



**AMERICAN
RIVERS**

Life Depends on RiversSM

THE IMPORTANCE OF DAM REMOVAL



DAMS BY THE NUMBERS

500,000+

Number of dams in
the United States.

85%

Percentage of
existing dams that
are unnecessary,
harmful, and even
dangerous.

2,025

Number of dams that
have been removed.

83%

Percentage of dams
removed nationwide
that have occurred as
a result of American
Rivers' work.

Selective removal of dams, particularly those that are outdated or unsafe, can be an economical and effective solution for eliminating dam-owner liability and improving river health. Removing a dam can enhance public safety, quality of life, and economic development in communities across the country. Dam removals can increase property values, protect people and property from flooding, and boost recreational opportunities by restoring the natural function of rivers.

WHY DAM REMOVALS ARE NECESSARY

While many dams have important uses such as water supply, flood management, and hydropower, many others – both publicly and privately owned – have reached the end of their useful life. Those dams can pose public safety risks, impact fish and other aquatic life, and can be costly liabilities to their owners. Many of those dams are abandoned, not profitable, or require costly repairs and upgrades that push dam owners to consider removal. Removing dams restores native aquatic life to rivers, increases climate resilience, and reduces the risk of aging dams failing and possibly causing catastrophic flood damages and/or loss of human life.

Federal funding for a dam removal requires the written consent of the dam owner, if ownership is established.

Climate resilience for rivers.

In many situations, removing dams at the end of their useful lives can be an effective method to increase climate resilience in rivers. Dam removals can lower water temperatures, increase dissolved oxygen, eliminate conditions conducive to growth of algae and toxic cyanobacteria, restore native riverine habitat, and allow fish and other aquatic species to move upstream and downstream to different habitats necessary to their life cycles. Because free-flowing rivers do not produce methane, some dam removals can also reduce potential sources of GHGs.

Safety for communities.

As many dams age and some dam owners lack the resources to continue maintaining their structures, dams can become public-safety hazards. In the last few years alone, dam failures or near failures have forced hundreds of thousands of people to evacuate, caused millions of dollars of property damage, and caused loss of life. In addition, hundreds of drownings have occurred below low-head dams because of the dangerous forces caused by flow hydraulics downstream of the structures.

Fisheries, wildlife, and natural heritage.

Dams are a major cause of species decline in U.S. rivers, from migratory fish like salmon and herring to nonmigratory fish like trout to aquatic species like freshwater mussels. Removing dams is a proven approach to restoring healthy conditions for native river species, with documented results showing increases in fish and other aquatic species populations. For example, populations of herring in the Northeast, smallmouth bass in the Midwest, mussels in the Southeast, and salmon in the West have all increased after dam removals.

Tribal rights.

In a continued effort to more equitably consider Tribal Nations' water, fishing, and cultural rights, focusing some incentives on dam removals where Tribal rights have been infringed upon allows us to begin to resolve not only ecological but also cultural impacts.

Jobs.

Removing a dam is an intensive infrastructure endeavor, creating construction, engineering, scientific, planning, and other jobs. Dam removal projects support 12 to 15 jobs per \$1 million invested. Long stretches of free-flowing rivers also have the potential to provide economically valuable recreational opportunities, including boating and fishing, along with associated economic stimulus from travel, lodging, food, and equipment.



Rivers provide our drinking water, grow our food, and sustain our spirits. Today, our rivers are at risk as never before. Nothing short of our health and safety are at stake.



**AMERICAN
RIVERS**
Life Depends on RiversSM

American Rivers is championing a national effort to protect and restore all rivers, from remote mountain streams to urban waterways. Healthy rivers provide people and nature with clean, abundant water and natural habitat. For 50 years, American Rivers staff, supporters, and partners have shared a common belief: Life Depends on Rivers.

AmericanRivers.org