Date: November 23, 2020

To: Forest Fortescue, Senior Engineering Geologist, North Coast Regional Water Quality Control Board (Regional Water Board) – Northern Nonpoint Source and Forestry Unit
File

From: Chad Johnson, Environmental Scientist, Regional Water Board

Subject: Water Quality Inspection Report for MT-10, MT-420, and MT-800 Roads

I. INTRODUCTION

On October 28, 2020, Regional Water Board staff Timothy Walcott and I inspected the primary access roads of 1-20EM-00126 (Project). Timber harvest operations were active at the time of our inspection. The Project intent is to salvage harvest 800 acres with ground based and cable yarding methods. Silvicultural practices consist of salvage harvest of dead, dying, and diseased trees within the burned perimeter of the 2020 Slater Fire. Non-hazard trees located in the Watercourse and Lake Protection Zone (WLPZ) are left standing. Another Emergency Notice project adjacent to this Project area is occurring simultaneously. 1-20EM-00109-DEL uses the same access road and timber prescription, and will harvest 109 acres.

The Project area is located within the Elk Creek watershed, which is tributary to the Illinois River, and is located within the Rogue River Hydrologic Unit (HU). The watershed contains anadromous salmonids listed as threated and/or endangered.

In 2010, the Regional Water Board adopted *Waste Discharge Requirements For Discharges Related to Road Management and Maintenance Activities Conducted Pursuant to the Green Diamond Resource Company Aquatic Habitat Conservation Plan in the North Coast Region,* Order R1-2010-0044 (GDRC Road Management WDR). In 2012, the Regional Water Board adopted *Waste Discharge Requirements For Discharges Related to Green Diamond Resource Company's Forest Management Activities Conducted Within The Area Covered By Its Aquatic Habitat Conservation Plan in the North Coast Region,* Order R1-2012-0087 (GDRC Forest Management WDR). The Project is located within a portion of the Green Diamond Resource Company's (GDRC) ownership within the Rogue River HU commonly referred to as the Moore Tract. The Moore Tract is a 4,995 acre portion of the land owned by GDRC. The Moore Tract was not included in the GDRC Aquatic Habitat Conservation Plan (AHCP) area and as a result, activities in the Moore Tract are not eligible for coverage under either the GDRC Roads WDR or the GDRC Forest Management WDR.

The purpose of this inspection was to evaluate potential impacts to beneficial uses of waters of the state and to evaluate whether Project operations complied with all substantive and procedural requirements of *General 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 (Categorical Waiver), *Water Quality Control Plan for the North Coast Region* (Basin Plan) and the Porter-Cologne Water Quality Control Act. Additionally, this inspection provided an opportunity for Regional Water Board staff to verify compliance with current California Forest Practice Rules (FPRs). The Inspection was conducted in accordance with California Public Resources Code Section 4604(b).

II. INSPECTION PARTICIPANTS

Tom Dols, GDRC
Tim Walcott, Regional Water Board
Chad Johnson, Regional Water Board

III. PROJECT SUMMARY

The Project area is located approximately thirty miles northeast of Crescent City. The Slater Fire burned through the Project area at high intensity, resulting in nearly 100 percent tree mortality. Timber harvest activities are planned within portions of Sections 1, 2, 10, 11, and 12 of Township 18 North, Range 4 East and Sections 35 and 36 of Township 19 North, Range 4 East of the Humboldt Base and Meridian. The Erosion Hazard Rating for the Project area was not calculated.

The silvicultural practices are limited to the clearcut removal of dead and dying trees. Tractor, rubber-tired skidder, and feller buncher methods were identified for use. Operations include felling, yarding, and hauling.

In response to the Slater Fire, GDRC revised the Annual Work Plan for road work for 2020 in order to facilitate salvage harvest operations. The Annual Work Plan is a component of the AHCP that is relied upon by the CDFW Master Agreement for Timber Operations (MATO). The MATO functions as a programmatic Fish and Game Code section 1600 Lake and Streambed Alteration Agreement for CDFW.

While the MATO covers GDRC ownership outside the AHCP area, the portion of the GDRC Annual Work Plan in the Moore Tract is located outside the AHCP area. As a result, the inspected portions of the Moore Tract are not covered by the GDRC Roads Management WDR. Revision #6 to the Annual Work Plan described the proposed action for the reconstruction of 3 road watercourse crossings, including Road Point (RP) 1, installation of a bridge over a Class 1 watercourse at the site of a previously decommissioned crossing.

IV. OBSERVATIONS

Our inspection of the Project area began at 0930. Our inspection focused on twelve road points where stream crossing reconstruction was completed to facilitate timber harvest. Ten of the road points were determined to be completed satisfactorily. Two of the road points we inspected will require corrective actions to protect water quality.

We began our inspection at RP 1. RP1 is a reconstructed Class I watercourse bridge crossing on GDRC Road MT-10. The running surface of the bridge is comprised of two railroad flatcars with earthen abutments and pre-formed concrete footings (Figure 1). We observed that the abutment fill slopes were steep and unarmored and the footings were placed on loose fill near the top edge of the abutments. The unprotected abutment fill was exposed to the outside, scouring edge of a curve in the stream. Additionally, disturbed soil from site grading was left bare, the road approaches on both sides were not hydrologically disconnected, and a temporary construction access road was not treated with erosion control measures, creating a sediment source that was directly connected to the creek. This access road was approximately 300 feet long at a grade of approximately 15%, with a surface of bare loosely compacted soil. The access road would receive run-on from the MT-10 road.

We discussed options for repair of RP1 with Mr. Dols on the inspection. Mr. Dols agreed that the road was not satisfactorily constructed and committed to addressing Regional Water Board staff's concerns as soon as practicable.

Figure 1: Looking upstream at the abutment on the north side of RP1.

GDRC shall propose and implement repairs to RP1 as soon as possible in order to prevent the discharge of sediment to the Rogue River HU **(Recommendation 1)**. The stream abutments

shall be reconstructed to resist stream scour at 100-year storm flows. The road approaches shall be hydrologically disconnected. All bare soil shall be covered with mulch, slash, straw or other suitable erosion control material. The construction access road shall be decommissioned by installing water bars, ripping, or other techniques to prevent the entrainment of storm flows and the delivery of sediment into the creek.

The second site that we observed with the potential to cause erosion and discharge sediment into a watercourse was RP7, a recently-reconstructed Class II culverted stream crossing. RP 7 is a 24-inch diameter corrugated metal pipe (CMP) watercourse crossing on GDRC Road MT-10. We observed that the CMP at RP 7 was not set to stream grade, with the outlet sitting several inches higher than the streambed. The fill over the culvert was shallow. GDRC shall propose and implement repairs to RP7 as soon as possible in order to prevent the discharge of sediment to the Rogue River HU **(Recommendation 2)**. Rock armoring or similar shall be installed at the culvert outlet to prevent erosion caused by flows accelerating from a plunge out of the culvert.

The Regional Water Board further requests notification of when the bridge reconstruction has been completed. The Regional Water Board will arrange a mutually agreeable time to inspect the completed work.

VI. RECOMMENDATIONS

Recommendations and comments are provided pursuant to the statutory authority contained in the Porter Cologne Water Quality Control Act (California Water Code Section 13000 et seq.), the Basin Plan, and the Z'Berg Nejedly Forest Practice Act (PRC Section 4604), and in accordance with the Forest Practice Rules 14 CCR 1037.5(f).

Recommendation 1

1. Reconstruct bridge at Road Point 1 to place footings on stabilized fill.
2. Layback abutment fill slopes to stable inclinations and install armor suitable to resist stream scout at 100 year discharge.
3. Hydrologically disconnect bridge approaches.
4. Protect bare soil with mulch, slash or straw.
5. Decommission equipment access road to resist concentrating flow along its length and discharging sediment into the creek.

Recommendation 2

1. Armor outlet of perched culvert installation at Road Point 7.