

McCloud in a Bottle

Nestlé's plan to bottle Mt. Shasta's spring water

JIM YUSKAVITCH

TROUT AND HUMANS have one vital commonality: water. In the intense competition for that precious resource, fish often end up on the dry end of the stick. We humans pump it from streams and reservoirs for myriad purposes—to drink, flush toilets and water lawns, irrigate crops and golf courses, or as an ingredient in manufacturing processes.



A 50-mile-long tributary of the Sacramento River, the McCloud (above) originates in the Shasta National Forest about 20 miles southeast of Mount Shasta. Swiss-based Nestlé, the world's largest producer of bottled water, plans to tap the resource for hundreds of millions of gallons of water from the basin annually.

But the trout of the McCloud River watershed in northern California face an even more exotic threat to their liquid assets: the world's largest producer of bottled water.

Swiss-based Nestlé is negotiating with the community of McCloud for a deal that could result in the withdrawal of hundreds of millions of gallons of surface water from the basin annually along with a potentially unlimited amount of groundwater, with which it plans to fill millions of plastic containers and haul it away. It's a plan that has drawn both the support of business boosters, and the ire of wild-fish advocates and community activists.

Redbands

A 50-MILE-LONG tributary of the Sacramento River, the McCloud originates in the Shasta National Forest about 20 miles southeast of 14,163-foot Mount Shasta, and is fed by numerous spring creeks draining the peak's southern and eastern flanks. A renowned California trout stream, even anglers who have

never cast an eye or a fly on its waters have likely heard of McCloud River redbands. This historic stock is a cohort of the northern Sacramento redband population, and occupies a prominent place in angling mythology as the founding gene pool of all hatchery rainbow trout. (In reality, San Francisco-area coastal rainbows were the first hatchery stock in 1870, with McCloud River redband eggs entering the hatchery propagation mix seven years later.)

Wild McCloud rainbows, along with some brown trout, provide stellar angling experiences in the McCloud River basin. A protected, unique, and isolated population of Sheepheaven Creek redbands dwells in the cold and pure spring-fed headwaters of the McCloud—the very properties that have attracted the bottled water industry.

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McCloud, California, was established in 1897 and named after a Hudson's Bay Company trapper who wandered through the region in 1829. The town (population 1,300) is located on California Highway 89 about 10 miles east of Interstate 5 in Siskiyou County. A typical Western timber town, the McCloud River Lumber Company gave area residents steady employment beginning in 1892, and the McCloud River Railroad Company shipped the forest products to market. By 1980, a series of buyouts and mergers eventually put the mill in the hands of the Stockton-based California Cedar Products Company, which closed the mill in 2002. It is on this former mill site that our story unfolds.

Although tourism and small independent businesses are slowly reviving the town's economy, the perceived security provided by a large employer is a powerful idea in small Western communities. In that spirit, the McCloud Community Service District, the local government

Continued on page 20

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STREAM WATCH

Continued from page 19

entity, originally signed a 50-year contract with Nestlé Waters North America, effective October 1, 2003—which the parties are now renegotiating. The contract ceded the rights to up to 1,600 acre-feet of spring water annually, more than a half billion gallons, mostly from Squaw Valley Creek, a major spring-fed tributary of the McCloud River that runs along the east side of town.

The original terms of the contract included an option to renew the contract for another 50 years. Nestlé would have paid the District \$26.40 per acre-foot of water—a fraction of the typical going rate in California of about \$1,200 per acre-foot. Depending on how much water they took, it worked out to about \$340,000 to \$390,000 to the service district per year.

But “how much” was a tricky matter. Language in the original contract defined the 1,600 acre-feet of spring water for bottling as “qualified water”—in other words, the best quality spring water. The contract allowed Nestlé to set the definition of what constituted qualified water at its sole discretion. If it determined that some of that maximum 1,600 acre-feet of water was of lesser quality, or non-qualified water, the company could take more water to make up the difference.

In addition, the contract allowed Nestlé to use this lesser-quality water to make juice or other beverages. Depending on how the company decided to define water quality over time, it could feasibly take substantially more spring water from the creek than the 1,600 acre-foot cap stipulated by the contract.

The company intends to build a million-square-foot bottling plant on the old mill site, which it has purchased. But there is more.

The property also comes with waters right allowing the owner to take about 8,900 acre-feet of water annually from the McCloud River via a pipeline from a Lakin Dam located on the river about 5 miles east of town. In addition, because groundwater use is unregulated in California, the company could legally pump as much groundwater from the mill site as it wants.

Red Flags

THIS TRIPLE THREAT to the McCloud River watershed's surface and ground water raised immediate red flags and soon the McCloud Watershed Council, Trout Unlimited, and California Trout formed a coalition to scrutinize the deal and its environmental impacts.

“The concern is that Nestlé will be able to take water from three sources,” says Curtis Knight, California Trout's

Mount Shasta area manager. “It's a sizable amount of water and we don't know how much of it they will take.”

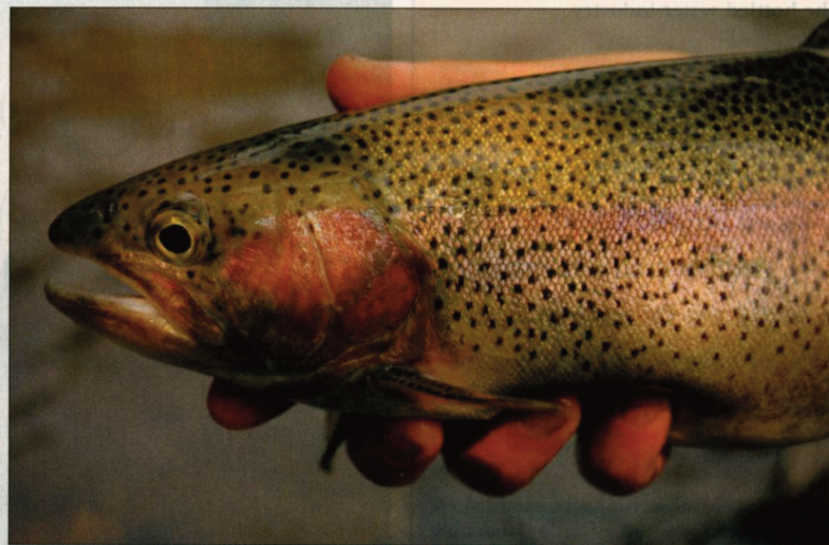
In 2006, Nestlé and Siskiyou County, working with Pacific Municipal Consultants, completed a draft environmental impact report as required under the California Environmental Quality Act (CEQA). The idea was to get a handle on what kind of effects the water-bottling operation would have on the 800-square-mile basin's water resources, and the fish and other creatures that depend on a healthy aquatic environment.

Little is known about the interaction between the McCloud River, its tributaries, and the numerous small springs that leak into the system. For example, according to Brian Johnson, Trout Un-

limited's director of California water projects, local landowners report that the small springs feeding the watershed disappear temporarily during dry periods, leading to concerns that they may be highly sensitive and easily affected.

Members of the public, along with a number of state agencies including the California Department of Fish and Game, reviewed the draft report. In addition, a coalition of California Trout, Trout Unlimited, and the McCloud Watershed Council coalition brought in experts from the University of California to scrutinize the report's science.

“There was no information on stream flow, on insects, on fish, or anything else,” says Knight. “We had about 4,000



Wild redband rainbows (above), along with some brown trout, provide stellar fly-fishing experiences on the McCloud River.

At certain times of the year, Nestlé might be taking as much as 30 percent of Squaw Valley Creek's total flow, substantially reducing the amount of water eventually reaching the main stem. And if the company decided to pump large volumes of ground water from the mill site, how would that effect the interaction between the water table and the river?

Conservationists, who hoped the report would provide the baseline data needed to help assess the impacts of the plan, were disappointed. “During our first contact with the company, we

limited's director of California water projects, local landowners report that the small springs feeding the watershed disappear temporarily during dry periods, leading to concerns that they may be highly sensitive and easily affected.

To many locals, the whole thing had the air of a done deal from the beginning. Debra Anderson, local real estate broker and vice-president of the McCloud Watershed Council, had just 48 hours to review a copy of the 50-page original contract before attending a public meeting called by the service district in late September 2003.

“We thought that we were at a meeting to discuss the contract and our concerns,” says Anderson. “But the service district board voted [to sign] the contract at the meeting. We feel that proper public procedures were not observed.”

Jobs and economic growth are at the heart of this deal. Anderson notes there is quite a bit of division in McCloud over whether this is a good thing or not, and

this has spawned a group of community activists opposed to the plant called Concerned McCloud Citizens. This group is challenging the plan on issues ranging from claimed economic benefits to impacts on community infrastructure.

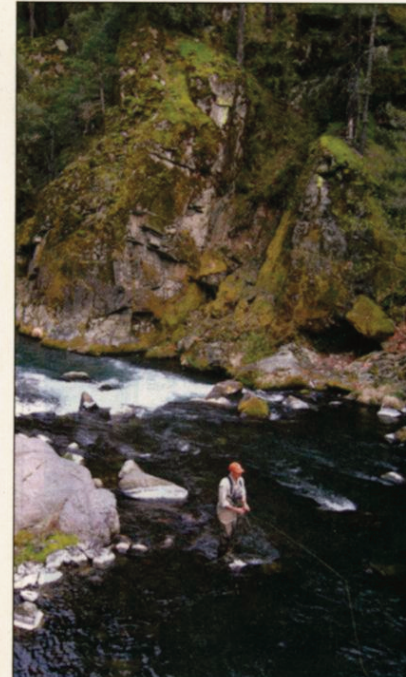
41 Billion Gallons

NESTLÉ SAYS THE PLANT will create about 240 jobs, although a report prepared by ECONorthwest, an Oregon economic consulting firm hired by opponents, says that bottled water jobs tend to be low paying and production oriented, and questions whether McCloud residents would fill all those positions.

“I think everybody in the U.S. needs to look at the value of water,” says Anderson. “We're trying to educate the citizenry on what it means to have healthy watersheds, and what the bottling industry does to the environment and the health of communities.”

Bottled water is an immense international business and, from a marketing standpoint, is genius along the lines of selling ice to Eskimos. It is a product readily available to virtually everyone in the developed world in their own homes for a fraction of the cost.

In 2004, worldwide consumption of bottled



In 2004, worldwide consumption of bottled water was 41 billion gallons. The McCloud River (above) could be part of that supply.

bottled water was 41 billion gallons according to the Washington, D.C.-based Earth Policy Institute. The U.S. is the world's top consumer of bottled water followed by Mexico, China, and Brazil. Americans drank about 9 billion gallons of bottled water in 2007, making it a \$15 billion per year industry in the U.S. Worldwide sales are about \$100 billion.

But the bottled water industry is coming under increasing criticism. Some brands cost more per gallon than gasoline. Municipal water delivered to homes through pipes costs less than a penny per gallon. That cost effectiveness is not lost on bottling companies and up to 40 percent of bottled water is merely filtered or otherwise processed tap water, sometimes with minerals added.

The bottling industry also requires tremendous amounts of energy. In the U.S., more than 17 million barrels of crude oil are used each year to make the plastic bottles. After figuring in all the energy costs, from producing the bottles to delivering them to market, the domestic bottled water industry burns through the equivalent of about 50 million barrels of oil per year. The

Continued on page 22

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Continued from page 21

Container Recycling Institute estimates that in the U.S. only 14 percent of empty plastic water bottles are recycled—the rest end up in the garbage.

Perhaps most importantly, when communities sign deals with water-bottling companies they lose control over a substantial portion of their water resource, impacting the ability to conserve and manage it for local use, including watershed health and restoration.

In the summer of 2007, under pressure from opponents, Nestlé agreed to reinstate the CEQA process and produce a new environmental impact report to address the deficiencies of the first one.

"What we are looking for is to establish a baseline condition in Squaw Valley Creek and the water table so we can assess what the project's impacts will be," explains California Trout's Knight.

Not a great deal of information exists about the region's water resources—stream flow gauges have only been installed in area streams over the last couple of years, so it is hard to ascertain what drawing significant amounts of water from the system might mean. That uncertainty makes many people nervous about Nestlé's plans.

In response to the intense opposition, Nestlé came forward in early 2008 with a proposal to adhere to the 1,600-acre-foot cap in the contract, forego pumping groundwater, and use its water rights to the McCloud River to mitigate for the water it takes from Squaw Valley Creek, by diverting water from Lakin Dam into the creek. But Knight points out that the McCloud River in that reach is a small stream and taking water from it would just create water flow problems in the McCloud as well. "We think that's a terrible idea," he says.

The situation has not been ignored at higher levels of state government. Nestlé has lobbyists prowling the halls of the state capitol in Sacramento, and California Attorney General Edmund G. Brown, Jr., has called the planned plant at McCloud a significant environmental concern.

Finally, bowing to intense public pressure that has contributed to its inability to meet benchmarks stipulated in the first contract, Nestlé announced in August 2008 that it was canceling the contract and would renegotiate a new agreement with the McCloud Community Service District. Further slowing the company's progress is a recent mandate by Attorney General Brown that Nestlé assess the operation's carbon footprint to be in compliance with current California climate change law.



Mt. Shasta looms over the small community of McCloud, California (above). Conservationists fear a plan to bottle McCloud River water could adversely impact its wild trout.

Negotiations on the new contract are expected to start in early 2009, although how much a new agreement might differ from the previous one, especially relating to the amount of surface water to be withdrawn from the McCloud River system, is an unknown at this point. In the meantime, Nestlé has begun a \$5.5 million dollar baseline research package.

Once a final agreement between McCloud Community Service District and Nestlé is ironed out, Siskiyou County will have the final say on the matter, and if the county board of commissioners signs off on it, then the bottling operation is a go. If conservationists' concerns have not been adequately addressed in the final environmental impact report, and the plant is approved, then a lawsuit is likely the next course of action.

"The McCloud River is such a special place that we are absolutely opposed to the plant if there is a risk, and we don't know what that risk is," says Johnson. "We're happy that there may be a way to build the plant in a way to protect the river, but it will be a pretty high bar."

JIM YUSKAVITCH is editor of *The Osprey*, the Federation of Fly Fishers' salmon and steelhead newsletter. He lives in Sisters, Oregon.

Seam Smarts:

WHEN IT COMES to durability, there's something to be said about wader seams: Inevitably they wear and fail, leaving your supposedly waterproof ally a watery sieve.

Leaky seams have been a design problem for years, but innovative solutions are helping close the gap—literally—for good. The fight mostly involves repositioning wader seams away from traditional wear zones. Considering some of the "sloshy" wading we've done in the past, that seems alright to us.



L.L. Bean

L.L. BEAN product designer Kevin Murray says the company's new **Helix** (\$399, llbean.com) waders have shed the total number of seams by as much as 50 percent, compared to previous Bean waders, and now has only six seams. Starting at the feet, just past the gravel guards, a continuous seam runs up each leg toward the crotch. Instead of cutting darts into the fabric at the joints, articulation is created through a spiral seam process. Another seam-saving area is in the articulation around the knees. Murray explains: "In typical waders, there are darts cut into the knee area to allow a more ergonomic shape to the leg. The Helix shape has eliminated that and all the additional stop-and-go taping that used to occur."

The spiral construction is more subtle around the corners to make the taping easier and ultimately more effective. On top of less leak potential, Helix waders use four-layer waterproof breathable fabric. Waders have beefier stockingfoot bottoms, supportive wading belts, adjustable shoulder straps, and zippered front pockets with hand warmers.



Patagonia

PATAGONIA says it built its new **Guidewater** waders (\$425, patagonia.com) puncture resistant,