



## The Good Fight

The Politics of Fishing  
With Andrew Braugh

# The Fall River: Cold Water Refuge in a Changing Climate

I'M FLOATING in a 10-foot flat-bottomed pram, watching the sun set behind distant Mount Shasta. At sundown on the Fall River, the sky bursts with countless shades of orange and yellow, and the methodical, spring-fed current glasses over. As if someone adjusted nature's sound system, background noise suddenly disappears. In high fidelity, reed tules rattle, fish rise, waterfowl take flight. The stream reflects the sky with such precision that I'm reconsidering which way is up.

For a moment, I forget that Carson Jeffres and Art Teter are sitting next to me. Jeffres works as a river ecologist for the U.C. Davis Center for Watershed Sciences. Teter just completed his twenty-third year as a fishing guide on the Fall River. Although they just met, Jeffres and Teter have something in common — they can both flat-out fish. Teter knows the hiding place of every fish in the river, and Jeffres spends most of his time with his head underwater, observing how fish feed and make use of different habitat types. Together, these guys are alarmingly effective with a fly rod. Thankfully for the fish, that's not what this day is about.

This day is about figuring out what's gone wrong with the Fall River. Art Teter and many others fear that the fishery may soon collapse and take with it one of the best spring-creek angling experiences in California.

### The Fall River

The Fall River originates from California's largest network of cold-water springs. In total, the entire system generates approximately 1,200 to 2,000 cubic feet per second (cfs) of cold, clean water. For perspective, 1,500 cfs converts to about one million acre-feet per year — enough water to sustain over a million families of four for up to one year. All of California requires just over 40 million acre-feet of surface water storage to quench its annual thirst. California's largest reservoir — Shasta Lake — holds about 4.5 million acre feet. Most Northern California anglers know that the McCloud, upper

Sacramento, and Pit Rivers supply the majority of the water flowing into Shasta, but few realize that 85 percent of the summer base flows in the Pit River actually originate in the Fall River. At one million acre-feet per year, the Fall River, not the Pit, supplies an astounding 22 percent of the storage capacity in Shasta Lake. Sitting in our pram, we're in fact floating atop the largest connected body of cold, clean springwater in California.



WITH PROPER MANAGEMENT, THE FALL RIVER VALLEY CAN SET AN EXAMPLE OF AN AGRICULTURAL LANDSCAPE THAT SUPPORTS WILDLIFE AND A HEALTHY TROUT FISHERY.

But in the ecology of rivers, Jeffres constantly reminds me, "It's not just the quantity of water that matters, it's the quality." Historically, the water of the Fall River has provided a rich environment for all kinds of wildlife. Its watershed, at over 600 square miles, creates more than 30 miles of ideal cold-water habitat for wild trout, Shasta crayfish, rough sculpins, and a variety of native aquatic plants and macro-invertebrates. With a gradient of less than a foot per mile, the slow, constant, cold current has the potential to support well over 5,000 wild trout per mile. The springs that feed the river also create wetlands and other habitats that support a popular rest stop on the Pacific flyway.

### The Problem

All around us, however, warning signs indicate trouble. Through the clear spring-

water, the river bottom looks like a sand-box: two feet of fine sediment blankets the entire upper river. In the lower river, invasive Eurasian water milfoil grows from bank to bank.

The once world-famous Fall River *Ephemera* hatch (Pale Morning Duns) no longer produces what the old-timers remember as snowstorms of mayflies. In select areas, unrestricted cattle trample stream banks. Traces of E-coli and fecal

successfully led a major effort to restore headwater tributaries, the major source of sediment input. The Natural Resource Conservation Service continues to work with landowners to improve ranching and agricultural practices. The Fall River Wild Trout Foundation, led by Michael Fitzwater and Dale Dennis, extensively studied potential solutions for removing excessive sediment. The Shasta Land Trust protected over 400 acres of private riverfront land with conservation easements. California Trout continues to advocate at the state level for improved management of wild-trout waters. Combined, these efforts form a solid foundation for building future conservation programs.

### The Fall River Conservancy

This is where the Fall River Conservancy joins the good fight for the Fall River. In 2009, Teter organized a group of local landowners to form a nonprofit organization aptly named the Fall River Conservancy (FRC). In 2010, I joined the FRC to help develop a conservation program to protect the water, lands, and cultural heritage of the valley. For the last year, the FRC has been developing a strategy and raising funds to carry out this mission.

As a nascent organization, the FRC doesn't claim to know the solutions to the river's complex problems. We do, however, propose a vision for the future of the valley. As FRC board member Steve McCane puts it, "We envision making the Fall River Valley the prototypical model in California for how to create a working landscape while still protecting natural resources." Or as board member Ray Christensen, longtime resident and wild-rice farmer reflects, "Certainly, things have changed — more angling pressure, invasive species, sediment, and land divisions — but one thing that still stands out is the pristine beauty of the Fall River Valley. This must be and can be preserved for future generations."

Certainly, the FRC wants to solve problems now. However, we recognize that shortcuts and river conservation go