Open Rivers Initiative

NOAA's Efforts to Restore Fish Passage

What is the Problem?

In the United States, there are as many as 2 million dams located throughout the nation's waterways, many of which block migratory fish from reaching critical spawning grounds. Other barriers that can block fish from migrating upstream include culverts that are too small, perched too high above the streambed, or too steep to allow fish to swim over.

Some dams provide numerous benefits for modern society, including energy production and recreation, but many no longer serve their original purpose or have outlived their planned life expectancy; they now present safety hazards and liability risks to communities. More than 3,500 dams in the U.S. are unsafe due to structural deficiencies that make them more susceptible to failure. Removal of these barriers can yield significant environmental improvements as well as considerable economic and societal benefits.

Pictures of the Wyomissing Creek in Pennsylvania before and after the dam was removed.

The Open Rivers Initiative

In 2005, NOAA created the Open Rivers Initiative, which provides communities with funding and technical guidance to carry out dam and barrier removal projects that restore local rivers and streams. The initiative is focused on community-driven dam and river barrier removals, with the goal of enhancing watershed health and fostering sustainable populations of migratory fish such as salmon, sturgeon, shad, river herring and American eel. Open Rivers Initiative projects also aim to improve public safety and enhance community vitality, while encouraging economic growth.

Benefits of Removing Dams and River Blockages

NOAA has removed more than 90 dams and stream blockages, opening more than 1,700 miles of high quality river habitat for migratory fish. The restoration projects repair vital river ecosystems, benefiting riverfront communities and populations of key migratory fish species. They provide significant environmental improvements, such as opening access to spawning habitat and improving water quality. They also offer economic and societal benefits such as decreased dam maintenance and liability costs, improved recreational opportunities, and the elimination of safety hazards associated with out-dated, non-functional dam structures.

Contact Tisa Shostik NOAA Fisheries Service • NOAA Restoration Center
1315 East-West Highway • Silver Spring, MD 20910
tisa.shostik@noaa.gov • (301) 713-0174
www.nmfs.noaa.gov/habitat/restoration

Open Rivers Initiative Partners

- American Rivers
- Association of National Estuary Programs
- California Conservation Corps
- California State Coastal Conservancy
- Ecotrust
- FishAmerica Foundation
- Gulf of Maine Council
- Gulf of Mexico Foundation
- Hydropower Reform Coalition
- Lower Columbia River Estuaries Partnership
- National Association of Counties
- National Fish and Wildlife Foundation
- Restore America's Estuaries
- The Nature Conservancy
- Trout Unlimited
- U.S. Department of Transportation
- U.S. Forest Service
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- U.S. Department of Agriculture
- Natural Resources Conservation Service
- State and local agencies and tribes