



Five Disappearing Northern California Rivers Using the Clean Water Act to Resuscitate Waterways Sucked Dry

In August 2010, tribal, fishing, and conservation groups submitted more than one thousand pages of detailed studies, data, and analysis to inform the Board's development of the 2012 Clean Water Act Section 303(d) List. As detailed in that letter, and at several subsequent State Water Board meetings on this matter, California is legally required to include on its 303(d) List *all* of the waterways that "readily available" data indicate are impaired, including impairments due to alterations in natural flow.

Other states (Idaho, Washington, North Carolina, South Carolina, Tennessee, Michigan, Vermont) have begun this essential task of identifying water bodies impaired by altered flows, with support by U.S. EPA. Within California, U.S. EPA's Bay Delta Action Plan¹ notes, "identifying those impairments and identifying the cause (whether it is a "pollutant" for purposes of Section 303(d) or some other cause) is a critical part of the Clean Water Act response to the Estuary's problems."

To support the Board's effort, our coalition developed a shortlist of waterways in Region 1 that are clearly and incontrovertibly impaired, and for which low flows are so clearly a cause that there are no reasonable arguments against their 303(d) listing: **Scott River, Shasta River, Upper Main Eel River, Mattole River, and Russian River tributaries (Maacama Creek & Mark West Creek).**

Our coalition worked with local groups throughout the region to create a shortlist of priority waterways based on the following criteria, among others:ⁱⁱ

- a. Significant data was submitted prior to August 2010 as part of the CWA 2012 303(d) scoping process, or is otherwise readily available (e.g., such as in government databases) and demonstrates altered flows such that impairment could not be dismissed as either naturally occurring or episodic.
- b. Local stakeholders are invested in the health of the waterway, and could inform and participate in restoration of the health of the listed waterway.
- c. Prior formal recognition of flow issues with the waterway by State Water Board, Department of Fish and Game, or other state or local agencies.
- d. Ongoing or potential injury to threatened or endangered species.
- e. Waterways within the National or California Wild and Scenic River System, or Class I streams (habitat for fishery resources) or Class II streams (habitat for aquatic non-fish vertebrates and/or aquatic benthic macroinvertebrates).
- f. Waterways where listing would help prevent waste, unreasonable use or unreasonable method of use of water, or unreasonable diversion or method of diversion of water.

Given California's current drought, long history of water management issues, and the challenges to come with climate change, every tool must be used to prevent further damage and to restore degraded waterways. Including these critically impaired waterways on the 2012 303(d) List for Region 1 (North Coast Regional Water Quality Control Board) is an important first step to restoring these rivers and creeks. The brief descriptions provided below summarize the detailed flow data and information that has been submitted to the State Water Board.

1. **Scott River.** Sections of the Scott River are completely dewatered during summer months, while other sections are severely flow-impaired. Adjudicated water rights alone are sufficient to allow complete dewatering of the Scott River during the summer and early fall. In addition, a shift from surface diversions, which are naturally self-limiting, to groundwater wells have made worse the apparent over-appropriation of water in the watershed.ⁱⁱⁱ
2. **Shasta River.** Seven major diversion dams and numerous smaller structures located on the Shasta River, substantially and rapidly reduce flows in the main stem when they are in operation. In addition, Dwinnell Dam, located at about river mile 40, has dramatically altered the flow regime in all seasons of the main stem river. During various times of the year, no water is released from Dwinnell Dam for fish in the Shasta River. These flow alterations have adversely affected salmonid populations in the river.^{iv}
3. **Upper Main Eel River.** Historic land use, including pervasive logging that reduced shade, vastly increased sedimentation and altered hydrology and soils is exacerbated in many areas by unregulated dry-season diversions related to marijuana cultivation. As a result, the Eel River and its tributaries suffer from low flows that often produce temperatures lethal to listed fish species.^v
4. **Mattole River.** A detailed study of the Mattole River Basin found that lack of adequate late summer and early fall stream flow is recognized as one of the most important limitations on salmonid habitat in the Mattole River basin. In recent years, juvenile salmonids have become stranded in pools due to excessively low flows, causing mortality and necessitating fish rescue operations.^{vi}
5. **Russian River Tributaries:**
 - a. **Maacama Creek.** In Maacama Creek “[s]tanding crops of fall fish show a major reduction in many years, suggesting that low flow conditions are limiting, and these low flow conditions are likely linked to agricultural water use.”^{vii} “Coho salmon are at very high risk of extinction in the Russian River basin. Because “the biggest problem is over-consumption of water,” listing of these waterways as impaired by natural flow alterations/water diversions is an important step in ensuring their return to good health.
 - b. **Mark West Creek.** Ten years ago all 28 miles of Mark West Creek had water in the summer. Today, because of increased diversions, only 3½ miles have water. Department of Fish and Wildlife flow records of Mark West Creek dating back to the 1960s show that the lowest summer stream flow has historically been 2 cfs; recent summer stream flows are averaging at approximately that level.

For additional information, contact Sara Aminzadeh, California Coastkeeper Alliance (Sara@cacoastkeeper.org) or Linda Sheehan, Earth Law Center (lsheehan@earthlaw.org).

ⁱ U.S. EPA. “Water Quality Challenges in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: EPA’s Action Plan,” p. 9, available at <http://www.epa.gov/sfbay-delta/pdfs/EPA-bayareaactionplan.pdf> (August 2012).

ⁱⁱ Criteria 4-6 taken from the State Water Board’s AB 2121 Enforcement Priorities. See Appendix G AB 2121 work (see Appendix G).

ⁱⁱⁱ S.S. Papadopoulos & Associates Inc. 2012. Groundwater Conditions in Scott Valley, California. Report prepared for the Karuk Tribe, Happy Camp, CA.

^{iv} Lestelle, L. 2012. Effects of Dwinnell Dam on Shasta River salmon and considerations for prioritizing recovery actions. Report prepared for the Karuk Tribe, Happy Camp, CA.

^v Patrick Higgins, Consulting Fisheries Biologist, “Evaluation of the Effectiveness of Potter Valley Project National Marine Fisheries Service Reasonable and Prudent Alternative (RPA): Implications for the Survival and Recovery of Eel River, Coho Salmon, Chinook Salmon, and Steelhead Trout” (February 2010).

^{vi} Randy D. Klein, Hydrologist, “Hydrologic Assessment of Low Flows in the Mattole River Basin 2004-2006,” (March ‘07).

^{vii} Letter from Patrick Higgins, Consulting Fisheries Biologist to Traci Tesconi, County of Sonoma, “Pelton House Winery Application #PLP05-0010,” (Dec. 29, 2008), p. 12 (included in Appendix A).