

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Kevin B. Lunde)  
MEETING DATE: FEBRUARY 12, 2014

**ITEM:** 6

**SUBJECT:** **Napa River and Sonoma Creek Non-tidal Portions – Delist for Nutrients from Impaired Water Bodies List** – Adoption of Resolution Recommending Delisting

**DISCUSSION:** The Revised Tentative Resolution (Appendix A) would approve two revisions to the federal Clean Water Act (CWA) section 303(d) list of impaired waters (303(d) list) in our Region. In accordance with State policy, Board staff has determined that the non-tidal portions of the Napa River and Sonoma Creek are not impaired by nutrients and therefore should be “delisted” or removed from the 303(d) list.

One of the Board’s functions is to evaluate the water quality condition of all waters in the Region. Under CWA regulations, the State is required to report to the U.S. EPA on the status of water quality in the State and provide an updated list of impaired water bodies (the 303(d) list) based on that status. Water bodies placed on the 303(d) list usually require development of a total maximum daily load (TMDL) to address the impairment. In preparation for the next listing/delisting cycle, staff is bringing this item to the Board for its consideration.

The main stems of the Napa River and Sonoma Creek were placed on the 303(d) list in the 1970s (Napa) and 1980s (Sonoma) for impairment due to elevated levels of nutrients (nitrates and phosphorus) that can cause excessive algae growth, known as eutrophication. Eutrophic waters can significantly alter dissolved oxygen levels and pH, which are critical to aquatic wildlife, and can impact beneficial uses including cold freshwater habitat, warm freshwater habitat, and recreation. Staff began working on developing TMDLs for these two water bodies in 2003. Since then, data have been collected that demonstrate improved water quality conditions and support removing these two water bodies from the 303(d) list for impairment by nutrients. These water bodies will remain on the 303(d) list for pathogens and sediment, for which the Board has already adopted TMDLs.

The Revised Staff Report (Appendix B) provides our assessment of all readily-available data related to nutrients for the non-tidal portions of the Napa River’s and Sonoma Creek’s main stem and tributaries. In assessing these waters, we applied a weight of evidence approach, because there are no numeric water quality objectives or U.S. EPA criteria for algae indicators that could be used to determine impairment. Because evaluation guidelines for appropriate amounts of algae in freshwater streams are available, we focused our analysis on the non-tidal, freshwater portions of these water bodies. The reviewed data is of good

quality, as indicated by quality assurance and quality control procedures, and meets the spatial and temporal requirements of the State Board's Listing Policy.

Our assessment shows that benthic (i.e., bottom-growing) algae levels were below the available evaluation guidelines for chlorophyll *a* and percent cover of algae. Those two indicators directly assess the amount of benthic algae growing in the stream. At locations where an exceedance of one benthic algae indicator was observed, a second benthic algae indicator and subsequent indicators, such as pH or dissolved oxygen, did not show consistent signs of eutrophication. Nutrients such as nitrite, nitrate+nitrite, and total and un-ionized ammonia and water column chlorophyll *a* levels were all below levels of concern. We conclude that water quality conditions in the non-tidal portions of the Napa River and Sonoma Creek are meeting the Basin Plan narrative biostimulatory water quality objective with respect to nutrients and eutrophication.

*Comments Received:* Public notice of this hearing occurred in December, and the draft tentative resolution and supporting staff report were circulated for public comment ending on January 15, 2014. We received four comment letters (Appendix C) on the draft tentative resolution and staff report. Two letters were supportive of the delisting recommendation. Two letters disagreed with our assessment of the data used to support delisting. Our responses to the comments received are provided in Appendix D, and we have revised the tentative resolution and staff report as appropriate. We plan to make a presentation to the Board at the Board meeting to further describe our basis for recommending delisting these stream segments for nutrient impairment.

**RECOMMEN-  
DATION:**

Adoption of the Revised Tentative Resolution

**APPENDIX A:** Revised Tentative Resolution

**APPENDIX B:** Revised Staff Report

**APPENDIX C:** Comment Letters

**APPENDIX D:** Response to Comments