For more than 100 years, America has led the world in dam building—blocking and harnessing rivers for hydroelectric power, irrigation, flood control, water storage, and other purposes. Now, some 75,000 large dams span our nation’s waterways and thousands of smaller dams plug our rivers and streams (NRC 1992, AR/FE/TU 1999, USACE 2001a). Although many dams provide important benefits, some no longer serve any significant purpose, or they have negative impacts that are greater than their benefits. In these cases, dam removal is becoming an increasingly attractive option for achieving conservation goals such as river and fisheries restoration, public safety goals such as elimination of unsafe dams, and other community-revitalization goals through increased recreation and green space.

In the past few decades, the United States has also been a world leader in protecting rivers and wildlife from threats such as point source pollution and unsound riverside development. To accomplish this, the United States has developed a series of laws—the Clean Water Act (CWA) and the Endangered Species Act (ESA), for example—designed to stop further damage to our rivers and to the fish and wildlife that depend on them. Today, our increasing interest in dam removal and our strong environmental protection laws are increasingly interacting, with some unexpected results.

Many legal issues are associated with removal of a dam. Decisions about whether or not to remove a dam are often made in the context of regulatory proceedings. In addition, once a decision has been made to remove a dam, federal, state, and local permits are required for the physical removal of the dam from the river. But because many of the laws that are triggered by a dam removal decision focus on environmental protection, they are not easily adapted to the environmental restoration activities associated with dam removal, and some laws actually discourage environmental restoration efforts.

This article outlines the legal issues associated with both decisions about whether or not to remove a dam and decisions about how to remove a dam. It then examines how implementation of environmental restoration activities such as dam removal fits into our existing legal system and how environmental laws may need to evolve to address the increasing interest in environmental restoration.

Legal issues associated with deciding whether to remove a dam
The decision of whether or not to remove a dam is not a centralized decision that is made by one entity. Depending on who owns the dam, what services the dam provides, and the type and significance of the dam’s negative impacts, a decision on dam removal can be made by a federal agency, a state agency, or a private dam owner. Although sometimes dam removal is a voluntary undertaking, many dam removal decisions are the result of legal proceedings—either as a formal outcome of the proceedings or through a negotiated settlement associated with the proceedings.

Dam safety proceedings. The most common legal proceedings resulting in dam removal are safety-related inspections of dams at the state level. Most states have dam safety...