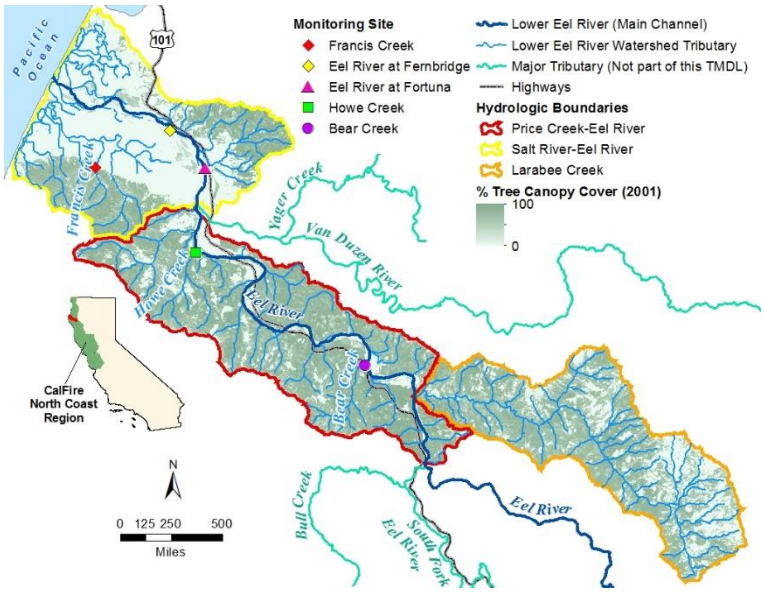
Water Quality Report Card		Temperature in Lower Eel River
Regional Water Board:	**North Coast, Region 1**	**STATUS** ☑ **Conditions Improving** ☐ Data Inconclusive ☐ Improvement Needed ☐ Targets Achieved/Waterbody Delisted
Beneficial Uses Affected:	COLD, RARE, MIGR, SPWN, COMM, FISH, CUL, REC-1	
Implemented Through:	NPS Permit, 401 Certification, 319 Grant	
Effective Date:	December 18, 2007	
Attainment Date:	2057	**Pollutant Type:** ☐ Point Source ☑ Nonpoint Source ☐ Legacy

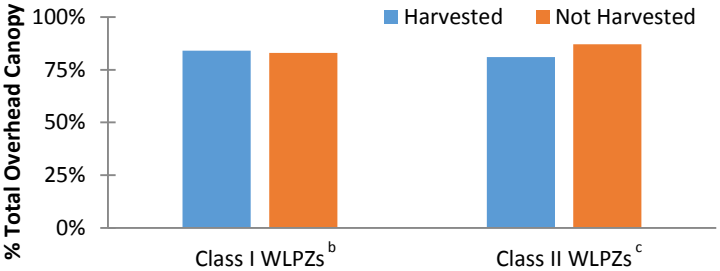
Water Quality Improvement Strategy

The Lower Eel River Watershed, part of the Eel River Watershed, drains into the Pacific Ocean near Ferndale in Humboldt County. Land uses in the nearly 300 square mile watershed include timber harvest operations, cattle ranching, hunting, recreation, rural residential, and marijuana cultivation. In 1992, the watershed was added to the 303(d) list for sediment and temperature. Historically large salmon and steelhead populations have been greatly reduced as a result of elevated water temperatures. To address the impairments, USEPA established the Lower Eel River TMDLs for Temperature and Sediment in 2007. The TMDL assigned heat load allocations based on natural shade and flow conditions, but did not establish an implementation plan. To establish actions to achieve the TMDL load allocations, Region 1 adopted the Action Plan to Address Elevated Water Temperatures in the Eel River Watershed (Action Plan) in March 2014. The Action Plan addresses stream shade and flow levels, and identifies the regulatory tools for addressing temperature concerns (e.g., regulatory programs for discharges from timber harvest operations, dairies, county roads, State highways, dredge and fill activities, and agriculture). The Action Plan also directs Region 1 to coordinate with the Division of Water Rights to address flow- and temperature-related concerns.

Lower Eel River Watershed



Percent Canopy Cover in CalFire's North Coast Region, 2001-2004[a]

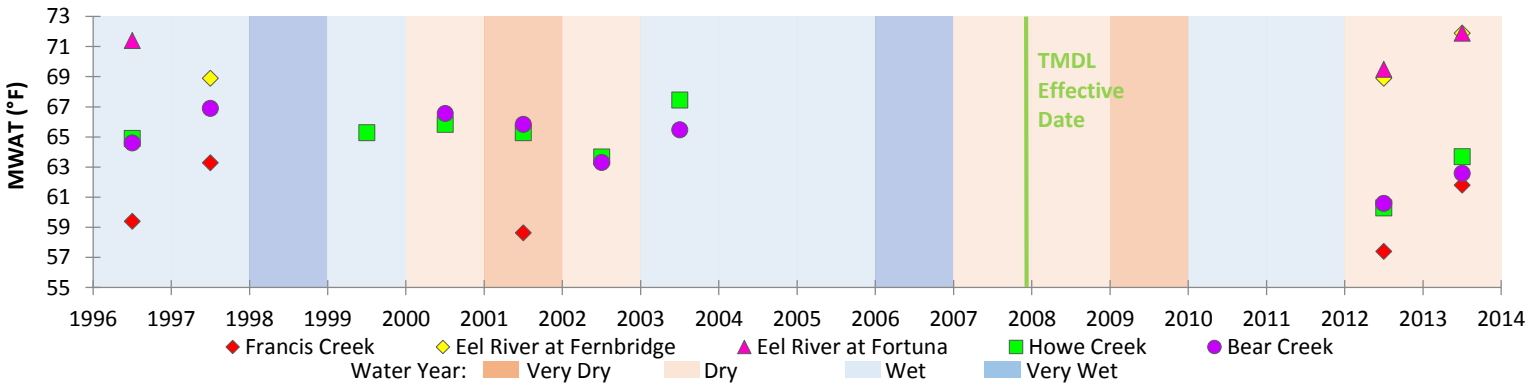


[a] TMDL limits are not shown as the TMDL identifies "site-specific potential effective shade," or no decrease in shade on the water.
[b] Class I WLPZ - watercourse and lake protection zone with streams that contain fish habitat.
[c] Class II WLPZ - watercourse and lake protection zone with aquatic habitat, but no fish.
Data source: CA Board of Forestry and Fire Protection Monitoring Results, 2001-2004.

Water Quality Outcomes

- *Water quality data demonstrate that temperatures in the Lower Eel River tributaries have been improving (i.e., getting colder) since the 1990s.*
- *Water quality data demonstrate that temperatures in the main stem Lower Eel River have not significantly changed since the 1990s.*
- *Implementation of nonpoint source regulatory programs is effectively ensuring protection of riparian shade.*
- *Region 1 will continue to implement the Action Plan, as well as develop an agriculture permitting program, and temperature trend monitoring and work plans.*

Lower Eel River Watershed Maximum Weekly Average Temperature (MWAT), 1996-2013[d]



[d] To account for the wide range of natural stream temperatures, the TMDL states that attainment should be monitored based on the progress toward natural shade. Therefore, there are no temperature water quality objectives/targets.

Released October 2014