

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
February 6, 2020
Regional Water Board Office
Santa Rosa, California

ITEM: 4

SUBJECT: Public Hearing to consider adoption of Proposed Order No. R1-2020-0001, Waste Discharge Requirements for Discharges Related to Green Diamond Resource Company's Forest Management Activities Conducted Within the Upper Elk River Watershed Humboldt County (Jim Burke).

BOARD ACTION: The North Coast Regional Water Quality Control Board (Regional Water Board) will consider adoption of Proposed Order No. R1-2020-0001 (the Proposed Order).

BACKGROUND: The Elk River, one of the primary tributaries of Humboldt Bay and an important salmon spawning and rearing habitat, was identified in 1998 as impaired due to excessive sedimentation/siltation and was subsequently placed on the federal Clean Water Act section 303(d) list. The impairment is primarily attributed to land use activities that have been occurring since the 1850s, including but not limited to timber harvesting, forest conversion, agriculture, grazing, road construction, and rural housing development.

Green Diamond Resource Company (GDRCo) owns and/or conducts timber harvesting activities on approximately 2,059 acres (7.2%) of the 28,288-acre Upper Elk River Watershed. GDRCo's ownership in the South Fork Elk River Watershed is located in the tributaries McCloud Creek, Tom Gulch, and Railroad Gulch and consists of 1,905 acres. The South Fork is one of the two major tributaries of Elk River, the other being the North Fork Elk River. GDRCo also own approximately 154 acres located along the ridge line of the Lower North Fork Elk River. Sedimentation in the reaches downstream from industrial timberlands has resulted in conditions of nuisance, including increased rates and depth of annual flooding and loss of property, use of property, access to property, and risk to human health and welfare.

In June 2010, the Regional Water Board adopted ownership-wide Road Management Waste Discharge Requirements (WDRs; Order No. R1-2010-0044) and in October 2012 adopted the ownership-wide Forest Management WDRs (Order R1-2012-0087) for associated activities on GDRCo's property within the North Coast Region. The Road Management WDR covers systematic road upgrading and decommissioning, as well as maintenance and monitoring of the road system associated with the Road Management Plan from GDRCo's Aquatic Habitat Conservation Plan (AHCP). All activities carried out under the Road Management Plan comply with techniques and restrictions designed to prevent and minimize impacts to water quality, as detailed in the AHCP and the Master Agreement for Timber Operations. The Forest Management WDR covers activities associated with timber harvesting, including timber product harvest, silvicultural regimes and methods, timber stand regeneration and improvement, road construction and

reconstruction, minor forest product harvest, and in-stream and riparian restoration. Conditions specific to the Elk River in GDRCo's Roads Management and Forest Management WDRs rely, in large part, upon its Operating Conservation Program, with specific prescriptions described in the South Fork Elk River Management Plan (SFERMP). The SFERMP addresses watershed specific operating procedures in the following five key categories: A) Riparian Prescriptions, B) Geological Prescriptions, C) Harvesting, Yarding and Hauling Prescriptions, D) Road Management, and E) Seasonal Restrictions.

GDRCo primarily utilizes clearcut silvicultural as well as commercial thinning, precommercial thinning and selection methods. A full road assessment within GDRCo's Elk River ownership was completed in 2006. GDRCo uses shovel logging in ground-based harvest areas. Shovel logging has been shown to minimize ground disturbance due to low ground pressure, no need to construct skid trails, operating on top of slash rather than bare soil, and the opportunity to utilize residual vegetation to slash pack temporary constructed haul roads to minimize raindrop impact and surface erosion. GDRCo inventoried and prioritized all controllable sediment discharge sites located within the drainage and proposed corrective action for each site. As of the end of 2018, GDRCo has completed 93% of the sites, representing approximately 96% of the sediment volume that could potentially deliver to a watercourse. GDRCo will treat the remaining 7% of the controllable sediment discharge sites by the end of 2021. Seasonal road use restrictions ensure that the majority of operational activities occur between May 15 and October 15. Given the sensitivity of soils and underlying bedrock in the watershed, GDRCo limits winter operations to All Terrain Vehicles or only foot traffic for some roads to access the property within the watershed so that THP layout, tree planting, and cutting activities, as well as other administrative functions can occur throughout the year.

Together the two WDRs provide complete, programmatic, ownership-wide WDR coverage to GDRCo's commercial timberlands within the area covered by its Aquatic Habitat Conservation Plan (AHCP) and Master Agreement for Timber Operations (MATO), including the Upper Elk River watershed.

Finding 22 of the GDRCo Forest Management WDR states, "At such time as the Total Maximum Daily Load (TMDL) is adopted, the provisions of the Elk River component of this Order and/or the South Fork Elk River Management Plan will be reviewed and adjusted, as appropriate, to ensure compliance with the TMDL." On May 12, 2016, the Regional Water Board adopted the Action Plan for the Upper Elk River Sediment Total Maximum Daily Load (TMDL Action Plan). On April 4, 2018, the United States Environmental Protection Agency approved the TMDL Action Plan, the final step in the process necessary for the Action Plan to be amended into the Water Quality Control Plan for the North Coast Region (Basin Plan), following approvals by the State Water Resources Control Board on August 1, 2017, and the Office of Administrative Law on March 8, 2018.

The TMDL sediment source analysis identifies the key sediment source categories that produce sediment in the Upper Elk River Watershed. Sediment discharges resulting from timber harvest and other land-management activities in the most recent analysis time

period (2004-2011) are (in order of significance): in-channel sources (headward channel incision, bank erosion, and streamside landslides), discharges from existing land use-related sediment discharge sites, other road-related discharges, and harvest-related discharges.

The Proposed Order would supersede those portions of the GDRCo Forest Management WDR that apply to certain activities conducted by GDRCo on its timberlands in the Upper Elk River Watershed. Similar to Order No. R1-2019-0021, WDRs for Humboldt Redwood Company's timber harvesting activities in the Upper Elk River Watershed adopted by the Regional Water Board in June, 2019, the Proposed Order has been developed to be consistent with all of the hillslope indicators and numeric targets contained in the 2016 TMDL Action Plan and ensure that all anthropogenic discharges of sediment are eliminated to the extent feasible and, if not feasibly eliminated, minimized, as soon as feasible, but no later than 2031.

The TMDL Action Plan includes hillslope indicators and numeric targets as well as a load allocation. Due to the lack of sediment loading capacity in the impacted reaches, the load allocation is defined as zero. The TMDL Action Plan also lays out a program of implementation which identifies a combination of regulatory and non-regulatory actions that are designed to lead to the attainment of water quality objectives, recovery of beneficial uses, protection of high-quality waters, and prevention of nuisance conditions in the Upper Elk River Watershed. Waste Discharge Requirements (WDRs) are the primary regulatory mechanism utilized by the Regional Water Board to control the nonpoint source pollution resulting from past and ongoing timber harvesting and associated management activities in the watershed and are a mechanism to implement applicable TMDL hillslope targets and the TMDL load allocation.

In Resolution No. 2017-0046 approving the TMDL Action Plan, the State Water Board included the finding that its "understandings of the TMDL Action Plan's requirements and statements described above are (1) that hillslope indicators and numeric targets in Table 2 apply throughout a discharger's area of land ownership and not solely in areas of active harvest, (2) that the North Coast Water Board's WDRs and any other orders for the two major landowners that conduct timber harvesting will incorporate specific provisions that implement all of the hillslope indicators and numeric targets in Table 2, unless the regional board makes specific findings about why any omitted hillslope indicators or numeric targets are not appropriate or feasible, (3) the WDRs and any other orders for the two major landowners will also contain any additional specific provisions to ensure that all anthropogenic discharges of sediment are minimized and eliminated, and (4) in the absence of a future amendment to the TMDL Action Plan, including an amendment based on successful implementation of the Watershed Stewardship Program resulting in expanded sediment loading capacity in the impacted reach, the WDRs and any other orders will require the landowners to achieve the zero load allocation for all anthropogenic discharges of sediment as soon as feasible, but no later than 2031." In a letter dated October 15, 2018, the State Water Board provided the following clarification to understanding 3 above, as follows: "the WDRs and any other orders for the two major landowners will also contain any additional specific provisions to ensure that all anthropogenic discharges of sediment are ~~minimized and eliminated~~ to the extent feasible

and, if not feasibly eliminated, minimized, as soon as feasible but not later than 2031”
[strikeout and underline are from the original October 15, 2018 letter].

The Resolution further directed the Regional Water Board “to review its WDRs for the two major landowners in the Upper Elk River Watershed that conduct timber harvesting and revise the WDRS and adopt any additional orders as necessary to make them consistent with the State Water Board’s understandings of how the TMDL Action Plan will be implemented as described in finding no. 9, above”.

Following adoption of the TMDL Action Plan and further discussions with Regional Water Board staff, GDRCo revised specific provisions of the SFERMP for the purpose of meeting the TMDL hillslope targets and load allocation, and on August 23, 2019, submitted the revised SFERMP (or plan). The revisions primarily address expanded riparian management zone (RMZ) protection measures, modified annual harvest limits, and yarding prescriptions. The plan applies to all GDRCo’s timberlands in the Elk River watershed and is therefore referred to as the Elk River Management Plan (ERMP) (included as Attachment B of the Proposed Order). Regional Water Board staff found that the ERMP is expected to implement most, but not all, of the TMDL Hillslope Water Quality Indicators, but additional protection measures for riparian zones are necessary to implement certain Specific Upper Elk River Watershed Indicators. With the ERMP and additional protection measures for riparian zones included as requirements in the Proposed Order, Regional Water Board staff determined that GDRCo’s timber harvest and related management activities in the Elk River Watershed will be consistent with the TMDL Action Plan. The Proposed Order supersedes those provisions of Order No. R1-2012-087 that applied to the Upper Elk River and establishes revised requirements for GDRCo Forest Management Activities conducted within the Upper Elk River Watershed.

DISCUSSION: The initial Public Notice stated that the comment period would end on November 1, 2019. Subsequently, based on a request by GDRCo, the comment period was extended an additional 15 days and on October 30, 2019, the Regional Water Board issued a revised Public Notice extending the end of the public comment period to November 15, 2019. Both Public Notices were posted on the Regional Water Board’s website, sent out to the Lyris email subscription list as well as emailed directly to known stakeholders. The Regional Water Board received written comment letters from five individuals during the October 2 – November 15, 2019 comment period, including from representatives of GDRCo, Environmental Protection Information Center (EPIC) and Elk River residents. The comment letters generally fall into two opposing points of view: (1) those opposing any additional logging, or only supporting logging under restrictions in the upper watershed more stringent than the Proposed Order while conditions remain impaired; and (2) GDRCo, which maintains that its proposed ERMP fully implements the TMDL Action Plan, that no additional upstream sediment control measures can affect meaningful improvements in the impacted reach, and that certain specific requirements of the Proposed Order are not warranted or adequately supported by the available science. Staff has prepared a comprehensive response to comments document responding to all substantive comments (attached). Staff made minor editorial revisions and one substantive revision to the draft Order in response to public comments. The revision is the addition of a footnote to section I.C.2 of the Proposed Order stating, “Alternate yarding

methods may be utilized in areas where the ERMP specifies use of shovel logging equipment when dictated by site conditions and operational constraints.” The revision is in response to a comment from GDRCo that the TMDL buffers would require modification of the ERMP requirement to shovel yard on slopes less than 35%.

Consistent with Order No. R1-2019-0021 for Humboldt Redwood Company, compliance with the terms of the Proposed Order will further the TMDL Action Plan goals of minimizing and eliminating sediment discharges from GDRCo’s timber operations in the Upper Elk River Watershed. The monitoring and reporting program included as Attachment C of the Proposed Order is designed to provide a feedback mechanism to ensure that management measures are implemented and functioning as intended and provide data on in-stream sediment conditions.

RECOMMENDATION: Adopt Proposed Order No. R1-2020-0001

SUPPORTING DOCUMENTS:

1. Proposed Order No. R1-2020-0001 (underline/strikeout version)
 - Attachment A – Elk River Location Map
 - Attachment B – Green Diamond Resource Company’s Elk River Management Plan
 - Attachment C – Monitoring and Reporting Program
 - Attachment D – CEQA Findings and Mitigations
2. Notice of Public Hearing, Draft Order No. R1-2020-0001
3. Regional Water Board staff response to comments on Draft Order No. R1-2020-0001
4. Public Comments on Draft Order No. R1-2020-0001