

The Michigan River Partnership (MRP) is a broad-based coalition of government and nongovernment partners formed in 2004 to:

- Assess opportunities to facilitate dam removal on Michigan rivers
- Highlight the need to repair dams that are not candidates for removal
- Provide dam owners, opinion leaders, and other stakeholders with the information necessary to optimize decision-making processes at the local level
- Underscore the need for dedicated funding to address emerging challenges posed by aging dams



Hamilton Dam, Flint, Michigan
On the Flint River

Pucker Street Dam, Niles, MI
Formerly used to generate electricity.



Participating Organizations

- American Fisheries Society, Michigan Chapter
- Michigan Association of County Drain Commissioners
- Association of State Dam Safety Officials
- Izaak Walton League, Michigan Chapter
- Michigan Environmental Council
- Michigan Lakes and Streams Association
- Michigan Municipal League Foundation
- Michigan Sea Grant College Program
- Michigan State University—Extension/Dept. Fisheries & Wildlife
- Michigan Townships Association
- Michigan United Conservation Clubs
- Sierra Club
- The University of Michigan—School of Natural Resources and Environment
- Tip of the Mitt Watershed Council
- Michigan Council of Trout Unlimited

Technical Advisors

- Michigan Department of Natural Resources
- Michigan Department of Environmental Quality
- Michigan Department of Transportation
- U.S. Department of Agriculture - Natural Resources Conservation Service
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service

MRP
Michigan River Partnership
Policy Brief
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Dams on Michigan Rivers are a legacy of our settlement history. Dams were first constructed in Michigan in the 1800s for timber transport and for waterpower for gristmills and sawmills. Later they were used for electric generation and for water supply purposes. By 1940, dams had been constructed in the lower portion of nearly every major Michigan tributary to the Great Lakes. Today, a comprehensive database compiled by the State of Michigan has identified 2,552 Michigan dams. While some dams still serve important functions, many have outlasted their original purpose and represent a future expense to taxpayers and private owners. Many of these dams also have a negative impact on the environment and are becoming a growing threat to public safety as well as the property.

Over the next 25 years, many of Michigan’s aging dams will reach the end of their design life and require removal or repair.

- Ninety-three percent of Michigan’s dams are more than 25 years old.
- More than one-third of Michigan’s dams are more than 50 years old.

These aging structures will directly impact Michigan’s communities. There are 251 dams upstream of towns with populations of at least 5,000; of these, 107 are within one mile of the population center. Aging dams will require considerable maintenance and significant reinvestment in the coming years, particularly those dams that have seen little or no maintenance over the last two decades.

While these dams continue to age, many have now outlived their original purpose and are in disrepair because of neglect or abandonment. The following statements reflect current estimates at the time of this report:

- Michigan resource managers have initially identified nearly 120 dams in need of an estimated \$50 million to address removal or repair issues.¹
- Michigan resource managers estimate that the numbers are likely much higher, but that they lack the detailed information necessary to develop a total cost estimate.

In many cases, the **owners of dams do not have the financial or technical resources** to remove their dams or make necessary repairs.

- Small communities often do not possess the expertise and/or manpower to oversee a dam removal or rehabilitation.
- There is currently no state-dedicated funding for dam removal, dam maintenance, or fish passage projects in Michigan, or for provision of technical assistance to dam owners interested in dam removal.

The Case for Removal

Today, dam removal costs in many cases are significantly lower than estimated costs for long-term safety and environmental compliance, repair, and maintenance. Removal costs for 70 small dams in Wisconsin, for example, were found to be an average of two to five times lower than estimated repair costs.²

Finding funding for dam repair or maintenance, dam removal, or enhancing fish passage is a significant impediment to carrying out

successful projects. Private owners and many small community dam owners require technical and financial assistance to manage a deteriorated dam. There are no funding programs dedicated specifically to dam repair or removal.

It is clear that without state and federal support, dams eventually will fail and put public safety at risk.

Removing dams to address unsafe conditions and enhance fish passage is gaining support and popularity as a river and watershed management tool. Dam removals in the United States have been documented since the early 1900s, including a large number removed in just the last decade. In Michigan, approximately 24 dams have been removed over the last ten years. The recent trend toward dam removal is a result of three elements:

- Michigan’s aging dam infrastructure

- Significant changes in land use and the structure of our economy, which have reduced our need for dams as economic necessities
- Growing societal concern about river ecology

This topic received recent national attention when the U.S. House of Representatives passed the *Dam Rehabilitation and Repair Act of 2007*, HR 1098. Since the potential for successful passage of this provision in the Senate is unclear, federal funds cannot be relied upon to relieve the burden that Michigan’s aging dam infrastructure has created. This presents an opportunity for Michigan to be a leader in funding dam rehabilitation and removal; decisive action now would position Michigan among the frontrunners in development of dam policy for the next era of river restoration.

Key Recommendations of the MRP to Enable Dam Removal or Repair

- Create a dedicated state funding program for dam removal and dam rehabilitation in Michigan. This fund should include consideration of direct grants in addition to the capitalization of a low-interest loan program.
- Explore new and expanded partnerships with nonprofit organizations (e.g., Michigan River Network) to help maximize distribution of information and leverage resources for river restoration and dam removal. Nonprofits may serve as a clearinghouse and fiduciary to procure funding for dam removal.
- Require that dam repair programs using public funds include measures to mitigate resource damage that occurs as a result of the dam’s continued operation; such programs should also stipulate that opportunities to improve the dam area, such as enhancing fish passage or providing safe paddling portages, be examined as well.
- Examine and streamline the current regulatory review process in the MDEQ and the MDNR for dam removal by reconciling the current overlap between conflicting state and federal regulations (e.g., wetlands protection).
- Develop and disseminate an information brochure as part of routine dam safety and permit correspondence by the MDEQ. The brochure should focus on the potential cost savings and community benefits that can result from dam removal.
- Develop a river restoration team comprised of representatives from the MDEQ and the MDNR that can facilitate outreach and information exchange for dam owners wishing to remove a dam.
- Emphasize the need for local communities to assess their dam(s) as part of comprehensive watershed management planning.

¹ Task Committee of the Association of State Dam Safety Officials, “The Cost of Rehabilitating Our Nation’s Dams: A Methodology, Estimate & Proposed Funding Mechanisms” (2002).

² American Rivers, Friends of the Earth, and Trout Unlimited, *Dam Removal Success Stories: Restoring Rivers Through Selective Removal of Dams That Don’t Make Sense* (N.p.: American Rivers, Friends of the Earth, and Trout Unlimited, December 1999)