



U.S. Fish & Wildlife Service

Reconnecting Midwest Aquatic Habitats

Region 3 Fish Passage Program (Accomplishments 1999 - 2010)

Aquatic habitats in the U.S. are fragmented by millions of dams, culverts, dikes, water diversions, and other human constructed barriers. Many of these barriers have a negative impact on fish and other aquatic organisms, such as crayfish, freshwater mussels, and insects; some structures even create safety hazards for local communities. This problem has a simple fix, remove or modify the barriers. Doing so can return access to habitats for fish and other aquatic organisms to reproduce and thrive as well as eliminate safety concerns and reduce structure maintenance costs. This will enhance biodiversity, help restore healthy populations of aquatic species, and benefit the American people!



DeSanto Site before Dam Removal
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DeSanto Site after Dam Removal

The DeSanto Dam project removed 2 barriers and opened 10 miles of habitat to uninhibited fish passage.

The Midwest Region Fisheries Program has initiated 146 projects. To date, 80 barriers have been removed and 821 stream miles reconnected; while projects currently in progress will remove 93 barriers and reconnect an additional 4,482 stream miles.

What is the Fish Passage Program?

The U.S. Fish and Wildlife Service's National Fish Passage Program (NFPP) is a voluntary, nonregulatory program that works to restore native fish and other aquatic species to self-sustaining levels by reconnecting artificially fragmented habitats. Since 1999, the Service has worked with a multitude of partners, providing federal funds and technical assistance to remove barriers and reconnect important aquatic habitats under this program.

close proximity to some of North America's greatest freshwater resources: the Great Lakes, Upper Mississippi River, Lower Missouri River, the Ohio River and their respective watersheds.

The Economics of Fish Passage

Recent reporting indicates the economic value of a single stream mile restored is near \$570,000 (Charbonneau and Caudill 2010). At this rate, with the number of Region 3 NFPP stream miles restored and in progress since 1999, our potential economic value of this work to our local communities is more than \$302 million, excluding the value of local job creation.

Midwest Region

The Region is home to more than 60 million people who live and work in



-USFWS photos

The Johnson's Crossing culvert replacement in Michigan reduced sediment loading and enhanced fish passage for brook trout.



Before Fish Passage Improvement



During Construction



After Fish Passage Improvement

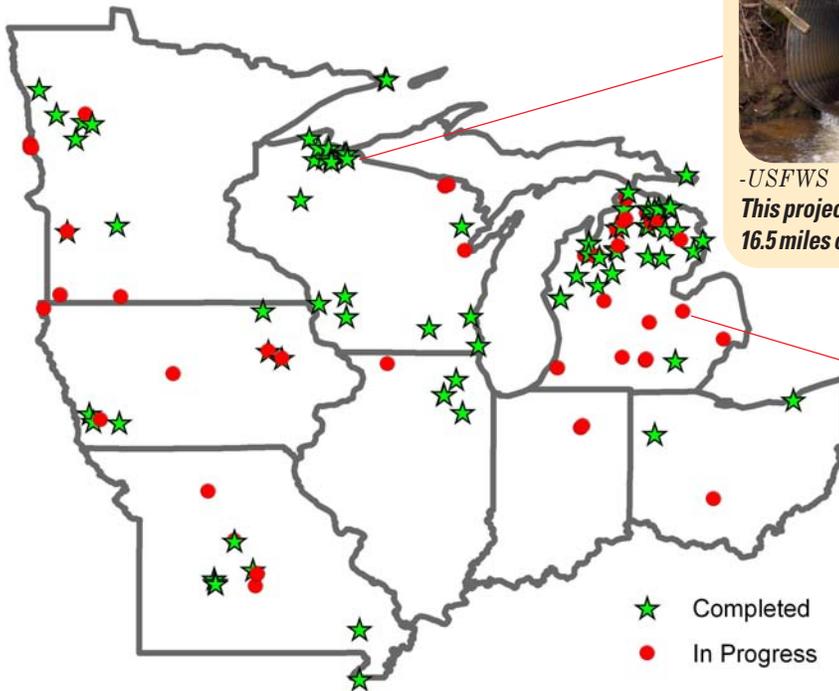
The Hickory County Low Water Crossing project in Missouri removed a barrier to movements of the threatened niangua darter and improved sediment transport in the stream. This project reconnected 16.9 miles of stream habitat, benefitting numerous species of fish and other aquatic organisms.

Region 3 - Fish Passage Program



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This project on 18 Mile Creek in Wisconsin provided aquatic species with 16.5 miles of uninhibited access to prime stream habitat.



Completed and in-progress Fish Passage Program projects in the Midwest Region (1999-2010). Projects include culvert renovations, dam removals, installations of fish passage structures or natural by-passes, and stream grade control structure modifications.



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A natural rock fishway will allow aquatic organisms to bypass this structure and access 73 miles of upstream habitat, Frankenmuth, MI.

Building Partnerships

The Fish Passage Program has become one of the Service's most popular initiatives and is a model for cooperative aquatic habitat restoration. We work with states, tribes, local municipalities, non-governmental organizations, watershed groups and many others. These partners provide important match funding and in-kind support which helps to stretch taxpayer dollars.

Status of Aquatic Resources

While the Midwest ecosystems support tremendous aquatic biodiversity and numerous recreational and commercial fishing opportunities, the health of these systems and the abundance of many organisms is declining. Many aquatic organisms have declined because of habitat fragmentation resulting from barriers in rivers and streams.

| | Number of Projects | # of Barriers Removed/In Progress | # of Stream Miles Reconnected/In Progress | Fish Passage Program Funding | Partner Matching Funds and In-Kind support | Total Project costs | Number of Partners |
|-----------|--------------------|-----------------------------------|---|------------------------------|--|---------------------|--------------------|
| Iowa | 12 | 16 | 2295.3 | \$829,795 | \$1,580,099 | \$2,409,894 | 18 |
| Illinois | 6 | 5 | 172 | \$272,884 | \$906,920 | \$1,179,804 | 32 |
| Indiana | 1 | 2 | 190 | \$118,571 | \$56,400 | \$174,971 | 0 |
| Michigan | 68 | 57 | 1305.3 | \$2,681,033 | \$6,991,465 | \$9,672,498 | 93 |
| Minnesota | 15 | 18 | 808.1 | \$882,571 | \$7,586,000 | \$8,468,571 | 23 |
| Missouri | 16 | 12 | 115.34 | \$745,518 | \$2,023,382 | \$2,754,614 | 21 |
| Ohio | 4 | 4 | 140 | \$150,700 | \$183,200 | \$333,900 | 9 |
| Wisconsin | 24 | 59 | 277.8 | \$807,606 | \$1,346,580 | \$2,154,186 | 48 |
| Totals | 146 | 173 | 5303.84 | \$6,488,678 | \$20,674,046 | \$27,148,438 | 244 |

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*FWCO (Fish and Wildlife Conservation Office)

Additional Resources:

Region 3 Fisheries Program at: <http://www.fws.gov/midwest/Fisheries>

Region 3 Fisheries Program - Fish Friendly Stream Crossings at: <http://www.fws.gov/midwest/Fisheries/StreamCrossings>

National Fish Passage Program at: <http://www.fws.gov/fisheries/FWMA/fishpassage>

Fish Passage Decision Support System at: <http://fpdss.fws.gov>