

Water Quality Report Card

Temperature in Shasta River

Regional Water Board:	North Coast, Region 1
Beneficial Uses Affected:	COLD, COMM, CUL, MIGR, MUN, RARE, REC-1, SPWN
Implemented Through:	Watershed Stewardship (319(h) Grants , Education and Outreach, Voluntary Stakeholder Efforts, Conditional Waiver of Waste Discharge Requirements (WDRs))
Effective Date:	January 2007
Attainment Date:	January 2047

STATUS	<input checked="" type="checkbox"/> Conditions Improving
Pollutant Type:	<input checked="" type="checkbox"/> Nonpoint Source
Pollutant Source:	Removal of Riparian Vegetation Irrigated Crop Production Hydromodification Grazing Non-Point Source Runoff

Water Quality Improvement Strategy

The Shasta River, a tributary to the Klamath River, drains a 795 mi² basin and provides habitat for the listed Southern Oregon/Northern California Coastal Coho Salmon. Key characteristics of the basin include year-round cold spring flows, low summer rainfall, a high desert environment, and surface water diversions supporting irrigated agriculture and cow-calf grazing operations.

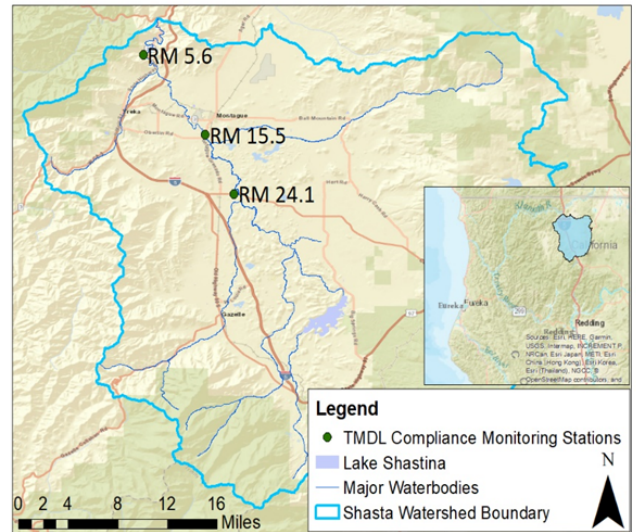
The Shasta River is listed on the Clean Water Act 303(d) List as impaired for temperature because it regularly exceeds chronic temperature thresholds necessary to support salmonid lifecycle needs including migration, incubation, and rearing. The Shasta River temperature Total maximum Daily Load (TMDL) analysis indicates that surface water diversions play a key role in altering the river's temperature. Additional factors affecting temperature include reduced riparian vegetation, warm irrigation tailwater return flows, and instream impoundments.

The [Shasta River TMDL Action Plan](#) requires landowners to implement measures that protect streams, enhance riparian vegetation, and prevent tailwater return flows from entering streams. The Regional Board implements these measures through a mix of funding assistance and permits, including the [Shasta River TMDL Conditional Waiver of WDRs](#). The Waiver was most recently updated in October 2018.

TMDL Maximum Stream Temperature Load Allocations

River Mile	Baseline Daily Max (°C)	Load Reduction Needed (°C)	Absolute Daily Max (°C) (2013 - 2018)	Load Reduction Recorded (°C)
5.6	30.3	-2.1	29.4	-0.8
15.5	28.3	-1.2	27.3	-1.0
24.1	26.6	-1.4	26.5	-0.1

Shasta River Watershed Map



Water Quality Improvement Projects

- 2 in-channel impoundments removed
- 2 cold-water springs reconnected
- Over 90% of the mainstem Shasta River fenced for livestock management.
- Over 3,000 linear feet of stream-side riparian plantings
- 8 tailwater re-use and efficiency projects funded through SWRCB grants
- 9 irrigation efficiency/water management projects funded 319h grants
- 19 off-channel stock water systems installed through SWRCB grants

Water Quality

