

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
Thursday, August 15, 2019
Santa Rosa, California

ITEM: 7

SUBJECT: Update on Flow Objectives and Flow-Related Activities in the North Coast Region (*Bryan McFadin*)

BOARD ACTION: This is an information item only. No action is necessary.

BACKGROUND: One of the fundamental factors affecting the quality of any stream is the quantity of water in the stream, including the rate, pattern, and timing of streamflow. The rate, pattern, and timing of streamflow controls many physical, chemical, and biological processes that support beneficial uses. North Coast Regional Water Quality Control Board (Regional Water Board) staff have identified the impacts of altered streamflow on beneficial uses as a priority issue that affects many water quality programs.

The Regional Water Quality Control Boards (RWQCBs) control the discharge of waste to waters of the state through administration of their implementation (i.e., permitting) authorities. The RWQCBs address controllable water quality factors that are not directly associated with discharges of waste through their basin planning authority. An example of this is the establishment of water quality objectives for flow (flow objectives) in a water quality control plan (Basin Plan), which is a means of establishing the flow conditions that are necessary for support of beneficial uses. In the past two (2015 & 2018) Triennial Reviews of basin planning priorities, the Regional Water Board has directed staff to pursue the development of both numeric and narrative water quality objectives for instream flow conditions.

Since 2015, Regional Water Board staff have engaged in multiple efforts to address the impacts of altered flow on beneficial uses, including:

- Completion of a study plan for development of numeric flow objectives in the Navarro River watershed.
- Development of an implementation approach for narrative flow objectives.
- Collaboration with the State Water Resource Control Board's (State Water Board) Division of Water Rights and California Department of Fish and Wildlife (CDFW) on California Water Action Plan efforts to establish instream flow criteria in the South Fork Eel River, Shasta River, and Mark West Creek watersheds.
- Collaboration with CDFW, National Marine Fisheries Service, California Sea Grant, and Cal Trout in the pursuit of alternative approaches to defining relationships between water quality and quantity.

- Engagement in statewide forums to build tools for implementing flow objectives.
- Monitoring flow conditions in the region to assist with prioritization of permitting, planning, and enforcement efforts.

DISCUSSION: North Coast RWQCB staff and invited guests will update the Board and public on efforts to develop flow objectives and other flow-related activities in the North Coast Region, including the following topics:

- **Navarro River Basin Instream Flow Needs Assessment.** Staff contracted with R2 Resource Consultants for the development of the Navarro River Basin Instream Flow Needs Study Plan (Completed May 2019) that identifies an approach, necessary steps, and costs associated with the technical work to develop instream flow criteria in the Navarro River watershed.
- **California Environmental Flows Framework.** The State Water Board is collaborating with UC Davis and others to develop an approach to estimating unimpaired flows and critical components of the hydrograph, including the timing, magnitude, and pattern of natural flows. This effort has great promise for providing the basis for ranking and prioritizing flow-impaired streams, and may factor into an implementation plan for achieving narrative flow objectives.
- **California Water Action Plan.** The State Water Board and CDFW are making progress on instream flow criteria in the South Fork Eel River, Shasta River, and Mark West Creek watersheds.
- **Investigation of flow-related controls on dissolved oxygen in Russian River tributaries.** Regional Water Board staff are collaborating with California Sea Grant and CDFW to investigate flow-related dissolved oxygen thresholds in coho rearing streams in the Russian River watershed.
- **Support of voluntary flow augmentation and dedication projects in the region.** Staff have supported a variety of efforts to augment stream flows during critical low flow periods in the region by engaging with the Division of Water Rights, modifying permits, conducting monitoring, and providing letters of support for project proponents.
- **Ongoing monitoring and coordination.** Regional Water Board staff have been busy monitoring flow conditions in collaboration with the State Water Board, CDFW, and local partners in several north coast watersheds. The monitoring is helping prioritize cannabis permitting and enforcement, providing planning data for local partners pursuing non-regulatory solutions, and evaluating the effectiveness of current regulatory efforts.

RECOMMENDATION: N/A

SUPPORTING DOCUMENTS:

Follow these web links for more information on these topics:

[State Water Resource Control Board's California Water Action Plan website.](#)

[California Department of Fish and Wildlife's California water Action Plan website.](#)

[U.C. Davis California Environmental Flows Framework website.](#)