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SMART TRAVELER

[TRAVEL AT ITS BEST]



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

Opening the Floodgates

Dams such as the Hoover have long attracted visitors. But the dismantling of dams across the U.S. should draw even more. Here's why. | **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 so-called anadromous species that swim upstream to

spawn. 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, osprey, 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

TIKTIK (UPPER), CARL D. WALSH/AURORA PHOTOS (LOWER)

only for fish and their predators but also for anglers, kayakers, rafters, hikers, and mountain bikers.

Serena McClain, a program director at the nonprofit conservancy American Rivers, estimates that the number of dams removed annually has increased from a dozen or so 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 witness its thousandth 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 hydroelectric power; many are small dams once used to power mills that no longer exist.

THE MAINE EVENT

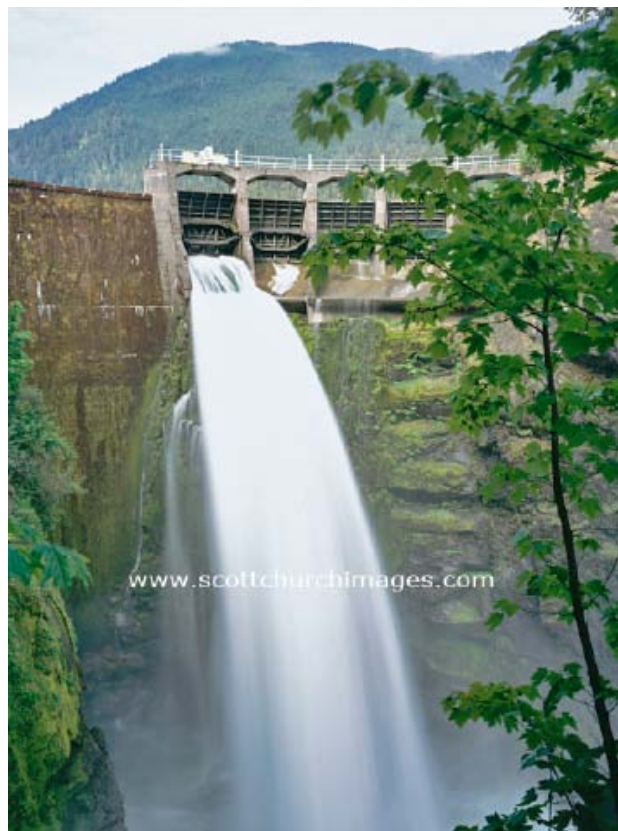
The watershed moment (pardon the pun) for dam removal was 1997, when the Federal Energy Regulatory Commission denied a new license for the 160-year-old Edwards Dam along Maine’s Kennebec River. The agency ordered the owners to remove it, saying the environmental benefit of doing so outweighed the value of any hydropower it provided.

The Edwards Dam came down in 1999, opening an additional 23 miles of spawning habitat along the Kennebec and Sebasticook Rivers for salmon, steelhead, 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 hundreds of canoeists and kayakers for a 16-mile paddle past the former dam site.

The Kennebec’s success made it a blueprint for restoring other rivers. In Sandy, Ore., 40 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



Nature nurtured: In some areas, the dismantling of dams has resulted in the revival of freshwater-spawning fish such as the rainbow trout (above) and new trails for hiking and biking (top). Washington State’s century-old Elwha Dam (right) is currently being taken down.



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 TKT-KTKTKTKTKTK.

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 are

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 mid-June. Dave Slover, owner

(CLOCKWISE FROM TOP): SCOTT CHURCH; STEVE STRAQUALURS; ANNA LAXAQUE

of Alder Creek Kayaks, 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, 20 miles 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 rafters. James Jackson of Tuckasegee Outfitters says last summer was his most profitable ever.

OLYMPIC NEWS

This fall, the biggest dam removal project in history gets underway along the Elwha River in Washington's Olympic Peninsula. Both the Glines Canyon Dam and the century-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 30,000, 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 non-profit that is spearheading an effort to remove the O'Shaughnessy Dam from Yosemite National Park. Opposition to the flooding of Hetch Hetchy Valley dates back to the naturalist and early environmentalist John Muir himself, who in 1912 called it "a wonderfully exact counterpart" of Yosemite Valley. To dam this beloved valley, he lamented, "one may as well [destroy] ... 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 1932 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 is collecting signatures in hopes of placing the issue on city ballots in November 2012. If voters agree to remove the dam, Marshall anticipates the return of trout and marmots in the



Before and after photos of Yosemite's Hetch Hetchy Valley: A dam built in 1932 altered the area's topography. A campaign is underway to dismantle the dam and restore the valley to its former state.



first few years, meadows and saplings in five years, and trees tall enough for shade within 25 years. He envisions a day when visitors rave not about Yosemite Valley but rather the park's twin valleys. ■

DAM NATIONS

In these countries, barriers are still going up, not coming down.

While Americans are undoing some of the harm caused by dams, the current is going the other way in developing nations. "In most of the world, rivers are still being dammed, sometimes as if there's no tomorrow," says Peter Bosshard, policy director for International Rivers, a Berkeley, Calif.-based nonprofit. He said the following dams, either proposed or under construction, are among the most destructive to their surrounding environments. Express your concerns to travel companies when visiting these destinations.

BRAZIL The country plans to build more than 60 dams over the next 20 years. The Belo Monte Dam on the Xingu River, a major Amazon tributary, would be the world's third



Brazil's Amazon.

largest hydroelectric project. International Rivers estimates it would displace 20,000 people from the rain forest.

ETHIOPIA Despite opposition from communities along the Omo River, the largest

infrastructure project in Ethiopian history—the Gibe III Dam—began in 2006. Downstream in Kenya, 300,000 people are dependent on the Omo's annual flow into Lake Turkana for their survival.

LAOS The proposed Xayaburi Dam would be the first along the Lower Mekong River, south of the Chinese border, and could propel construction of as many as ten more dams in Laos, Cambodia, and Thailand. Dams on China's Upper Mekong have already blocked fish passage and changed the river's ecology.

INDIA The country's Central Electricity Authority has targeted 150 sites for hydro-power projects in the northeastern Brahmaputra Basin, a seismically active area it calls the future powerhouse. The proposed Lower Siang Dam on the Siang River would have a serious impact on local communities. —J.R.