New Outdoor Adventures at Undammed Rivers

Wild water: A dam removal in 1999 on Maine's Kennebec has led to rebounding wildlife and increased recreational activities.

Photograph by Carl D. Walsh, Aurora Photos

By John Rosenthal

What a Difference a century makes. A hundred years ago in the United States, damming mighty rivers to create clean, reliable electricity was seen as an innovative way to harness nature's power, create jobs, and build communities.

Except that somebody forgot to tell the fish. Dams present nonnegotiable obstacles for salmon, steelhead, alewives, and other anadromous species that swim upstream to their spawning grounds. Though some newer, larger projects have fish elevators or ladders to alleviate the problem, the U.S. still has thousands of small dams that don't. The victims include not just the fish but eagles, ospreys, otters, bears, and other animals above them in the food chain.

In the past decade, however, there's been a monumental shift. From the Kennebec to the Clark Fork to the Rogue to the Rappahannock, dams are coming down. The result is a windfall not only for fish and their predators but also for anglers, kayakers, rafters, hikers, and mountain bikers.

Serena McClain, a director at the nonprofit conservancy American Rivers, estimates that the number of dams removed annually has increased from 28 in 2000 to more than 50 now. The organization has declared 2011 the "Year of the River" in honor of the unprecedented numbers and scope of dam elimination projects. This fall, McClain
says, the United States will likely witness its 1,000th dam removal.

Environmentalists needn’t worry about the loss of green energy. The overwhelming majority of dams already removed or targeted for razing delivered minuscule amounts of power; many are small dams once used to power mills that are no longer in existence.

The Maine Event

The watershed moment (pardon the pun) for dam removal was 1997, when the Federal Energy Regulatory Commission denied a new license for the 162-year-old Edwards Dam along Maine’s Kennebec River. The agency ordered the owners to remove it, saying the environmental benefit of doing so outweighed the value of any hydropower it provided.

The Edwards Dam came down in 1999, opening an additional 18 miles of spawning habitat along the Kennebec River for salmon, striped bass, shad, and hundreds of thousands of alewives, a herring used for baiting lobster traps. “Visitors can now see nine-foot sturgeon leaping into the air at eye level. Fishermen are catching shad for the first time in over a century. The eagle population is astounding,” says Rick Lawrence, alewife warden for the town of Benton, Maine. “We even had a seal in Waterville, chasing fish 40 miles upstream from the Atlantic.”

Every June, the Kennebec Celebration festival attracts more than a hundred canoeists and kayakers for a 17-mile paddle past the former dam site.

The Kennebec’s success made it a blueprint for restoring other rivers. In Sandy, Ore., 28 miles southeast of Portland, the local utility company realized that upgrading its hydropower plant to modern licensing standards would cost more than razing it. In 2007, Portland General Electric (PGE) blew up the Marmot Dam, freeing the Sandy River’s entire 56-mile run, from Mount Hood to the Columbia River Gorge, for the first time since 1912. As a parting gift, PGE donated the 1,500 acres surrounding the former dam site to the nonprofit Western Rivers Conservancy.

This tract, which includes old-growth Douglas fir and hemlock forests, had been off-limits to the public for security reasons. But with the dam gone, there will be new put-in and take-out points for paddlers as well as trails through the forests for hikers, bikers, and birders. Portland’s kayakers, canoeists, and rafters are thrilled. They no longer have to portage around the dam, and the increased river flow has extended paddling season from March to July. Dave Slover, owner of Alder Creek Kayak and Canoe, calls the Sandy’s inner canyon “one of the coolest places I’ve boated in the world.”

A similar story unfolded last year along North Carolina’s Tuckasegee River, southeast of Great Smoky Mountains National Park and a favorite among families for its beginner-friendly rapids. After the local utility removed the Dillsboro Dam, the Tuckasegee developed a new section of Class II rapids that has become popular with canoeists and kayakers.

Olympic News

This fall, the biggest dam removal project in U.S. history and perhaps the world gets underway along the Elwha River in Washington’s Olympic Peninsula. Both the Glines Canyon Dam and the 98-year-old Elwha Dam will be razed, opening more than 70 miles of river and streams to all five species of Pacific salmon: king, sockeye, silver, chum, and pink.

Although the dams won’t be completely removed until 2014, Dave Reynolds, a public information officer at Olympic National Park, says visitors should notice changes soon. The Park Service estimates salmon stocks will ultimately increase from 3,000 to 300,000, which will fuel corresponding leaps in the populations of bald eagles, otters, black bears, and other wildlife. Reynolds expects the dam removal itself may be an attraction. “People will want to see what the big deal is.”

Each successful dam breaching encourages Restore Hetch Hetchy, a San Francisco–based nonprofit that is spearheading an effort to restore a valley in Yosemite now flooded because of the O’Slaughnessy Dam. Opposition to the flooding of the valley dates back to the naturalist and early environmentalist John Muir himself, who in 1870 called it “a wonderfully exact counterpart” of Yosemite Valley. To dam this beloved valley, he later lamented, would be akin to destroying “the people’s cathedrals and churches, for no holier temple has ever been consecrated by the heart of man.”
Despite Muir’s protestations, the city of San Francisco won federal authority to clear-cut the valley and in 1923 built the dam, which has delivered water to San Francisco ever since. Mike Marshall, Restore Hetch Hetchy’s executive director, says the dam could be breached without undermining San Francisco’s water supply. The organization plans to collect signatures in hopes of placing the issue on city ballots in November 2012. If the dam ends up being removed, Marshall anticipates the return of trout and bears, foxes, and bobcats in the first few years, meadows and saplings within five years, and trees tall enough for shade in 25 years. He envisions a day when visitors rave not about Yosemite Valley but rather the park’s twin valleys.

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