

**RESPONSE TO PUBLIC COMMENTS ON THE 2015, 2017, AND 2019 DRAFTS OF
THE ACTION PLAN FOR THE RUSSIAN RIVER WATERSHED PATHOGEN TOTAL
MAXIMUM DAILY LOAD (TMDL) AND STAFF REPORT**

August 2019

California Regional Water Quality Control Board

North Coast Region



Response to Public Comments on the 2015, 2017, and 2019 Drafts

On August 21, 2015, the North Coast Regional Water Quality Control Board (Regional Board) released for a 48-day public review period the *Draft Staff Report for the Action Plan for the Russian River Watershed Pathogen Indicator Bacteria Total Maximum Daily Load (August 21, 2015)* and *Draft Basin Plan Amendment* including revisions to the Basin Plan's On-Site Waste Treatment and Disposal Practices Policy (On-Site Systems Policy). These documents are referred to here as the 2015 Draft Staff Report and Action Plan. The number and extent of public comments precipitated staff's re-evaluation of the project, including outreach to 1) the State Water Resources Control Board (State Water Board) to identify funding for community-based planning and low interest loans for individual OWTS upgrades and 2) Sonoma and Mendocino counties to identify local and state roles and responsibilities associated with community-based planning and oversight of individual OWTS assessment and upgrade. Also, in response to public comments, the 2015 Draft Staff Report and Action Plan was significantly revised and re-released for public review.

On August 7, 2017, the Regional Board released for a 53-day public review period the revised project as described in the *Staff Report for the Action Plan for the Russian River Watershed Pathogen Indicator Bacteria Total Maximum Daily Load (August 2017)* and *Draft Action Plan for the Russian River Pathogen Total Maximum Daily Load*, including revisions to the Basin Plan's On-Site Systems Policy. These documents are referred to here as the 2017 Draft Staff Report and Action Plan. The number and extent of public comments again precipitated staff's re-evaluation of the project.

This document summarizes the revisions made to the 2015 and 2017 Draft Staff Reports and Action Plans that resulted in the draft 2019 Staff Report and Basin Plan Amendment out for a 45-day public review beginning May 9, 2019 and concluding on June 24, 2019 at 5:00pm. These documents are referred to here as the 2019 Draft Staff Report and Basin Plan Amendment and 2019 draft documents. Appendix A to this document provides staff's responses to the substantive public comments received on the 2019 draft documents. The responses are organized by commenter. Appendix B provides staff's responses to the substantive public comments received on the 2017 draft documents. These responses, too, are organized by commenter. Appendix C provides staff's responses to substantive public comments received on the 2015 draft documents, which are offered as a courtesy, only. The 2017 draft staff report and Action Plan taken as a whole represent staff's responses to the 2015 comments, as they represent a substantially revised project. The following summary provides a broad overview of the most substantive changes found in the 2019 proposed Staff Report and Basin Plan Amendment.

A. REVISION TO PROGRAM OF IMPLEMENTATION FOR OWTS

The major revisions made to the 2015 draft Staff Report and Action Plan were to address comments made on the Program of Implementation, particularly the approach to addressing Onsite Wastewater Treatment Systems (OWTS). The Regional Water Board received many written comments and oral testimony voicing concern about the expense and obligations

assigned to OWTS owners, based on the assumption that OWTS within close proximity to a watercourse could be affecting water quality conditions. The Program of Implementation was revised in 2017 to:

1. Describe a Memorandum of Understanding (MOU) between the County of Sonoma and the Regional Water Board to share in the responsibility of defining the Advanced Protection Management Program (APMP) boundary, obtaining information regarding the condition of OWTS within the APMP boundary to determine the specific properties requiring upgrade, and ensuring that existing OWTS within the APMP that are failing or substandard are upgraded.¹
2. Establish a clear APMP boundary using Sonoma County's parcel map.
3. Modify the requirements applicable to properties within the APMP boundary to better target those specific properties with failing or substandard systems.
4. Highlight the availability of grant funds to support planning for community-based solutions where necessary and to establish public funding support to property owners in disadvantaged communities.

Subsequent revisions were made to the 2017 draft Staff Report and Action Plan that have resulted in the proposed 2019 draft Staff Report and Action Plan. The major changes to the 2017 include:

1. The geographic area within which the APMP applies has been refined by only including those impaired HUC-12 subwatersheds for which there is also evidence of human fecal waste discharge. Oat Valley Creek-Russian River, Sausal Creek-Russian River, Upper Santa Rosa Creek, and Porter Creek-Mark West Creek have been removed from the APMP. Also, the APMP boundary distance has been reduced from 600' to 200' on those streams only included due to their detection by LIDAR.
2. The inspection requirements for OWTS owners within the APMP geographic area have been clarified. Further, the Action Plan clarifies that local agencies with approved LAMPs have flexibility in how they define the professional qualifications of inspectors to accommodate the anticipated increase in demand for OWTS inspections resulting from implementation of the APMP.
3. Local agencies may approve OWTS repairs and replacements in substantial conformance with the OWTS Policy and the APMP in accordance with conditions and criteria established in an approved LAMP.
4. The distance from a waterbody to an OWTS that triggers the need for supplemental treatment for replacement OWTS is 600 feet for blue-line streams and was reduced to 200 feet for OWTS near small, intermittent waterbodies identified by LIDAR data. OWTS in the APMP located greater than these distances, respectively, can be repaired or replaced in accordance with local requirements.

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https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/russian_river/pdf/170420/Russian_River_TMDL_MOU_Redacted.pdf

5. The need for supplemental treatment for replacement OWTS within 600 feet of blueline streams and within 200 feet of small, intermittent waterbodies may be waived where there is suitable soil and separation to groundwater.
6. The requirement in Table 5 of the Action Plan for OWTS owners to provide the Regional Water Board with information about their OWTS within five years after the effective date of the Action Plan was removed. Instead, Regional Water Board staff will provide individual OWTS owners a deadline to provide information during the OWTS Assessment Program.

B. REVISION TO DATA ASSESSMENT

The major revisions made to the 2017 draft Staff Report and Action Plan primarily were to address the availability of the new statewide bacteria objective adopted by the State Water Board in August 2018. The adopted statewide bacteria objectives established limitations for *E. coli* in freshwater and enterococci in saline water to protect water contact recreational users from the effects of pathogens in California water bodies. Saline waters are defined as those waters where salinity exceeds 1 part per thousand more than 5% of the time. The new bacteria objectives include limitations based on a geometric mean (GM), to be calculated on a rolling size week basis. They also include limitations based on a statistical threshold value (STV), to be calculated in a static manner using all samples within a given calendar month. No more than 10% of samples in a calendar month can exceed the STV limitation to remain in compliance. To address the terms of the adopted statewide bacteria objective, the water quality data collected to support the TMDL findings had to be reanalyzed. Additional reanalysis was completed in response to comments on the 2019 draft documents. Specifically, the following reanalysis was conducted:

1. Historic ambient fecal coliform data collected in the Russian River Watershed were excluded from consideration. The adopted statewide bacteria objectives for *E. coli* in freshwater and enterococci in saline waters now replaces the fecal coliform objective associated with REC-1 protection included in the Basin Plan. The exclusion of fecal coliform data alters the impairment findings as presented in the 2012 303(d) list of impaired waters.
2. The GM for *E. coli* data collected in all waters defined as freshwater were recalculated using a rolling six-week average as required by the new bacteria objective. This differs from the method of calculation used in the 2015 and 2017 draft staff reports, which was conducted on a static basis.
3. The reanalysis did not alter staff's approach to using multiple lines of evidence as the basis for establishing the TMDL. But, to better assess the relationships among the multiple lines of evidence, ambient water quality data was binned into subwatersheds defined by HUC-12 boundaries, a finer geographic scale than the Hydrologic Subareas that had previously been used. The finer scale of assessment allowed for more refined conclusions to be drawn relative to areas of pollution/impairment.
4. Staff used enterococci data to assess pollution/impairment in the HUC-12 subwatershed containing the Russian River estuary, in conformance with the adopted statewide objectives.

5. Staff continued to use enterococci data to assess pollution/impairment in freshwater HUC-12 subwatersheds, in conformance with the guidance resulting from the scientific peer review process. But, in order for a freshwater HUC-12 subwatershed to be found polluted/impaired based on enterococci data staff also required an additional line of evidence of pollution/impairment, notably evidence of public health advisories between 2013 and 2018.
6. *Bacteroides* data and other DNA marker data (PhyloChip™) were also binned by HUC-12 subwatersheds and assessed. But, the results of the data were not used to draw conclusions regarding pollution/impairment. Instead, the data were used to a) augment pollution/impairment findings using *E. coli*, enterococci and public health advisories, b) establish where the evidence is moderate to good regarding fecal waste discharge, c) refine the boundaries of the APMP and d) identify areas that are a high priority for additional monitoring.
7. The data collected for the OWTS Study and Land Cover Study were also binned by HUC-12 subwatersheds and assessed. The results of these data were also not used to draw conclusions regarding pollution/impairment. Instead, these data were used to refine our understanding of the fecal waste sources requiring control (e.g., human versus bovine or grazer).

The results of the data reanalyses are 1) a reduced area defined as polluted/impaired, 2) alteration of the APMP boundary to conform to the newly defined area of pollution/impairment as modified by evidence of human fecal waste, 3) the identification of high priority monitoring locations for future data collection, and 4) support for the proposed Fecal Waste Discharge Prohibition to address fecal waste discharges throughout the Russian River Watershed. While the available ambient water quality data was insufficient to assess the entire watershed with respect to pollution/impairment status, the OWTS Study and Land Cover Study clearly demonstrate an association of certain land cover types (e.g., developed land, shrubland, agricultural lands, and rural residential lands) and density of OWTS with evidence of pollution/impairment. The adoption of statewide bacteria objectives and refinement in analysis of fecal indicator bacteria and evidence of human fecal waste data has led to revision of the proposed Fecal Waste Discharge Prohibition and the wasteload and load allocations to better conform with data results and refinement of the APMP boundaries. Further, these refinements have highlighted the need for the Regional Water Board to develop a program to address fecal waste discharges from non-dairy livestock and farm animal facilities.

Appendix A: Staff Responses to Public Comments on the 2019 Draft Documents

Appendix B: Staff Responses to Public Comments on the 2017 Draft Documents

Appendix C: Staff Responses to Public Comments on the 2015 Draft Documents