

Attachment C

Order No. R1-2018-0011 Monitoring and Reporting Program

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code section 13267(b) and is associated with the *Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program in the North Coast Region*, Order No. R1- 2018-0011 (hereinafter referred to as “the Order” or “Waiver”). The reasons for requiring the Discharger to provide this information, and the evidence supporting this need, can be found in the Order. The North Coast Regional Water Quality Control Board has delegated its authority to the Executive Officer to revise, modify, and reissue the MRP. Under the authority of the California Water Code section 13267(b), enrolled counties and other dischargers covered under the 5C Waiver are required to comply with the following:

MONITORING AND REPORTING PROGRAM

Monitoring and reporting are necessary to ensure full implementation and effectiveness of the Best Management Practices (BMP) used in accordance with the Waiver. The current 5C Annual Reporting requirements satisfy many of these monitoring elements. Chapter 10 in the Five Counties Salmonid Conservation Program’s *“Water Quality and Stream Habitat Protection Manual for County Road Maintenance”* (5C Roads Manual) contains a well-thought-out outline of the monitoring that road maintenance projects may require; however, additional monitoring and reporting is needed to ensure that activities outlined in, and their related BMPs that are part of, the 5C Roads Manual are fully instituted. Therefore, this MRP builds on the existing process outlined in the 5C Roads Manual.

Monitoring

There are four types of monitoring outlined in the 5C Roads Manual: 1) Implementation, 2) Effectiveness, 3) Photo point, and 4) Project. Monitoring shall be conducted at a minimum level for all projects and activities, as described below. The minimal level of monitoring includes implementation monitoring, which may use a check-list approach, of on-the-ground prescriptions to protect water quality; BMP effectiveness monitoring for recent projects, and targeted patrols of roads to prevent water-quality problems during storms.

- 1) ***Implementation Monitoring*** – Assesses whether the recommended activity-specific BMPs in the manual were fully and properly carried out as specified. Assessment is usually carried out via visual observation of the completed BMPs.

Implementation monitoring shall be conducted for all projects and will be the primary method for early detection of potential water quality problems stemming from failure to fully or properly implement all of the BMPs for a particular project. **Implementation monitoring shall be performed using the protocol specified in Item 10-B-1 of the 5C Roads Manual, or an equivalent method.**

Implementation monitoring will be performed prior to ground-disturbing activities for planning phase BMPs, prior to the beginning of the winter period following project initiation, and at the completion of the project. It must be completed early enough to allow corrective action to be taken, if needed, prior to the release of contractors or the onset of the winter period.

- 2) ***Effectiveness Monitoring*** – Assesses whether each of the implemented BMPs are adequately protective of water quality. Effectiveness monitoring may be as simple as conducting a visual inspection both of the BMP site and the adjacent area, or may require detailed measurements at the BMP site and the adjacent area. It is usually performed after a BMP has gone through one year or one winter period, in order to evaluate how well the BMP functioned during winter rain events and/or spring snowmelt.

Effectiveness monitoring shall be conducted for all projects and will be the primary systematic means for early detection of assessing the effectiveness of water quality protection for all projects and their associated BMPs. The focus of BMP effectiveness monitoring will be on direct observation of the condition of implemented BMPs and on-the-ground prescriptions and the potential for water quality impairment.

The 5C Roads Manual outlines two methods for conducting effectiveness monitoring. Option A is use of the DIRT inventory process and the Culvert Inventory process. The purpose of the DIRT inventory and Culvert Inventory is for remediation of sites on a priority basis, with the highest priority sites, those with the largest water quality impacts or potential for impacts, receiving attention first. However, this does not preclude addressing lower priority sites in the normal conduct of operations or in concert with remediation of higher priority sites or as funding sources become available.

Option B is visual evaluation utilizing a standardized evaluation form, much like a checklist. An example of the form is contained in Chapter 10 of the 5C Roads Manual. These two methods are designed to standardize effectiveness monitoring and enable counties to compare the results of their individual BMP monitoring efforts, and demonstrate TMDL implementation.

Effectiveness monitoring will be conducted after June 15 after the first winter period following project completion. **Effectiveness monitoring shall be performed using the protocol specified in Item 10-B-2 of the 5C Roads Manual, using either Option A or B.**

- 3) ***Photo point Monitoring*** – Taking a series of photographs over time, from the same point and orientation. This type of monitoring is well suited for monitoring sediment delivery because it captures a complete inventory or baseline through a quick and repeatable process. By documenting through successive photos, the implementation and effectiveness of sediment control measures can also be monitored. Additionally, photo points can be used to evaluate the effect of practices on riparian conditions and fish passage in culverts and under bridges. When photo point monitoring is required, **it shall be instituted using the protocol specified in Item 10-B-3 of the 5C Roads Manual.**

- 4) ***Project Monitoring*** – Assesses the impacts to water from an entire project and the associated BMPs. This is a type of effectiveness monitoring, and may require more detailed measurements, including up- and down-stream, and pre- and post-project documentation, of the in-stream condition of the watercourse. When Project monitoring is required, **it shall be instituted using the protocol specified in Item 10-B-4 of the 5C Roads Manual.**

The Executive Officer may require that project monitoring and/or photo point monitoring be done for larger, more complex projects to determine a project's success or potential environmental impacts.

Reporting

Reporting enables the information gathered from implementation and effectiveness monitoring to be used by the Counties to modify BMPs and correct any failures that have or may result in impacts to water quality, and to inform the Counties and the Regional Water Board of BMP/project successes and failures.

Each County, or its authorized representative, will develop an annual report to be submitted by March 15 of each year, that summarizes the County's self-evaluation of the effectiveness of its road maintenance BMPs and the 5C Roads Manual in protecting water quality and stream habitat. The intent is to provide a simple process for documentation that can be used internally by the county, submitted to the Regional Board, and can be shared with the other counties and agencies. Contents of the annual report shall include the following items:

- a) A list of all completed or in-progress county road projects from the previous year that were covered under the 5C Waiver;

- b) results of BMP implementation and effectiveness monitoring for completed or in-progress county road projects from the previous year that were

- covered under the 5C Waiver, including corrective actions in the event of BMP failure;
- c) suggested changes to BMPs and the 5C Roads Manual for better water quality protection;
 - d) proposed schedule for addressing high priority DIRT sites for the coming year;
 - e) description of the progress on the DIRT inventories, site prioritization, and implementation;
 - f) investigations of illicit discharges to County rights of way or drainages;
 - g) trainings attended by roads staff;
 - h) description of efforts made to obtain funding (grants and otherwise) to aid in implementation of the 5C Program; and
 - i) A list of the names and WDID numbers of all completed or in-progress county road projects from the previous year that were covered under other permits (e.g. individual 401 Water Quality Certifications, dredge/fill projects).

Counties are required to submit discharge notifications in the event of unauthorized discharges of waste. Counties shall notify the Executive Officer within 48 hours of the discovery of an unauthorized discharge, and provide a brief description of the nature of the discharge, any impacts resulting from the discharge, and remedial actions taken to abate and clean up the discharge. A written summary report shall follow within 14 days of the notification of discharge.

Request for Extensions

Requests for extensions to required time lines within this MRP shall be submitted in writing at least ten (10) working days before the due date. Requests for extension must provide a reason, or reasons, for the request. Approval of any request for an extension of time to comply with required deadlines is subject to the approval of the Regional Water Board's Executive Officer. If written approval is not received, it should not be assumed that the due dates are extended indefinitely or have been approved. The counties shall be accountable for all due dates set out in this Plan in the absence of written approval from the Executive Officer.

Ordered by: _____
 Matthias St. John
 Executive Officer

Date: May 17, 2018