## **Rough Water**



The Likely Removal of Four Dams on the Klamath River Will Mark the Largest Dam Decommissioning in History. An Unlikely Alliance of Farmers, Fishermen, Ranchers, and Indians Made It Happen.

## **By Jacques Leslie**

photo courtesy Robert Dawson, www.robertdawson.com

Maybe the Klamath River basin would have turned itself around without Jeff Mitchell. Back in 2001, at the pinnacle of the conflict over the river's fate, when the Klamath earned its reputation as the most contentious river basin in the country, Mitchell planted a seed. Thanks to a drought and a resulting Interior Department decision to protect the river's endangered fish stocks, delivery of Klamath water to California and Oregon farmers was cut off mid-season, and they were livid. They blamed the Endangered Species Act, the federal government that enforced it, and the basin's salmon-centric Indians who considered irrigation a death sentence for their cultures. The basin divided up, farmers and ranchers on one side, Indians and commercial fishermen on the other. They sued one another, denounced one another in the press, and hired lobbyists to pass legislation undermining one another. Drunken goose-hunters discharged shotguns over the heads of Indians and shot up storefronts in the largely tribal town of Chiloquin, Oregon. An alcohol-fueled argument over water there prompted a white boy to kick in the head of a young Indian, killing him.

Mitchell sports two long black braids that instantly establish his identity as a Native American – in fact, he's a leader of the three-tribe confederation known as the Klamath Tribes of Oregon. In the midst of the conflagration, when Indians weren't exactly a welcome sight in farming territory, Mitchell knocked on farmers' doors to express his condolences for their waterless plight. His intent was to "help the farmers to understand that the tribes weren't going to leave them isolated through this ordeal," and to explain that he could sympathize because his tribe had endured comparable trials. On his way to a conversation with approachable farmers in the back of a restaurant, he had to walk through the main dining room, filled with less hospitable farmers who'd been idled by the water cut-off. "Everybody just stopped and stared at me, and some of those stares were pretty icy," Mitchell says. "That was one of the toughest things I've ever done." If his gesture registered, the evidence at the time was scant – most farmers thought reconciliation with Indians was an unimaginable, even subversive idea.

It's possible, too, that the Klamath basin would have arrived at an agreement to restore the river without Becky Hyde. Distressed by the Klamath system's drastic environmental decline, she and her husband Taylor moved their cattle ranch in 2003 to a badly eroded, thoroughly overgrazed parcel of stubble straddling the Sycan River, a Klamath tributary. If restoration could be done here, it could be done anywhere, they figured, and immediately set to the task. Like virtually all the basin's other residents, the Hydes are not wealthy, and the production constraints they placed on the land to promote its health – including cutting their herd to a fraction of its former size – dramatically reduced their ranch's potential income. They also designed a conservation easement that obligated future owners to continue promoting the land's recovery; then, stunningly, they turned over trusteeship of the property to the Klamath Tribes of Oregon, effectively sharing the land's stewardship with the Native Americans who'd once lived on it. Like the farmers, most Klamath ranchers chiefly viewed Indians as threats to their water supply, and the Hydes' act leapt across the Indian/rancher chasm. One of Becky's rewards was a death threat.

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Maybe the agreement announced in January to take down four dams on the Klamath, opening the way for river restoration, would have happened without Troy Fletcher, or Steve Kandra, or Greg Addington. Fletcher, a leader of the Yurok tribe, was notorious among farmers for his vitriolic denunciations of them, but at a meeting of basin leaders in 2005, he suggested that both sides stop attacking each other in the media – and, surprisingly, the farmers agreed. That led to an end of public recrimination and the beginning of trust-building. Kandra, a farmer who filed a lawsuit against the US Bureau of Reclamation over the 2001 water cutoff, turned around a few years later and worked toward reconciliation with the tribes, provoking outrage from fellow farmers. Addington, who heads the farmers' association, endured fierce criticism for his conciliatory negotiating stance. Basin allegiances became so jumbled, he said, "My friends are my enemies, and my enemies are my friends."

None of these courageous acts was indispensable, but together their impact was incalculable: At a time when cooperation among basin inhabitants seemed far-fetched, they introduced the idea that reason and compassion could overcome hatred. It's now clear that Mitchell, the Hydes, Fletcher, Addington, Kandra are pathfinders whose concern for the watershed's well-being has opened the way for the world's biggest dam removal project, the key component of one of the world's largest and least likely river restoration plans.

Only a few years ago, the Klamath embodied the failure of legal and political systems to resolve natural resources disputes; now, it stands as an example of how to step past confrontation and negotiate. The agreement united farmers, tribespeople, commercial fishermen, electric utilities, even Warren Buffett and George W. Bush. Back in 2002, a comprehensive deal on river restoration was a long shot. Today it's a fact, and dam removal, though not certain, stands a better-than-even chance of taking place.

If it does, the effort to revive the river and its gravely depleted salmon runs would comprise what Steve Thompson, the US Fish and Wildlife Service representative in negotiations with the utility that owns the Klamath dams, has called "one of the most amazing restoration projects in the world."

Says Patrick McCully, executive director of the Berkeley, California-based anti-dam nonprofit International Rivers, "To see that dams of such size can be brought down, that these concrete monuments that people view as permanent parts of the landscape can be temporary parts of the landscape – I think that is hugely significant."

The prototypical river starts in high mountains, descends quickly through canyons, then spreads out across marshes at its mouth. By that standard, the Klamath River is geographically backward, for it originates in the high, flat Oregon desert and negotiates steep, picturesque canyons near its mouth in California. Though its length is modest – a mere 254 miles, a tenth of the Mississippi's – it once contained the Pacific Coast's third most productive salmon fishery, trailing only the salmon runs on the Columbia and Sacramento Rivers. Remoteness is the Klamath's burden and its saving grace: Thanks to a constantly shifting sand bar at its Pacific Ocean mouth, it is largely unnavigable and, probably as a result, no big city or industry occupies its shores.

For most of the last 1,500 years, the river supported a sustainable salmon economy. Salmon were at the heart of all the Klamath's tribal cultures, and Indians were careful not to over-harvest them. Each summer, the lower Klamath's Yurok and Hoopa tribes blocked the upstream paths of spawning salmon with barriers; then, after ten days of fishing, they removed the barriers, allowing upstream tribes to take their share. As the salmon completed their lifecycle, dying in the waters where they'd been spawned, they enriched the watershed with nutrients ingested during years in the ocean. Among the beneficiaries were at least 22 species of mammals and birds that eat salmon. Even the salmon carcasses that bears left behind on the riverbanks fertilized trees that provided shade along the river's banks, cooling its waters so that the next generation of vulnerable juvenile salmon could survive.

"We tried to go to court, to go through the political process, but it didn't work. ... The big issues were still out there, and we still had to resolve them."

Salmon's biological family may have started in the age of dinosaurs a hundred million years ago. They've survived through heat waves and droughts, in rivers of varying flow, temperature, and nutrient load – but they were as ill-prepared for Europeans' arrival as the Indians themselves. Gold miners who showed up in the mid-nineteenth century washed entire hillsides into the river with high-pressure hoses and scoured the river's bed with dredges. Loggers dragged trees down streambeds, causing massive erosion, and dumped sawdust into the river, smothering incubating salmon eggs. Cattle grazed at the river's edge, causing soil erosion and destroying shade-giving vegetation. Farmers diverted water to feed their crops.

The dams were the crowning blows. Between 1908 and 1962, six dams were built on the Klamath. The tallest, the 173-

foot-high Iron Gate, is the farthest downstream, and definitively blocked salmon from the river's upper quarter – after it was built, the river's salmon population plummeted. In addition, the dams devastated water quality by promoting thick growths of toxic algae in the reservoirs. For Klamath basin farmers, however, the dams were deemed indispensable, as they generated hydropower that made pumping of their irrigation water possible. To the farmers, the potential loss of the dams' hydropower was considered no less crippling than an end to Klamath-supplied irrigation.

About a third of the farmers in the area are descendants of World War I and II veterans who won national drawings for Bureau of Reclamation "Klamath Project" homesteads on drained wetlands; others simply responded to the Bureau's invitations to settle the 350-square-mile expanse of land spread across south-central Oregon and northeastern California. As Addington, executive director of the Klamath Water Users Association, puts it, "People showed up from New Jersey, having won a homestead, and went 'Holy cow, what did I just get myself into?'"

In addition to eking a living from the fields, the farmers built homes, schools, churches, whole towns. Even now, the sort of large-scale corporate farming that reigns in California's Central Valley is unknown in the basin. Farms are modest, family owned, and generate incomes estimated at less than \$15,000 a year. Not unreasonably, the farmers assumed that in return for turning swamps into productive acreage, they were owed cheap water and power in perpetuity.

For most of the last century, the farmers were oblivious to the damage that dams and water diversions caused downstream, while the tribes and commercial fishermen quietly seethed. The annual salmon run, once so abundant that people caught fish with their hands, was roughly pegged at more than a million fish at its peak; in recent years it has dropped to perhaps 200,000 in good years, and as low as 12,000 – below the minimum believed necessary to sustain the runs – in bad years. Spring Chinook, which once comprised the river's dominant salmon run, entirely disappeared. Two fish species – the Lost River sucker and the shortnose sucker – that once supported a commercial fishery, were listed as endangered in 1988. Coho salmon were listed as threatened nine years later.

All this has had a devastating impact on the tribes. Traditionally able to sustain themselves throughout the year on seasonal migrations of the river's salmon, trout, and candlefish, tribal members suffered greatly as the runs declined or went extinct. For four decades beginning in 1933, the tribes were barred from fishing the river even as commercial fishermen went unrestricted. Members of the Karuk tribe once consumed an estimated average of 450 pounds of salmon a year; a 2004 survey found that the average had dropped to five pounds a year. The survey linked salmon's absence to epidemics of diabetes and heart disease that now plague the Karuk.

The 2001 cutoff left farmers without irrigated water for the first time in the Klamath Project's history. Over the next four months, many farmers performed repeated acts of civil disobedience, most notably when a bucket brigade passed pails of banned water from its lake storage to an irrigation canal while thousands of onlookers cheered. The protests attracted Christian-fundamentalist, anti-government, and property rights advocates from throughout the West; former Idaho Congresswoman Helen Chenoweth-Hage likened the farmers' struggle to the American Revolution.

Many of the Latino farmhands who had worked the farms left, and surrounding communities languished. Some farmers went bankrupt, and one committed suicide.

A year later, it was the tribes' and fishermen's turn to experience calamity. According to a Washington Post report, Vice President Dick Cheney ordered Interior Department officials to deliver Klamath water to Project farmers in 2002, even though federal law seemed to favor the fish. Interior Secretary Gale Norton herself opened the head gates launching the 2002 release of water to the Project, while approving farmers chanted, "Let the water flow!" Six months later, the carcasses of tens of thousands of Chinook and Coho salmon washed up on the riverbanks near the Klamath's mouth, in what is considered the largest adult salmon die-off in the history of the American West. The immediate cause was a parasitic disease called ich, or "white spot disease," commonly triggered when fish are overcrowded. Given the presence of an unusually large fall Chinook run in 2002 and a paucity of Klamath flow, the 2002 water diversion probably caused the die-off. Yurok representatives said that months earlier they begged government officials to release more water into the lower river to support the salmon, but were ignored.

photo courtesy Earthjustice In 2002, low water levels on the

Klamath led to the largest adult salmon

die-off in the history of the American West.

The die-off deprived many tribes-people of salmon and abruptly ended the river's sport-fishing season, but its impact didn't fully register until four years later, when the offspring of the prematurely deceased 2002 salmon would have made their spawning run. By then the Klamath stock was so depleted that the federal government placed 700 miles of Pacific Ocean coastline, from San Francisco to central Oregon, off limits to commercial salmon fishing for most of the 2006

fishing season. As a result, commercial ocean fishermen lost about \$100 million in income, forcing many into bankruptcy. Even more devastating, a precipitous decline in Sacramento River salmon led to the cancellation of the entire Pacific salmon fishing season in both 2008 and 2009. The Klamath basin was in a permanent crisis.

It turned out that desperation and frustration were perfect preconditions for negotiations. "Every one of us would have rolled the others if we could have," Fletcher, the Yurok leader, says. "We all tried to go to court, to go through the political process, but it didn't work – we might win one battle today and lose one tomorrow, so nothing was resolved. We spent millions of dollars on attorneys, plane tickets to Washington, political donations, but it didn't make any of us sleep any better, because the big issues were still out there, and we still had to resolve them."

Negotiations among 26 organizations representing farmers, tribes, fishermen, government agencies, and environmental groups got serious in 2005. Over the next few years, negotiators put in 80-hour weeks attending hundreds of daylong meetings. The hardest part of the negotiations was establishing trust. Over meals and in bars, farmer negotiators learned how the loss of salmon had devastated the tribes, and tribal negotiators learned that the farmers considered themselves basin stewards, too.

"What it comes down to is that our values aren't much different from each other," Fletcher said. "The farmers are from hard-working, honest rural communities, and I feel way more of an obligation to work with those guys than I do radical environmental groups from outside the area." By "radical," he had in mind Portland-based Oregon Wild, one of two environmental groups that were dropped from negotiations after opposing concessions to farmers.

At first, the idea of rapprochement among the Klamath's angry stakeholders seemed improbable. For one thing, PacifiCorp, the utility that owns the four Klamath dams – and is owned in turn by a subsidiary of Berkshire Hathaway Inc., multi-billionaire Warren Buffett's holding company – showed no interest in dam removal. Instead, PacifiCorp applied to the Federal Energy Regulatory Commission for a 50-year renewal of its licenses, which expired in 2006. That process turned into an opportunity for dam opponents when FERC ruled in January 2007 that PacifiCorp would have to install fish ladders and screens on the dams as a condition of renewal. Since the ladders and screens would cost an estimated \$350 million, as much as \$150 million more than dam removal, PacifiCorp was forced to consider removal as a cheaper option. When PacifiCorp challenged FERC's ruling on the grounds that salmon habitat upstream from the dams was irreversibly destroyed, a judge instead concluded that the river contained 58 miles of potential upstream habitat, lending more credibility to dam opponents. PacifiCorp also revealed that after relicensing it would raise Project farmers' electricity bills 17-fold on average. Since the farmers depended on cheap electricity to power their irrigation pumps, the planned rate hike gave them a reason to consider removal.

Earthjustice Farmers in the Klamath basin need free or cheap water in order to afford farming there.

In January 2008, the negotiators announced the first of two breakthrough Klamath pacts: the 255-page Klamath Basin Restoration Agreement. In it, most of the parties – farmers, three of the four tribes, a commercial fishermen's group, seven federal and state agencies, and nine environmental groups – agreed to a basic plan. It includes measures to take down the four dams, divert some water from Project farmers to the river in return for guaranteeing the farmers' right to a smaller amount, restore fisheries habitat, reintroduce salmon to the upper basin, develop renewable energy to make up for the loss of the dams, and support the Klamath Tribes of Oregon's effort to regain some land lost when Congress "terminated" its reservation in 1962.

This was a seminal moment, a genuine reconciliation among tribal and agricultural leaders who discovered that the hatred they'd nursed was unfounded. "Trust is the key," says Kandra, the Project farmer who went from litigant to negotiator. "We took little baby steps, giving each other opportunities to build trust, and then we got to a place where we could have some really candid discussions, without screaming and yelling – it was like, 'Here's how I see the world.' Pretty valuable stuff. The folks that developed those kinds of relationships got along pretty good."

Still, one crucial ingredient was missing: Unless PacifiCorp agreed to dismantle the dams, river restoration was impossible, and the pact was a well-intentioned, empty exercise. But PacifiCorp now had compelling reasons to consider dam removal. Not only was relicensing going to be expensive, but Klamath tribespeople were becoming an embarrassing irritant, in two consecutive years interrupting Berkshire Hathaway's annual-meeting/Buffett-lovefests in Omaha with nonviolent protests that won media attention. Also, the Bush administration, customarily no friend of dam removal, signaled its support for a basin-wide agreement. Negotiations between PacifiCorp and mid-level government officials began in January 2008, but made little progress until a meeting in Shepherdstown, West Virginia four months later, when for the first time Senior Interior Department Counselor Michael Bogert presided. As Bogert recently explained, President Bush himself took an interest in the Klamath "because it was early on in his watch that the Klamath became almost a

symbol" of river basin dysfunction. To Bush, the decision to support dam removal was a business decision, not an environmental one: The "game-changer," Bogert said, was the realization that because of the high cost of relicensing, dam removal made good fiscal sense for PacifiCorp. That fact distinguished the Klamath from other dam removal controversies such as the battle over four dams on Idaho's Snake River, whose removal the Bush administration continued to oppose.

According to Dean Brockbank, PacifiCorp's chief negotiator, until the Shepherdstown meeting a settlement seemed "far-fetched"; afterward, as a result of the Bush administration's involvement, it was in the "realm of reality." But PacifiCorp still had concerns; for example, that dam removal could subject it to liability claims if the sediment behind the dams proved toxic. When Bogert assured the utility that the agreement would absolve it of liability, the chances of a settlement soared. After the tribes balked at PacifiCorp's proposed target date for dam removal – 2028, so it could reap a last bounty of hydropower revenue – the utility agreed on 2020, and the path to the agreement was cleared.

In November 2008, when then-Interior Secretary Dirk Kempthorne announced a detailed agreement in principle with PacifiCorp to take down the dams, he acknowledged that he customarily opposed dam removal, but that the Klamath had taught him "to evaluate each situation on a case-by-case basis." In September 2009, Kempthorne's successor, Ken Salazar, announced that PacifiCorp and government officials had reached a final agreement. PacifiCorp and the many signers of the earlier Klamath Basin Restoration Agreement then ironed out inconsistencies between the two pacts in a final negotiation that ended with a final deal in January 2010.

When the agreement was announced, Becky Hyde said, "I think part of what this does is to set up governance for this whole river basin that's never been here, kind of what John Wesley Powell wanted to do a long time ago – set up a governance structure based on watersheds rather than other boundaries.

"The more profound thing is the relationships across the basin among parties who traditionally have not had the opportunity to get together. It's the start of a new way of being in a place, and I think ultimately for fish and for communities, it's just the right thing to do. I hope twenty or thirty years from now there will be young people in this basin who have really no idea what happened here – they just live in a place that's so much healthier. They don't live in a fight; they live in communities that are getting along and taking care of the place."

photo courtesy Robert Dawson, www.robertdawson.comThe Hoopa and Yurok tribes once had an entire economy built on the

salmon runs. Today, tribespeople still rely on fish from the river.

According to the agreement, the US Congress and California and Oregon legislatures must allocate about a billion dollars to carry out the river's restoration. Of that amount, at least half would consist of funds already being spent on basin fisheries. The plan's supporters argue that the remaining \$400 to \$500 million, can be justified as one-time expenditures that will restore the river, remove the dams, and help stabilize the basin's economy, in contrast to the continuing stream of funds, already over \$100 million, spent patching up the basin in emergencies. Most of the cost of actual dam removal will be borne by PacifiCorp's customers, who will pay a two percent surcharge on their electricity bills to raise \$200 million. In case dam removal proves more expensive, California voters are being asked to approve a \$250 million Klamath bond measure as part of a \$11.4 billion package of water laws on the November 2010 ballot. The package is highly controversial for reasons having nothing to do with the Klamath, and its approval is uncertain – it's the biggest reason that Klamath dam removal is still not guaranteed. (For its part, the Oregon legislature has already approved the deal.)

Even if the agreement is carried out to the last detail, it is uncertain to what degree the Klamath will recover; climate change and the continuing diversion of water from some tributaries will almost certainly limit salmon's comeback. It's also an open question whether the basin's improbable and still-incomplete success can be duplicated in other resource disputes, as environmental groups hope. In the end, what propelled the Klamath's stakeholders through endless meetings and setbacks was a shared devotion to the land that is not always a feature of such disputes. "The depth of energy in the fight was an expression of love of place manifested as enmity," says James Honey, program officer for Portland-based nonprofit Sustainable Northwest, which facilitates stakeholder reconciliation in the basin. "Now that love of place has been flipped over to a better end."

Jacques Leslie's book, Deep Water: The Epic Struggle Over Dams, Displaced People, and the Environment, won the J. Anthony Lukas Work-in-Progress Award for its "elegant, beautiful prose." Contributors of Spot.Us helped fund this report.