

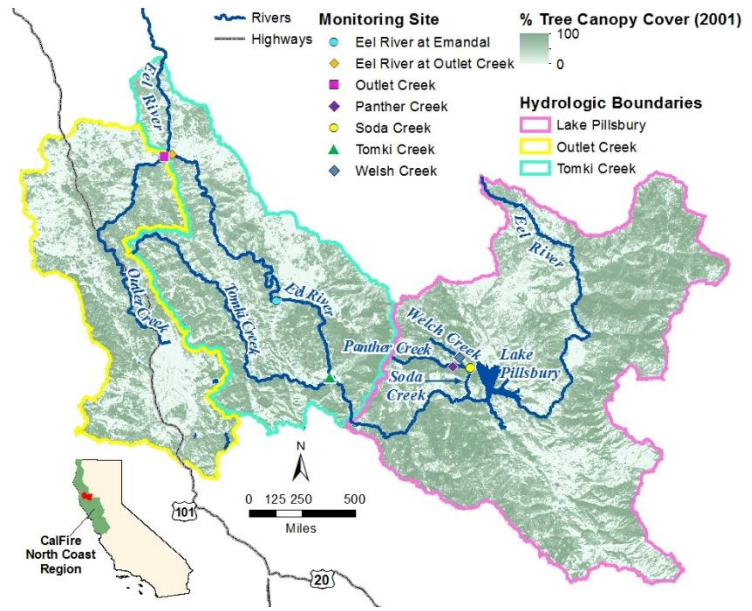
Water Quality Report Card	
Regional Water Board:	North Coast, Region 1
Beneficial Uses Affected:	COLD, RARE, MIGR, SPWN, COMM, FISH, CUL, REC-1
Implemented Through:	NPS Permit, 401 Certification, Grant
Effective Date:	December 29, 2004
Attainment Date:	2054

Temperature in Upper Eel River	
<b>STATUS</b>	<input type="checkbox"/> Conditions Improving
	<input type="checkbox"/> Data Inconclusive
	<input checked="" type="checkbox"/> <b>Improvement Needed</b>
	<input type="checkbox"/> Targets Achieved/Waterbody Delisted
<b>Pollutant Type:</b>	<input type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy

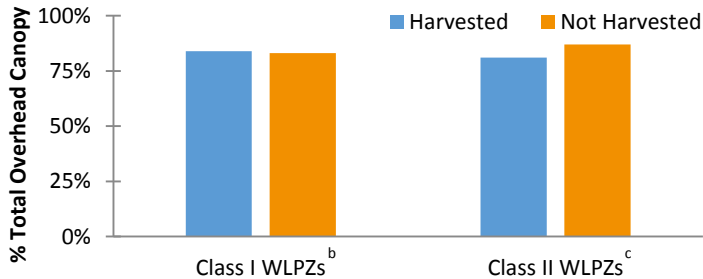
### Water Quality Improvement Strategy

The Upper Eel River Watershed is a 688 square mile watershed upstream of the Middle Fork. Land uses 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 [Upper Main Eel River and Tributaries TMDLs for Temperature and Sediment](#) in 2004. 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.

### Upper Eel River Watershed



### Percent Canopy Cover in CalFire's North Coast Region, 2001-2004<sup>a</sup>



<sup>a</sup> TMDL limits are not shown as the TMDL identifies "site-specific potential effective shade," or no decrease in shade on the water.

<sup>b</sup> Class I WLPZ - watercourse and lake protection zone with streams that contain fish habitat.

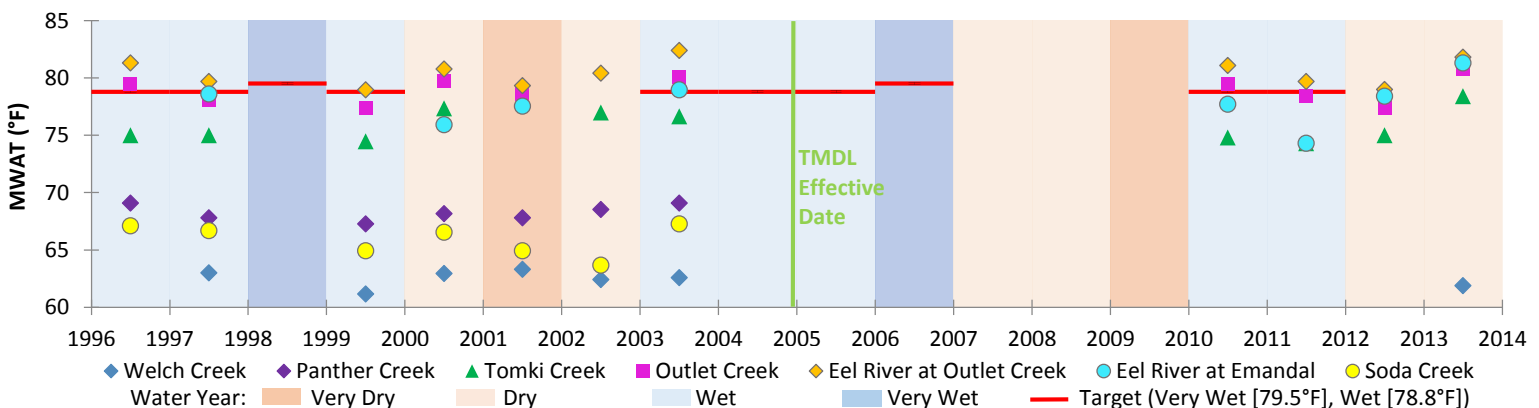
<sup>c</sup> Class II WLPZ - watercourse and lake protection zone with aquatic habitat, but no fish.

Data source: [CA Board of Forestry and Fire Protection Monitoring Results, 2001-2004](#).

### Water Quality Outcomes

- Water quality data demonstrate that temperatures in the mainstem Upper Eel River and the tributaries have not substantially changed since the 1990s.
- Water quality data demonstrate that downstream temperatures (at Outlet Creek and Eel River at Outlet Creek) regularly exceed wet year temperature targets.
- Region 1 will continue to implement the Action Plan, as well as develop an [agriculture permitting program](#), and temperature trend monitoring and work plans.

### Upper Eel River Watershed Maximum Weekly Average Temperature (MWAT), 1996-2013<sup>d</sup>



<sup>d</sup> (1) Temperature targets were only established for the Eel River at Emandal monitoring site for wet and very wet years; (2) Soda and Panther creeks were not monitored in 2012, and went dry during summer 2013; (3) Some reaches of Outlet and Tomki creeks were dry or intermittent in 2012 and 2013.