



Staff Report
Supporting the Policy for the Implementation of the Water Quality
Objectives for Temperature and Action Plan to Address
Temperature Impairment in the Mattole River Watershed, Action
Plan to Address Temperature Impairment in the Navarro River
Watershed, and Action Plan to Address Temperature Impairment
in the Eel River Watershed

PUBLIC REVIEW DRAFT

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1.0 INTRODUCTION

This document presents the background information and rationale that supports the North Coast Regional Water Quality Control Board's proposed *Policy for the Implementation of the Water Quality Objectives for Temperature* and *Action Plan to Address Temperature Impairment in the Mattole River Watershed*, *Action Plan to Address Temperature Impairment in the Navarro River Watershed*, and *Action Plan to Address Temperature Impairment in the Eel River Watershed*. This Policy and those Action Plans are proposed as a single amendment to chapter 4, (Implementation Plans) of the *Water Quality Control Plan for the North Coast Region* (Basin Plan).

1.1 Background and Purpose

Approximately sixty-three percent of the area of the North Coast Region is listed as temperature impaired, per Section 303(d) of the Clean Water Act, because the water quality of those rivers and streams does not meet the temperature water quality objectives. Temperature impairments in the watersheds of the North Coast Region are predominantly associated with nonpoint sources of pollution, such as timber operations, agriculture, streambed alteration, land conversion and other construction activities. Temperature impairments are also associated with activities which do not generally involve waste discharge, such as vegetation alteration, water withdrawal, and hydromodification. Temperature Total Maximum Daily Load (TMDL) analyses of 13 watersheds in the north coast found the same factors to be responsible for elevated water temperatures: increased exposure to solar radiation due to loss of stream shade, physical stream channel alteration in response to elevated sediment loads, engineered stream channel alteration, and alteration of hydrology resulting from impoundments, water diversions, hydromodification, and landscape alteration. The widespread temperature impairments and common source factors within the North Coast Region point to the need for a region-wide approach for addressing temperature issues. The establishment and implementation of this Policy will provide a common approach to ensuring attainment of the water quality objectives for temperature. Similarly, the establishment and implementation of such a policy will ensure that high quality waters are also protected.

On January 19, 2012, the North Coast Regional Water Quality Control Board (Regional Water Board) adopted Resolution R1-2012-0013 titled "*Policy Statement for Implementation of the Water Quality Objective for Temperature in the North Coast Region*" (Policy Statement)¹. The Policy Statement describes the water quality objectives for temperature, identifies common activities that have the potential to elevate water temperatures in excess of water quality objectives, and identifies the regulatory mechanisms at the disposal of the Regional Water Board used to control waste discharges and associated activities in a comprehensive and consistent

¹ Resolution R1-2012-0013 can be downloaded at:

http://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2012/120127_12_0013_Resolution_Temperature.pdf

manner. The Policy Statement also provides direction to staff developing and implementing permits and evaluating the water quality impacts of proposed actions, provides clarification to the public regarding what is required to comply with the objective, and provides direction to staff to incorporate a Temperature Implementation Policy into the Basin Plan.

1.2 Document Organization

The remainder of this document is organized in the following manner:

- Chapter 2 presents the science of water temperatures in both a general sense, and as applied in north coast temperature TMDL analyses.
- Chapter 3 presents the water quality objectives for temperature contained in the Basin Plan.
- Chapter 4 discusses the interpretation of the water quality objectives for temperature and the manner in which they are implemented for activities and situations.
- Chapter 5 identifies and discusses the temperature factors this policy focuses on, as well as the actions to address the identified temperature factors.
- Chapter 6 discusses the Mattole, Navarro, and Eel River watershed Temperature TMDLs, and the actions identified to implement them.
- Chapter 7 provides a simple description of the monitoring strategy staff will use as the basis of a monitoring plan to be developed in the future.
- Chapter 8 describes the environmental setting and baseline condition for the environmental analysis.
- Chapter 9 presents the environmental analysis of alternatives and reasonable means of compliance.
- Chapter 10 presents an economic analysis of the impacts of this policy.
- Chapter 11 discusses the public process that has been conducted to date.
- Chapter 12 lists the references cited in the text of the report.