



Edwards Dam in Maine has been demolished to help improve the salmon habitat.

## Demolish Outdated Dams That Endanger Fish

**S**WINGING a sledge hammer, Interior Secretary Bruce Babbitt whacked a hole in a 50-year-old dam on Butte Creek in the baking heat of the Sacramento Valley. In Maine, demolition workers clambered across the pre-Civil War Edwards Dam while a backhoe dug away at a shoulder of the cement structure.

Coast to coast, a once-radical notion is taking hold. Dams that helped tame the American landscape to provide power, irrigation, flood control and recreation are coming down.

The demolitions are still rare exceptions in a country dotted with 75,000 dams. But the "decommissioning" represents a major turnabout in official thinking about refashioning nature. Plentiful water and cheap power can come with a hidden price tag: a decline in wildlife, steep government subsidies and legal challenges.

Driving the change in attitude are scientists and environmentalists who claim the cement walls have hurt historic runs of migrating salmon, which are all but blocked from reaching spawning streams. Under such prodding, government authorities such as Babbitt have pushed to remove dams.

"The focus of the environmental movement in the 20th century has been fencing off and preserving the back 20," Babbitt said last year. "But the real action now is on landscapes and watersheds. It is about restoration writ large."

It's a dramatic shift. While environmentalists cheer the demolitions, farmers and power companies are often opposed. Take away a dam and croplands, power grids and summertime matinas and campgrounds can feel the difference.

It's a step to be used sparingly. "The whole economy of San Francisco is based on the Hetch Hetchy system," said Mary-Ann Summerdam, director of natural resources for the California Farm Bureau. Though some environmentalists have argued for tearing out a key dam to restore a breathtaking river valley, such an idea would have huge consequences for water supplies, power and irrigation.

In California, relatively few dams have come down. One example is Battle Creek, a tributary of the Sacramento River near Redding. Pacific Gas & Electric has agreed to tear down five of seven small dams to enable salmon and steelhead to reach spawning areas.

Utility Vice President Leslie H. Everett emphasized that the decision was "unique" and reached only after a raft of federal and state agencies agreed the fish-rearing conditions on the stream were worth the \$50 million cost of dam removal.

The biggest fight nationally concerns a string of four dams on the Snake River, which flows into the Columbia River in Washington state. A consortium of fishing groups, Native-American tribes and environmentalists are pushing the federal operators to acknowledge that decimated fish runs can only be restored by demolition of the dams built in the 1960s.

These structures typify the general debate. Turbines crank out enough power to light Seattle. Grain from eastern Washington is barged downriver at low cost through locks in the dams. The economic life of the region is linked to dams.

But the barriers are fish-killers. Salmon struggle to find fish ladders designed to lead migrations around the dams. Water temperatures rise in the stopped-up lakes, killing young smolts. Turbine blades chew up fish headed to sea. Removing the dams would give several imperiled runs of fish a clear path to stream beds and lakes where eggs are laid.

Money is found on both sides of the arguments. Fishing groups claim restored runs will lead to more jobs in their ranks. In addition, the dams amount to a giant subsidy to a relative few — farmers, power companies and

barge operators.

But, dam supporters counter that there will be higher prices elsewhere. It will cost more to ship grain by rail or truck, irrigation water may go up in price and electric rates could rise too. A consumer walking into this debate can be confused by the dueling numbers.

The change that dam-busting brings has provoked a political deadlock with senators and congressional leaders in Oregon, Washington and California largely opposed to demolition because of the unforeseeable change it will mean.

Though the Clinton administration would dearly love a compromise and to avoid a hard choice, it may not have that luxury. A court-ordered study is under way and expected to answer by year's end whether other methods short of dam destruction can save the salmon runs. Hatcheries, expanded fish ladders and even a system of trucks to carry fish around the killing turbines have fallen short.

If society has the ability to avert the extinction of endangered fish, it should make every effort to avoid that catastrophe, even if it means knocking down dams.

Some of these dams have outlived their usefulness. Demolition, in these cases, can be the first step towards saving the rivers that once flowed freely.

*When fish begin  
dying out, dams  
may have to come  
down to save  
endangered  
wildlife.*