities and programs to implement sediment TMDLs established for the North Coast Region, including the Gualala TMDL. Since 2004 North Coast Water Board staff have continued to support grants and restoration in the Gualala and other sediment TMDL Watersheds. In addition, the following regional permits have been developed, undergone independent CEQA processes related to activities for sediment source control, and apply within the Gualala River watershed.

- Order No. R1-2004-0030 - [General Waste Discharge Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region \(Timber WDR\)](https://www.waterboards.ca.gov/northcoast/water_issues/programs/forest_activities/private_forest_land/) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/forest_activities/private_forest_land/)
- Order No. R1-2013-0005 – [General Waste Discharge Requirements for discharges for Timber Operations on Non-Industrial Timber Management Plans \(NTMPs\) in the North Coast Region \(NTMP WDR\)](https://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/non_industrial_tmtps/130606/NTMP_WDR_FAQ-Guidance.pdf) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/timber_operations/non_industrial_tmtps/130606/NTMP_WDR_FAQ-Guidance.pdf)
- Order No. R1-2024-0001 – [General Waste Discharge Requirements for Discharges Related to Specific Types of Forest Management Activities on Non-Federal Lands in the North Coast Region \(Forest Management WDR\)](https://www.waterboards.ca.gov/northcoast/board_decisions/tentative_orders/pdf/2023/DRAFT_R1-0001_NonFedTimberGWDR_PubNot.pdf) (https://www.waterboards.ca.gov/northcoast/board_decisions/tentative_orders/pdf/2023/DRAFT_R1-0001_NonFedTimberGWDR_PubNot.pdf)

- Order No. R1-2018-0011 - [Waiver of Waste discharge Requirements and General Water Quality Certification for Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program in the North Coast Region \(5C Waiver\)](https://www.waterboards.ca.gov/northcoast/water_issues/programs/non_point_source/5C/)
(https://www.waterboards.ca.gov/northcoast/water_issues/programs/non_point_source/5C/)
- Order No. R1-2024-0002 - [General Waste Discharge Requirements and General Water Quality Certification for Rural Road and Watercourse Construction and Reconstruction Activities in the North Coast Region \(RRGO\)](https://www.waterboards.ca.gov/northcoast/board_info/board_meetings/04_2024/pdf/5/5-rrgo-order.pdf)
(https://www.waterboards.ca.gov/northcoast/board_info/board_meetings/04_2024/pdf/5/5-rrgo-order.pdf)

F.2. Proposed Project Description

The project will result in the development of a draft Gualala River Sediment TMDL Action Plan for public review and comment, followed by other steps of the Basin Plan amendment process that will result in the Action Plan's incorporation into the Basin Plan. The development of the Action Plan and incorporation of the Gualala TMDL into the Basin Plan fulfills the requirements of Sections 303(d)(2) and 303(e)(3) of the Clean Water Act and Water Code section 13242. The Action Plan will detail a program of implementation outlining actions to address sources of sediment identified in the Gualala TMDL: road-related sediment sources and timber harvest-related sediment sources. Reasonably foreseeable compliance measures, or actions, to address road-related sediment sources are outlined in section G.

Timber harvest-related sediment sources identified in the Gualala TMDL (skid trail surface erosion, other harvest related sediment delivery) are currently addressed primarily through enrollment in the Timber WDR and through timber harvest plans (THP) which are administered by the [California Department of Forestry and Fire Protection \(CAL FIRE\)](https://www.ca.gov/agency/?item=california-department-of-forestry-and-fire-protection) (<https://www.ca.gov/agency/?item=california-department-of-forestry-and-fire-protection>). The THP process substitutes for the Environmental Impact Report (EIR) process under CEQA because the timber harvesting regulatory program has been certified pursuant to PRC Section 21080.5. Regional Water Board staff participate in review of timber harvest plans in their role as responsible agency and member of a review team (Cal. Code Regs., tit.14 § 1037.5). In addition, the Regional Water Board evaluates each timber harvest plan for compliance with the Basin Plan prior to enrolling them in one of its timber permits.

G. Reasonably Foreseeable Compliance Measures

Reasonably foreseeable compliance measures, also known as implementation measures or actions, for this project will be assessed for erosion control and prevention projects that address road-related sediment sources identified in the Gualala TMDL (road-related landslides, road-related crossing failures, road-related gullies, road-related surface erosion). Timber harvest activities will not be assessed for environmental

impacts in the project's CEQA scoping analysis because the project will not result in any changes to timber harvest in the watershed, as activities are already occurring and addressed under the THP permitting and inspection process (see section F.1).

The following road-related erosion control and prevention projects are already occurring in the project area; however, the project will increase the frequency and spatial extent at which they will occur. Road-related erosion control and prevention projects may include but not be limited to the following actions:

- Installation, repair, and/or replacement of stream channel road crossings;
- Installation and/or maintenance of trash racks (to catch stream transported debris and thereby prevent it from blocking flow) through road crossing;
- Installation and/or maintenance of ditch relief culverts and/or cross-drains (to reduce concentrated runoff from roads);
- Excavation of potentially unstable road fill slopes or road-related landslide deposits (to prevent channel sediment delivery/transport);
- Construction of rolling dips, out-sloped road segments, and/or water bars on dirt roads to attenuate concentrated runoff;
- Sediment and/or vegetation removal to maintain conveyance capacity along the inboard ditch;
- Removal of road berms;
- Excavation and repaving of paved roads to repair and/or retrofit road drainage infrastructure, as needed to address significant sediment sources.; and/or
- Streambank stabilization to protect the roadway from erosion.

H. Environmental Impacts: CEQA Checklist

The North Coast Water Board is soliciting input from tribes, agencies, and members of the public regarding environmental impacts that may arise from implementation of the Action Plan including: the range of project actions, alternatives, reasonably foreseeable methods of compliance, significant impacts to be analyzed, cumulative impacts if any, and mitigation measures that will reduce impacts to a less than significant level. This Draft Environmental Checklist is prepared through the basin planning process, which is certified as an exempt regulatory program. The Regional Water Board is not required to prepare an initial study, a Negative Declaration, or an Environmental Impact Report, and instead uses substitute environmental documentation (SED).

The checklist below represents an initial draft of potential environmental impacts. CEQA for this project is at the programmatic level through the basin planning process and is not assessing site specific environmental impacts. This list may be updated considering public comments received during CEQA scoping. North Coast Water Board Staff are especially interested in comments on the level of environmental impact and potential mitigation options for increased road-erosion control and prevention projects to address sources of sediment. The Environmental Checklist Discussion section below the CEQA Checklist outlines any initial findings of potential environmental impacts and mitigations

of those impacts for environmental factors that may have an impact beyond “No Impact.”

1. AESTHETICS

The level of impacts to aesthetics are evaluated based on the following questions posed under impact description in the matrix below, except as provided in Public Resources Code section 21099. Will the project:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Have a substantial adverse effect on a scenic vista?				X
B	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
C	Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X
D	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

The level of impacts to agriculture and forestry resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				X
B	Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
C	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	Government Code section 51104(g)?				
D	Result in the loss of forest land or conversion of forest land to non-forest use?				X
E	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. The level of impacts to air quality are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Conflict with or obstruct implementation of the applicable air quality plan?				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
B	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
C	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality?				X
D	Expose sensitive receptors to substantial pollutant concentrations?				X
E	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				X

4. BIOLOGICAL RESOURCES

The level of impacts to biological resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
B	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
C	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
D	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
E	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
F	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

5. CULTURAL RESOURCES

The level of impacts to cultural resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?				X
B	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?			X	
C	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
D	Disturb any human remains, including those interred outside of dedicated cemeteries?				X

6. GEOLOGY AND SOILS

The level of impacts to geology and soils are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii	Strong seismic ground shaking?				X
iii	Seismic-related ground failure, including liquefaction?				X
iv	Landslides?				X
B	Result in substantial soil erosion or the loss of topsoil?			X	
C	Be located on a geologic unit or soil that is unstable, or that would become unstable as a			X	

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	result of the project, and potentially result in on- or off- site landslide, lateral spreading, subsidence, liquefaction, or collapse?				
D	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
E	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

7. GREENHOUSE GAS EMISSIONS

The level of impacts to greenhouse gas emissions are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				X
B	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

8. HAZZARDS AND HAZARDOUS MATERIALS

The level of impacts to hazards and hazardous materials are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
B	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
C	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
D	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
E	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
F	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
G	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
H	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

9. HYDROLOGY AND WATER QUALITY

The level of impacts to hydrology and water quality are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				X
B	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
C	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
D	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of		X		

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				
E	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
F	Otherwise substantially degrade water quality.				X
G	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
H	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
J	Inundation by seiche, tsunami, or mudflow				X

10.LAND USE PLANNING

The level of impacts to land use and planning are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Physically divide an established community?				X
B	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan,				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
C	Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

11. MINERAL RESOURCES

The level of impacts to mineral resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				X
B	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	general plan, specific plan, or other land use plan?				

12.NOISE

The level of impacts to noise are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
B	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
C	A substantial permanent increase in ambient noise levels in the project vicinity above levels				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	existing without the project?				
D	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X
E	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
F	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

13. POPULATION AND HOUSING

The level of impacts to population and housing are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
B	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
C	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

14.PUBLIC SERVICES

Levels of impact to public services are evaluated in the matrix below. This takes into account any foreseeable need for new or physically altered governmental facilities and potential adverse environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives associated with these public services:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				X
	Fire protection?				X
	Police protection?				X
	Schools?				X
	Parks?				X
	Other public facilities?				X

15.RECREATION

The level of impacts to recreation are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
B	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

16.TRANSPORTATION

The level of impacts to transportation are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				X
B	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				X
C	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
D	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
E	Result in inadequate emergency access?				X
F	Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

17. TRIBAL CULTURAL RESOURCES

The level of impacts to tribal cultural resources are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		X		
B	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

18. UTILITIES AND SERVICE SYSTEMS

The level of impacts to utilities and service systems are evaluated based on the following questions posed under impact description in the matrix below as to whether the project will:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
B	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
C	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
D	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
E	Result in a determination by the wastewater treatment provider which serves or may serve the project that				X

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
F	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
G	Comply with federal, state, and local statutes and regulations related to solid waste?				X

19.WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Substantially impair an adopted emergency response plan or emergency evacuation plan?		X		

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
B	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?		X		
C	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?		X		
D	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

20.MANDATORY FINDINGS OF SIGNIFICANCE

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
A	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		X		
B	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)?		X		

Item	Impact Description	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
C	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

ENVIRONMENTAL CHECKLIST DISCUSSION

The North Coast Water Board is soliciting input from public agencies, tribes, and members of the public on all possible environmental impacts from implementation of and compliance with the Gualala River Sediment TMDL Action Plan (project implementation and compliance) including: the range of project actions, alternatives, reasonably foreseeable methods of compliance, significant impacts to be analyzed, cumulative impacts if any, and mitigation measures that will reduce impacts to a less than significant level. Listed below are the issues North Coast Water Board staff have initially identified as most likely to have a "less than significant impact" or higher.

3. Air Quality

3.B. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact

The project would not violate any air quality standard or contribute construction of any permanent emissions sources or generate ongoing traffic-related emissions. Construction that would occur as a result of project implementation such as earthmoving operations to reduce sediment discharges from eroding areas like roads would be of short-term duration and would likely involve discrete, small-scale projects as opposed to massive earthmoving activities, which would be subject to permitting and those permits would have undergone individual CEQA processes.

4. Biological Resources

4.A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated

The project is designed to benefit, enhance, restore and protect biological resources, including fish, wildlife, and rare and endangered species. Adoption of the Basin Plan amendment and implementation of required BMPs will not result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW), National Oceanic and Atmospheric Administration (NOAA) or U.S. Fish and Wildlife Service (USFWS). The project may result in some incidental short term sediment discharge, however, substantial impacts resulting from the project would not occur because the project requires implementation of BMPs designed to improve and restore stream habitat, to provide a long-term benefit to both anadromous salmonids and other fish and wildlife.

4.B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact

Reasonably foreseeable implementation actions - road maintenance practices and erosion control projects – would result in an overall enhancement of riparian habitat conditions. Road erosion control actions will shift the particle size distribution of sediment supply closer to natural distribution enhancing sediment sorting and the diversity of substrate patch types in riparian habitats, which in turn would enhance the diversity of riparian habitats and communities.

4.C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact

Project-related implementation actions will involve road-related erosion control projects, a fraction of which could occur within and/or overlap with wetlands. The adverse impacts on wetlands would not be substantial, however because under the Nationwide or individual permit programs administered by the US Army Corps of Engineers, there are general conditions that require that for projects that may adversely affect all

wetlands, as defined under Section 404 of the Clean Water Act, responsible parties must demonstrate that avoidance, minimization, and mitigation has occurred to the maximum extent practicable to ensure that adverse impacts to the aquatic environment are minimal. Furthermore for all potential projects where wetland losses would exceed 0.1 acres, applicants are required to provide compensatory mitigation at a ratio that is greater than or equal to 1:1. For projects where wetland losses are less than 0.1 acre, on a case by case basis the District Engineer may require compensatory mitigation. If TMDL implementation projects are proposed that could have the potential to disturb wetlands, they also would be subject to the Water Board's review and approval under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, and the Water Board must, consistent with its Basin Plan, require mitigation measures to avoid, minimize, and mitigate impacts to less-than-significant levels. As specified in the Basin Plan, the Water Board uses the U.S. EPA Section 404(b)(1) Guidelines for dredge and fill material in determining the circumstances under which the filling of wetlands may be permitted. This policy requires that avoidance and minimization be emphasized and demonstrated prior to consideration of mitigation. Furthermore, the California Wetland Protection Policy also is incorporated into the Basin Plan. The goals of this policy include ensuring that "no overall net loss" and "long-term net gains in the quantity, quality, and permanence of wetland acreage and values ..." (Governor's Executive Order W-59-93). Wetlands not subject to protection under Sections 404 and 401 of the Clean Water Act are still subject to regulation, and protection under the California Water Code. Please also see discussion in part b) above relating to sensitive natural communities, some of which are wetland types.

4.D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact

The project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. None of the reasonably foreseeable compliance actions has the potential to substantially interfere with wildlife movement. Therefore we conclude that the impact is less than significant with mitigation incorporated.

5. Cultural Resources

5.B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?

Less than Significant Impact

With regard to road-erosion control implementation to comply with the project, all earth moving would occur in already disturbed areas, within the footprint and/or right-of-way of existing roads. No roads would need to be relocated in order to comply with the project. Therefore, we conclude that potential impacts of implementation to comply with the project are less than significant.

6. Geology and Soils

6.B. Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact

6.C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off- site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact

6.B. and 6.C.

The geographic scope of the activities covered under the project will include areas that are highly susceptible to soil erosion and shallow landslides due to the presence of steep slopes, high rainfall rates, and/or underlying geology. When roads are hydrologically connected the concentrated flow of water can generate sediment if it crosses on unprotected soils, develops gullies, or cuts into stream banks. It can also trigger landslides from oversaturated conditions, especially on fill-slopes. In addition, roads constructed with uncompacted or poorly compacted fill material, particularly on steep slopes, are vulnerable to failure of the fill, often trigger larger landslides. BMPs outlined under the reasonably foreseeable compliance measures section (G.) are designed specifically to reduce erosion and landslide potential.

While implementation of BMP to ensure proper road drainage and surface stability reduces soil erosion and can reduce or prevent large-scale slope and fill failures, some projects to implement proper road drainage have the potential to generate sediment from short-term construction activities. Disconnecting roads from streams involves limiting the concentration of surface discharge and using permeable soils on the natural ground and road fill-slopes to infiltrate runoff and convert it to subsurface flow before it can reach a stream. Remedial measures to correct existing and potential road erosion include (but are not limited to): replacing undersized culverts, creating critical dips at stream crossings, outsloping the road surface, adding more ditch relief culverts to in-sloped roads, rocking or paving the road surface, reconnecting the road drainage as much as possible to the natural drainage patterns, revegetating cutbanks and fill-slopes, and repairing 'shotgun' culverts.

As a result of the incorporation of the BMPs and mitigation measures outlined above, the potential for the project to result in increased soil erosion, loss of topsoil, or landslides is less than significant. Nor is there any reasonably foreseeable potential for the project to result in lateral spreading, subsidence, liquefaction, or collapse. Therefore, the appropriate finding is less than significant with mitigation.

8. Hazards and Hazardous Materials

8.A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact

8.B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact

8.A. and 8.B.

At a small fraction of sites, hazardous materials or substances may be discovered during project activities associated with erosion control. Required remediation actions would include the proper disposal and transport of contaminated soils, but such waste is expected to be of small volume. Proper handling in accordance with relevant laws and regulations would minimize hazards to the public or the environment, and the potential for accidents or upsets. Therefore, hazardous waste transport and disposal would not create a significant public or environmental hazard, and would be a less-than-significant impacts.

9. Hydrology and Water Quality

9.C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

Less than Significant Impact

Specific projects involving earthmoving or construction activities to comply with requirements derived from the proposed project are reasonably foreseeable including road-erosion control projects. Such projects could affect existing drainage patterns. However, to meet project allocations, they would be designed to reduce overall soil erosion, not increase it. Additionally, limiting the project construction period to the dry season to control erosion would protect water quality. Nevertheless, temporary

earthmoving operations could result in short-term, limited erosion. These specific compliance projects also would be subject to the review and approval of the Water Board, which requires implementation of routine and standard erosion control best management practices and proper construction site management. Therefore, the project would not result in substantial erosion, and its impacts would be less-than-significant.

9.D. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant with Mitigation Incorporated

Reasonably foreseeable actions to comply with the project will involve earthmoving that could affect existing drainage patterns. One of the primary purposes of BMPs outlined in the list of reasonably foreseeable compliance measures section is to ensure drainage patterns do not result in substantial erosion or siltation. BMPs often require alteration of existing drainage patterns or the course of a stream or river, but such alterations are specifically designed to improve or restore impaired conditions to reduce the potential for excess erosion or siltation. Projects under the RRGO or the 5C Waiver are subject to review by Regional Board staff. Future permits or agency approvals will be necessary, and project specific CEQA analyses will be required for those projects with discretionary approvals.

17. Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

17.A. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less than Significant with Mitigation Incorporated

17.B. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation Incorporated

17.A. and 17.B.

Tribes within the project boundary or that may have had historical presence in the area, have been sent tribal consultation requests to identify potential project impacts to tribal cultural resources. It is possible that some road projects could disturb tribal cultural resources, however, mitigation measures identified in past permits such as the Rural Roads General Order would be applied. These measures include:

- Procedures for discovery during significant ground disturbing project activities.
- Mitigation measures for treatment of human remains.
- Mitigation measures to minimize and avoid significant adverse impacts to TCR sites.

The above measures to identify any documented or on-site tribal cultural resources, and if found, work with local tribes to protect and preserve them. As such, the finding is that with implementation of these required mitigation measures, impacts will be less than significant with mitigation.

19. Wildfire

The analysis evaluates direct and indirect wildfire-related impacts that may result from activities conducted under the proposed project.

19.A, 19.B, 19.C

With one exception, the Action Plan defers to existing permits and alone does not prescribe or contain any specific activities that would directly affect the wildfire factors in the checklist. The exception is the requirement for a new watershed-wide permit for private, rural roads in the program of implementation. This permit would require landowners to inventory, assess, prioritize, and treat road related sediment sources on their property over time. These activities could: interfere with vehicle movement, including emergency vehicles (19.A); temporarily add flammable material (e.g., adding woody material to disturbed soil or existing areas of erosion) (19.B); lead to construction of new roads or infrastructure (19.C). These potential impacts are not expected to occur as a direct result of the Action Plan project, but they will be addressed—including any mitigation measures—by the environmental impact analysis during permit development. Mitigation measures may include plans or requirements for handling traffic adequately before road work begins (19.A); best management practices for minimizing the spread of flammable material (e.g., straw waddles are encased in netting) (19.B); and using existing infrastructure (water sources, power lines) during road construction (19.B). The watershed wide roads permit is not intended to substitute for any environmental analysis necessary for project-specific approvals by appropriate local governmental agencies that serve as lead agencies for projects within their jurisdictions. Accordingly, potential impacts will also be addressed in project-specific approvals by local lead agencies.

Less than Significant with Mitigation Incorporated

19.D

As stated previously, the Action Plan project does not prescribe specific project level activities that could affect wildfire risks. The Action Plan and existing and new permits address sediment erosion from roads and other activities so that in a post-wildfire setting, the risk of flooding, landslides, and other adverse hillslope effects would be reduced.

Less than Significant

20. Mandatory Findings of Significance

19.A. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated

The project may result in some incidental short term sediment discharge, however, substantial impacts resulting from the project would not occur because the project requires implementation of BMPs designed to improve and restore stream habitat, to provide a long-term benefit to both anadromous salmonids and other fish and wildlife.

19.B. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)?

Less than Significant with Mitigation Incorporated

As stated above, the implementation of BMPs will lessen temporary impacts such that they become less than significant and not contribute to cumulative impacts.

19.A. and 19.B.

Reasonably foreseeable actions to comply with the project will benefit native fish and wildlife species including rare and endangered species by decreasing fine sediment supply and enhancing stream-riparian habitat conditions in the Gualala River and its tributaries such that fish and wildlife species and their populations in and near waters of the state thrive. Reasonably foreseeable compliance actions, where applicable, would have to be permitted by either the Water Board, the California Department of Fish and Wildlife, the US Fish and Wildlife Service, NOAA Fisheries, and/or the County (which

would require a CEQA determination, and as applicable, a Biological Assessment). As described earlier in the explanation of checklist responses for Biological Resources and Cultural Resources, we conclude that compliance actions would not threaten any plant or animal community, and/or reduce the number or restrict the range of a rare or endangered plant or animal species. Also, as described in the explanation for the checklist response for Cultural Resources and Tribal Cultural Resources, with mitigation incorporated, there are no anticipated significant impacts known related to California history or prehistory.

19.C. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact

The project would not cause any substantial adverse effects to human beings, either directly or indirectly. The project is intended to benefit human beings through implementation of actions predicted to enhance fish populations, aesthetic attributes, recreational opportunities, and contribute to a reduction in property damage in and/or nearby to stream channels in the Gualala River watershed.