



THE GOOD FIGHT

The Politics of Fishing
Guest columnist: Tom Martens

■ SAVING ALAMEDA CREEK

NOTHING FIRES UP trout conservation activists more than being told they can't do something good for their home water. That was the case 27 years ago, when state fish and game officials told fly fishers that restoring historic steelhead runs in the 40-mile-long Alameda Creek was a lost cause.

Alameda Creek starts high in the hills east of San Jose, and then flows northwest to Sunol, where it is joined by Arroyo de la Laguna, Arroyo Del Valle, and Arroyo Mocho before heading west down Niles Canyon, draining nearly 700 square miles of watershed into San Francisco Bay just north of Fremont. Restoration of the creek was just too daunting a task, the state Department of Fish and Game reasoned at the time. In the heyday of water development, when the creek was divided up, a number of reservoirs had been created in the watershed for water storage by some of the Bay Area's most powerful utilities. No one bothered to build many fish ladders at the dams, let alone to maintain those they did build. And as for minimum flow standards to protect fish during periods of drought, none existed.

Actually, the DFG had given up on Alameda Creek years earlier, when the agency told the U.S. Army Corps of Engineers not to worry about creating barriers to spawning fish in plans to channelize the lower 12 miles of the stream to provide flood control. "By the time the corps was designing its flood control project, the DFG indicated that habitat conditions were sufficiently poor that fish passage need not be provided," the corps said in a recent plan that summarized the early-twentieth-century event. So it was no real surprise that the DFG said in 1975 there were simply too many obstacles to restoration in the largest drainage in the San Francisco Bay watershed — mostly from the dams that blocked steelhead routes to spawning areas.

For instance, 7 miles up from the creek's mouth, between Newark and

Union City, there is an inflatable rubber dam that blocks the migratory route of steelhead. At mile 8, there's the concrete BART weir and another rubber dam. At mile 10, there's one more rubber dam — another in a series used to divert water to groundwater recharge ponds. At mile 14, in Niles Canyon, there's Niles Dam. At the top of the canyon, there's Sunol Dam. At the mouth of Stonybrook Creek — halfway up the canyon — there's a CalTrans road culvert that is blocking steelhead runs. Further upstream in the Sunol Valley, there is a cement-armored gas pipeline. At mile 30, there's the large Alameda Diversion Dam. You get the picture. It's no wonder that the DFG said in a memo it would "not actively promote steelhead restoration" in the creek and its network of three reservoirs high above the bay in or near the Sunol-Ohlone Regional Wilderness

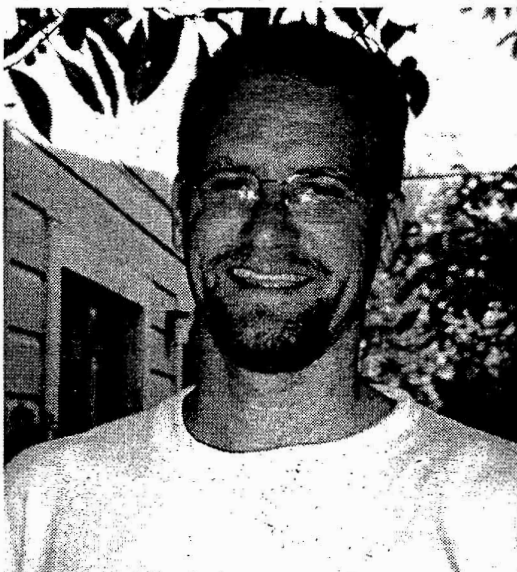
That memo didn't sit very well with local fly fishers, however. They had carefully preserved old snapshots and relished telling their grandchildren stories about catching big steelies in the creek in the old days. Their faded black-and-white photos supported yarns about robust steelhead runs in the period before the dams went in.

Records at the Livermore Valley Historical Society tell the story of a creek that "ran year 'round with steelhead, trout and salmon" in the 1800s. In 1910, an article in the *Livermore Herald* said the headwaters of Arroyo Valle and Valpe Creek in the upper Alameda watershed were "full of fish, 30-inch, seven and one-half pounds." A 1935 photo shows workmen catching steelhead on Calaveras Creek, located in the watershed. In 1938, DFG observers documented "steelhead seen jumping the dam" at Sunol Dam. In 1942, a DFG let-

ter documented a "plentiful steelhead run" at the "Green Bridge" on the creek.

"We caught steelhead that were 17 to 18 pounds," said Hal Janssen, who rode his black-and-white Schwinn from his

[the Alameda County Water District] inflated the rubber dams to divert the water, they would strand the fish," he said. "I would net the steelhead and move them above the dam. Over 10 years, I probably moved 100 fish over the spillway. We would move winter-run steelhead that would go 13 to 14 pounds."



JEFF MILLER OF THE ALAMEDA CREEK ALLIANCE.

Niles home to fish the creek when he was eight years old. "I fished every day. I was the only kid who had his parents' permission to fish during recess from Niles School."

Janssen, of the Janssen Minnow fame, who now distributes fishing gear to fly shops, said he fished the creek with his dad's three-piece bamboo rod. "I fished with flies I copied out of *Outdoor Life* that were made out of chicken feathers, but it wasn't hard catching fish because they were in the creek by the thousands. I broke off the tip of that three-piecer so many times the top section was only three inches long in the end."

Despite the drubbing that Alameda Creek has taken over the years, it still sustained a somewhat healthy steelhead population into the early 1960s. John Walton, who owns a tackle shop in San Leandro, used to save steelhead from being stranded during the 1970s and 1980s. "When they

BUT THAT WAS THEN, and this is now. "The creek has a very high potential for restoration," DFG fishery biologist Erika Cleugh recently told the press. "We know that Alameda Creek is a large creek capable of maintaining a self-sustaining steelhead population."

So what happened to cause the DFG's dramatic switch in positions? Among other things, the Alameda Creek Alliance was created — just in time to ride the wave of restoration pressure created by Central

Coast steelhead being listed as threatened under the federal Endangered Species Act. The Bay Area was also in the midst of an emerging stream restoration movement, with Bay Area anglers, urban-creeks grassroots activists, and some of the more progressive public agencies hell-bent to return steelhead to streams. For example, just to the south of Alameda Creek, the San Jose-based Santa Clara Valley Water District has been very active in restoring steelhead runs in the Guadalupe River and in Penitencia Creek, a tributary to Coyote Creek in Alum Rock Park. Across the bay, work is being done to restore Stevens Creek in Mountain View and San Francisco Creek in Palo Alto.

"We formed five years ago to do something locally to restore a threatened species," said Jeff Miller, who runs the alliance, adding that he started the volunteer group as a hobby, but now works half-time as its only employee. The alliance has 375

members, plus a 1,200-person list of activists and contacts. Miller works in a house in Berkeley out of a small office that is jammed from floor to ceiling with shelves full of environmental and fishery studies. He lives above the office. "I was impressed with the work that Trout Unlimited had done in restoring fish passage with jump pools for salmon and steelhead at Roy's Dam on Lagunitas Creek," Miller added, referring to the small coastal stream in Marin County. "I was looking around for a similar restoration project on the east shore [of San Francisco Bay], and Alameda Creek had the best stream habitat and the best potential."

Since the 1970s, with the adoption of state and federal environmental laws, interest in preserving the Bay Area's streams had been slowly growing. The period saw the emergence of early conservation groups powered by volunteers who had fly fished the streams and rivers before their decline. A Berkeley native, Miller said his group's advocacy carries on the work of the Friends of Alameda Creek, which was made up of local conservationists and anglers putting pressure on agencies over the years to protect and restore the creek's fishery.

The 39-year-old Miller is the perfect person for the job of untangling the complexities of the watershed, particularly for protecting endangered species. He also writes technical comments on endangered-species-listing petitions as a half-time staff member for the Center for Biological Diversity, a feisty, Arizona-based nonprofit with a national reputation for filing lawsuits to protect endangered species.

"Unlike many alliance members, I don't fish. I'm just one of those weirdos who just likes to observe native fish in their natural setting," said Miller, "And I don't like to see them go extinct." Miller rides herd on a large number of volunteers who collect water and fish samples in the creek, move fish upstream past dams in the lower creek, write letters advocating protection, and sponsor special events, such as a 10-kilometer "Spawning Run" and an annual steelhead festival that draws some four hundred enthusiasts.

The result of their actions and those of others over the years set the stage for what many are considering a model for watershed planning and restoration. In the 1940s, agencies conducted some of the first intensive studies on how to restore the creek's steelhead and salmon runs. Restoration didn't really begin until the 1980s, however. In 1980, the state Department of Water Resources chose

Alameda Creek as the top candidate for urban stream restoration in California, and in 1983, a task force determined that the upper reaches of the watershed could support anadromous fish.

In 1987, however, the restoration drive was dealt a setback when a technical advisory group could not agree on whether genetic samples proved that the steelhead were native or the product of hatchery-bred trout. Then, in 1989, a technical advisory group of local representatives recommended several alternatives for restoring steelhead, but water districts rejected the possibility of providing additional flows for migratory fish. So in 1991, a California Trout legal complaint started the process of obtaining more water for fish in the creek.

In 1997, steelhead in the Central Coast region, which includes tributaries to the San Francisco Bay, were listed as threatened under the federal Endangered Species Act.

Every winter since 1997, the alliance has documented adult steelhead blocked during their upstream migration by barriers in the lower creek flood-control channel. In 1999, improved genetic techniques finally showed that the adult steelhead trout returning to the lower creek were indeed native to the creek.

In 1998, the alliance and others sued an East Bay park district that owns public land in the upper watershed over the damaging effect of cattle grazing on the creek. The suit was unsuccessful, but brought attention to the creek's problems with degraded trout spawning habitat and riparian areas. Also in 1998, with the help of the Golden West Women's Fly Fishers, fifth graders from the Donlon Elementary School drew regional press attention with a successful native steelhead-egg-rearing program with eggs rescued from stranded steelhead in the flood-control channel.

IN 1999, the Alameda Creek Fisheries Restoration Workgroup was created to bring together the myriad government, private, and nonprofit groups with an interest in restoring steelhead runs in the creek. "The goal of the workgroup is to restore steelhead while maintaining flood-control and water-supply functions in the creek," said Gordon Becker, an environmental scientist for the Oakland-based Center for Ecosystems Management and Restoration, who serves as staff to the workgroup.

The workgroup represents an assortment of 12 local, state, and federal public agencies plus nonprofits, all of which have a stake in the creek's water and the recov-

ery of steelhead, chinook salmon, and 12 other native fishes that still exist in the nontidal portions of the creek. The major workgroup players include the San Francisco Public Utilities Commission (SFPUC), which provides water to the city of San Francisco and a number of San Francisco Peninsula cities. The SFPUC operates the 37-year-old San Antonio Reservoir, which stores water from the Hetch Hetchy aqueduct and upper watershed streams and also owns the 77-year-old Calaveras Reservoir, which is fed by natural streams, draining Mount Hamilton and Alameda Creek water that is diverted via a tunnel. The Alameda County Water District (ACWD) captures Niles Canyon runoff and also buys water from the State Water Project via the South Bay Aqueduct for storage in the Alameda Creek watershed at Lake Del Valle. In the lower creek area, this district also diverts water into the groundwater basin using the inflatable rubber dams via a network of quarry lakes for later delivery to its three hundred thousand customers in Fremont, Union City, and Newark. Another water agency — known as the Zone 7 Water Agency — captures Arroyo Mocho flows and buys Feather River water from the State Water Project for storage in the watershed before delivery to the cities of Dublin, Pleasanton, and Livermore.

The nonprofit members of the workgroup include the Alameda Creek Alliance, which represents over 25 local fly-fishing and conservation organizations, the Friends of the River, a state organization working on dam removal and fish restoration projects, and American Rivers, a national organization that works on returning water to streams as part of the dam relicensing process and that has recently been joined by the Natural Resources Defense Council, a national group working to protect endangered species.

The initial charge of the workgroup was to figure out options for getting fish around impassible barriers in the lower creek, according to those involved with the effort, but its tasks were expanded to sort out the fish-passage and water-flow issues that would have to be resolved in order to restore a viable steelhead run in the entire creek. "Gaining agreement on removing barriers is a no-brainer. Nobody argues that it shouldn't be done," said

Becker. "The water-supply issues are more difficult."

Two years ago, the workgroup produced a report called *An Assessment of the Potential for Restoring a Viable Steelhead Trout Population in the Alameda Creek Watershed* that concluded that steelhead recovery would depend not only on removing stream blockages, but also on reordering the complex water-flow system to provide more water for juvenile smolts to out-migrate to the Bay. In addition, the assessment recommended nine fish-passage and habitat improvements, many of which are now being implemented.

With lots of political speechifying and press fanfare last August, the East Bay Regional Park District removed two small but symbolic dams located high in the creek in the Sunol Regional Wilderness. San Francisco PUC officials are considering spending \$1.8 million to remove two larger dams in Niles Canyon, below the town of Sunol. The Lawrence Livermore National Lab is in the planning stages for removal of a road-crossing barrier on Arroyo Mocho southeast of Livermore, and CalTrans is even getting in on the act, looking at modifying the culvert at Stonybrook Creek in Niles Canyon.

Ironically, Alameda Creek's future will depend largely on the very agency that contributed to the ruin of its steelhead runs in the early days. According to Becker, the Army Corps of Engineers is considering providing \$6.25 million to build fish ladders around the major barrier in the lower creek, the BART weir, and one of the rubber dams, providing access to 11 miles of additional spawning habitat in the creek and its tributaries for steelhead. The corps is also considering paying for fish screens on ACWD diversions in the river. "The funds come from the Water Resources Development Act of 1986," said Becker. "The money provides for restoration of creeks and streams that were damaged by Army Corps projects."

In its report, the workgroup also suggested other "essential actions," such as modifying the Pacific Gas & Electric gas pipeline to allow fish passage, installing fish screens and changing diversions to improve protection for out-migrating steelhead smolts, and removing the Niles and Sunol Dams. Plans call for removing all the barriers in the creek by 2005, al-

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though most admit the deadline might slip because of the delays of bureaucracy and limited public funding caused by a sluggish economy.

IN ADDITION TO REMOVING blockages, the workgroup suggested making changes in recreational fisheries management to prevent hatchery-raised fish from infiltrating the areas targeted for raising native steelhead. "Stocking of hatchery-raised steelhead in Alameda Creek must be altered to prevent the possibility of interbreeding and competition with wild stocks," the report concluded, "and to redirect recreational fishing pressure."

Currently, there are put-and-take fisheries in the watershed at Lake Del Valle and Shadow Cliffs Reservoir near Pleasanton, with rainbows stocked by the East Bay Regional Park District (EBRPD), and previously at Niles Canyon, with rainbows stocked by the DFG.

According to Peter Alexander, fishery management specialist for the EBRPD, the district has been stocking rainbows and in December opened fishing for the first time in two quarries (called Horseshoe and Rainbow) in its Quarry Lakes Regional Park in the Fremont-Union City areas. "Fly fishermen have doing very well in there in the spring fishing from float tubes," said Alexander, adding the ponds also contain channel catfish and large and

smallmouth bass. "We hope to improve the fishery there to take the pressure off Alameda Creek."

Fish and game officials halted planting of fish two years ago in Alameda Creek. There is no stocking or fishing allowed in Calaveras and San Antonio Reservoirs, which harbor landlocked trout that are descendants of the original Alameda Creek steelhead run, making them target incubators for steelhead restoration. Juvenile "smolts" cut off from the ocean that currently end up in the reservoirs may be moved into the lower creek to help jump-start a restored steelhead run and supplement the gene pool of the adult fish that return to the creek each year on their own.

The workgroup is trying to figure out how to restore something resembling a native steelhead population, given all the planting of hatchery-raised rainbows and resulting interbreeding.

"The genetic implications are very complicated, and experts disagree on something called the 'founder effect,'" said Becker. "This deals with how small a number of fish can be used to introduce a population." Too small a population produces what is known as "genetic drift": genetic traits that occur at a certain frequency in a large population will occur either more or less frequently in an isolated smaller subset of that population. If the gene pool in the fish population used to restore the creek is too small, the genes of the "founders" will be disproportionately frequent in the offspring. That increases the likelihood that undesirable recessive genes will come to the fore. "Some want to limit the numbers" of native steelhead to diversify the gene pool, said Becker. "Others say mixing will surely occur. It's really a difficult issue the workgroup will have to deal with."

For the past four years, the alliance and the East Bay Regional Park District have been trying to jump-start the population by trapping steelhead below the BART weir, then hauling the fish into Niles Canyon above the flood-control section of the river. "The workgroup decided to halt the trap-and-haul program because there were concerns about introducing too small a number of fish to have a genetically sound population," said Becker. The program is being reviewed and could resume next winter.

IN SPITE OF ALL THE PLANNING successes, the steelhead restoration project still faces obstacles. The workgroup has yet to tackle the thorny issue of how to provide seasonal or minimum flows to

sustain a steelhead fishery. That debate will take place in the next year or two as dams are modified or planning occurs for the installation of fish screens. And just recently, the alliance cranked up its action-alert PR machinery with a volley aimed at one of its workgroup restoration partners, the SFPUC, which is considering raising the height of the Calaveras dam by 200 feet, enlarging the reservoir by six times in order to store more Hetch Hetchy water. "This would flood significant portions of the tributaries to the reservoir, which support landlocked steelhead trout," said the alliance in its alert. However, "We could get behind a modest enlargement of the reservoir if mitigation measures are taken to restore steelhead below the dam," said Miller. "This would include providing flow releases from the enlarged reservoir specifically for fish habitat enhancement and removing the Alameda Diversion Dam from upper Alameda Creek." These alerts all become part of the

planning for the future of the creek's watershed, making for lively meetings of the workgroup.

The alliance is also organizing testimony to convince another restoration partner — the East Bay Regional Park District — to phase out cattle grazing in the wilderness areas of the watershed. "Cattle [in Alameda Creek] are damaging some of the best steelhead trout habitat," said the alliance's action alert.

Restoring a stream that runs through major urban areas is a slow, tedious, meeting-heavy, and often contentious process with lots of bureaucratic feathers getting ruffled and unruffled. In the end, though, all the participants say restoring the steelhead will be worth the trouble.

In the future, Hal Janssen may be able to cast a Janssen Minnow into Alameda Creek. And on his way home, Janssen might even pass a kid on a Schwinn with a fly rod heading to the creek to catch a steelhead.

In spite of all the planning successes, the steelhead restoration project still faces obstacles. The workgroup has yet to tackle the thorny issue of how to provide seasonal or minimum flows to sustain a steelhead fishery.

How to Help

YOU CAN HELP THE ALAMEDA Creek Alliance by joining as a member, volunteering, or making a contribution at PO Box 192, Canyon, CA 94516. Phone them at (510) 845-4675. Web page: www.alamedacreek.org.

For copies of technical reports and updates on the Alameda Creek Fisheries Restoration Workgroup, contact Gordon Becker at the Center for Ecosystem Management and Restoration, 4235 Piedmont Avenue, Oakland, CA 94611; phone (510) 420-4565. Web page: <http://www.cemr.org/alamedacreek/index.html>.

The creek's planners are always looking for documentation of fish, so send all fish observations and historic photos to Richard Weitzig, Alameda County Flood Control and Water Conservation District, 951 Turner Court, Room 300, Hayward, CA 94545.

Tom Martens