



United States Department of Agriculture
Natural Resources Conservation Service

Mississippi River Basin Healthy Watersheds Initiative

Conservation Beyond Boundaries **MRBI**



The Need

The Mississippi River is North America's longest river, flowing over 2,300 miles through America's heartland to the Gulf of Mexico. The Mississippi River Basin supplies drinking water, food, employment, and recreation for millions of people. It also provides critical wildlife habitat for a variety of species. The Mississippi River flyway, home to over 325 bird species, is recognized as being significant globally.

This vital river's elevated levels of nutrients and sediment can impair these uses and ultimately impact the health of the Gulf of Mexico. Agriculture is one source of nutrients and sediment to the river. As a result, USDA's Natural Resources Conservation Service (NRCS) identified the need for additional conservation in the Mississippi River Basin as a top priority. Through the Mississippi River Basin Healthy Watersheds Initiative (MRBI) initiated in 2010, NRCS and its partners work with farmers,

ranchers and private forest landowners to implement conservation systems that improve water quality and benefit agriculture.

Small watersheds identified as significant contributors of nutrients and sediment are given priority, allowing targeted implementation of conservation practices to achieve the best results.



Programs

- Environmental Quality Incentives Program
- Wildlife Habitat Incentive Program
- Conservation Stewardship Program
- Wetlands Reserve Enhancement Program

Results/Outcomes

Since 2010, NRCS has invested more than \$222 million in financial and technical assistance to support 123 MRBI partnership projects covering 640 watersheds, and nearly 577,000 acres of targeted conservation planning and implementation. As projects are implemented, NRCS and its partners will collect data that will help determine which conservation systems deliver the best results and address specific resource issues best, and then refine management approaches. Producers are choosing to build healthy soil, manage nutrients more efficiently and reduce runoff. Through this investment, they contribute to cleaner water and protect fish and wildlife habitats, thereby improving

the overall health of the Mississippi River.

In fiscal year 2012, NRCS provided nearly \$102 million in MRBI funding for 1,604 contracts covering nearly 300,000 acres.

In 2012, severe drought in most of the MRBI states affected farming practices and work scheduled for completion under the Initiative. Producers participating in MRBI were able to adapt to drought conditions by using such practices as cover crops and no-till. Cover crops and no-till help retain soil moisture, improve soil health, and retain the nutrients for next year's crops. Land where no-till is used is more resilient to drought's adverse impacts.

Goals

MRBI's primary goals are to improve water quality, improve habitat and restore wetlands through partnership projects in small priority watersheds. NRCS plans to achieve this goal primarily by working with producers to avoid, control, and trap nutrient

and sediment runoff, and maintain or improve agricultural productivity.

Reducing nutrients and sediment losses in MRBI project areas will improve local water quality and may demonstrate a pathway for addressing larger issues such

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2012 Progress Report

Arkansas
Kentucky
Illinois
Indiana

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Missouri
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Feature Story

A Strong Partnership Results in Many Gains

The Greater Wabash Resource Conservation & Development (RC&D) Council and its partners in Indiana have excelled in outreach to minority and beginning farmers in the Wildcat Creek Watershed MRBI project. The project is designed to help producers implement a system of conservation practices

that will avoid, control, and trap nutrient and sediment runoff before it can enter surface water. This action by producers will help improve wildlife habitat while maintaining agricultural productivity.

From fiscal years 2010 through 2012, NRCS has dedicated more than \$2 million in financial assistance to help producers apply or install conservation practices on their agricultural land. Of that total, producers

received nearly \$772,000 in financial assistance in fiscal year 2012. Nearly 60,000 acres of approximately 360,000 acres of cropland received treatment with more than 26,000 acres of cover crops, 10,000 acres of livestock waste utilization, 16,000 acres of nutrient and pest management, and 3,200 acres of residue management.

Greater Wabash tracked its success using different partners, including the

Wabash River Enhancement Corporation (WREC) and the USDA Agricultural Research Service (ARS). WREC monitored water quality and ARS results showed that conservation systems applied through MRBI include reduced sediment loading by almost 12,900 tons (a 62 percent decrease), reduced total phosphorus loading by 39,800 pounds (a 64 percent decrease), and reduced nitrogen by 12,400 pounds (a 49 percent decrease).

**Fiscal Year 2012 Mississippi River Basin Healthy Watersheds Initiative
NRCS Financial Assistance (FA) and Active and Completed Contracts/Agreements**

State	Environmental Quality Incentives Program (EQIP)			Wildlife Habitat Incentive Program (WHIP)			Wetland Reserve Enhancement Program (WREP)		
	Number of Contracts	FA Contract Obligations	Contract Acres	Number of Contracts	FA Contract Obligations	Contract Acres	Number of Contracts	FA Contract Obligations	Contract Acres
Arkansas	404	\$17,149,234	92,114	3	\$142,051	631	25	\$8,461,928	4,530
Illinois	33	\$321,654	6,518						
Indiana	58	\$3,591,758	18,879	1	\$53		2	\$856,358	150
Iowa	229	\$6,005,678	43,322				8	\$2,902,449	699
Kentucky	66	\$1,284,670	13,996				15	\$7,792,109	1,520
Louisiana	19	\$511,443	6,978				3	\$1,607,260	973
Minnesota	72	\$844,049	20,657				4	\$531,175	304
Mississippi	150	\$7,995,181	25,728				5	\$3,443,608	2,085
Missouri	334	\$9,913,937	40,457	31	\$138,284	572			
Ohio	29	\$1,195,900	2,629						
South Dakota	15	\$236,148	3,414						
Tennessee	52	\$856,711	3,136				17	\$7,533,427	3,785
Wisconsin	29	\$457,937	6,546						
Totals	1,490	\$50,364,300	284,374	35	\$280,388	1,203	79	\$33,128,314	14,046

From Iowa . . .

“My goal is to get every row crop farmer in this MRBI project to convert to strip-till.”

Arlo Van Diest, Corn and Soybean Farmer

Statistical source: Protracts for new enrollment, October 4, 2012. Easement sourcing information: National Easement Staging Tool (NEST) for enrollments as of 10/18/2012. Financial Management Modernization Initiative (FMMI) for financial obligations as of 9/30/2012.

Helping People
Help the Land

FY2012 Mississippi River Basin Initiative Focus Areas



From Ohio
 "Continuing with projects like these will be very beneficial and important to the future of our practices."

Bill Knapke, Farmer

The Meiring Poultry Farm is owned and operated by the Knapke family which includes (from top) Bill and Janet Knapke with their children, Rick, 13, Melissa, 15, John, 10, and Megan, 7.

Goals (continued)

as hypoxia in the Gulf of Mexico. NRCS and its partners are providing additional financial and technical assistance to help producers use agricultural nitrogen and phosphorus most efficiently and reduce nonpoint source pollution. Monitoring and modeling are being used to evaluate the effectiveness of conservation practices on agricultural land in the basin. A three-tiered monitoring and evaluation approach will be used strategically to assess water quality at the edge-of-field, in-stream and on a watershed scale.

Results

In Wisconsin

NRCS' work in Dane County is focused in an area north of Lake Mendota located in Madison. This 230-square-mile area is home to about 45,000 head of cattle, and has potential for significant nutrient and sediment runoff. This four-year MRBI project's goal is to reduce phosphorus runoff by 50 percent from all non-point sources and to document nutrient reductions in the lake. So far, 73 percent of the cropland acres have nutrient management plans; 46 farmers have signed up for conservation practices; and one methane digester is producing green energy from the manure.

In Kentucky

Producers in the Licking River Watershed have planned over 5,500 acres of cover crops as part of a water quality and soil health effort through MRBI. Producers implement plans that contain systems of conservation practices such as cover crops and no-till planting. Producers who apply or install these practices will build healthier soil that uses nutrients much better and reduces soil erosion. These activities reduce the runoff of excess nutrients, resulting in positive impacts on local and downstream water quality. These practices also provide food and cover for wildlife.

Reducing excess nutrients and phosphorus in the Mississippi River is improving water quality and can positively impact the hypoxic zone in the Gulf of Mexico.

Producers are installing or applying systems of conservation practices to help them use their agricultural nitrogen and phosphorus most efficiently and reduce water runoff.

NRCS' partners are using monitoring and modeling in selected watersheds to assess water quality and evaluate the effects of conservation practices and activities on agricultural land.

NRCS and its partners are using a three-tiered monitoring and evaluation approach strategically in selected watersheds to assess the reduction of nitrogen and phosphorus at the edge-of-field, in-stream, and on a watershed basis.



For more information, visit: <http://go.usa.gov/47FR>

Conservation Beyond Boundaries

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