

### **3.0 TEMPERATURE WATER QUALITY OBJECTIVES**

The Basin Plan includes both narrative and numeric water quality objectives which describe the ambient water quality conditions necessary to protect beneficial uses. The Basin Plan contains two separate water quality objectives for temperature. The first objective is the intrastate temperature objective. This objective applies to all waters of the state.

The intrastate temperature objective is a narrative objective with associated numeric criteria and reads:

The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature.

At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperatures.

The second water quality objective for temperature is the interstate temperature objective contained in the statewide *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan). The Thermal Plan, as adopted by the State Water Board, is incorporated by reference in the Basin Plan (see Appendix 3 of the Basin Plan). The “Cold Interstate Waters” objective is as follows:

Elevated temperature waste discharges into cold interstate waters are prohibited.

“Elevated Temperature Waste” is defined as:

Liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water. Irrigation return water is not considered elevated temperature waste for the purpose of this plan.

The interstate objective applies to waters that cross or define the state border. The interstate temperature objective augments, but does not supersede, the intrastate temperature objective.

For those waterbodies which do not attain the ambient water quality conditions described by the water quality objectives, the federal Clean Water Act (CWA)

requires an evaluation of the sources of pollution contributing to the impairment and the calculation of the reduced pollutant loads necessary to attain objectives. For waters impaired by elevated temperatures, CWA section 303(d)(1)(D) specifically requires that states estimate “the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife.”

Finally, the State Water Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California", commonly known as the Antidegradation Policy. The Antidegradation Policy states:

“Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.” (State Water Board Resolution 68-16)

Accordingly, all waters in the North Coast Region with ambient water temperatures representing natural conditions are identified as high quality waters. There is a current scarcity of waterbodies with temperatures that fully support the Region’s COLD beneficial use, as indicated in part by the listing of red-legged frogs and several Pacific salmonids as threatened or endangered, and others designated as species of special concern (e.g., southern torrent salamanders and summer-run steelhead). The implication of the Antidegradation Policy is that waterbodies with temperatures that are cold enough to support these sensitive organisms during their temperature sensitive life stages, or colder, represent high quality waters regardless of their temperature status, and that any proposal likely to result in the elevation of water temperatures must be able to make the demonstrations spelled out in the Antidegradation Policy. This application of the Antidegradation Policy to temperature is supported by the Basin Plan on page 3-2.00, which states:

“Where water quality is better than the minimum necessary to support instream uses, the federal [antidegradation] policy requires that quality to be maintained and protected unless the state finds, after ensuring public participation, that:

- 1) Such activity is necessary to accommodate important economic or social development in the area in which the waters are located,
- 2) Water quality is adequate to protect existing beneficial uses fully, and
- 3) The highest statutory and regulatory requirements for all new and existing point source discharges and all cost-effective and reasonable best management practices for non point source control are achieved.”