

Mississippi River Basin Healthy Watersheds

2023 Progress Report

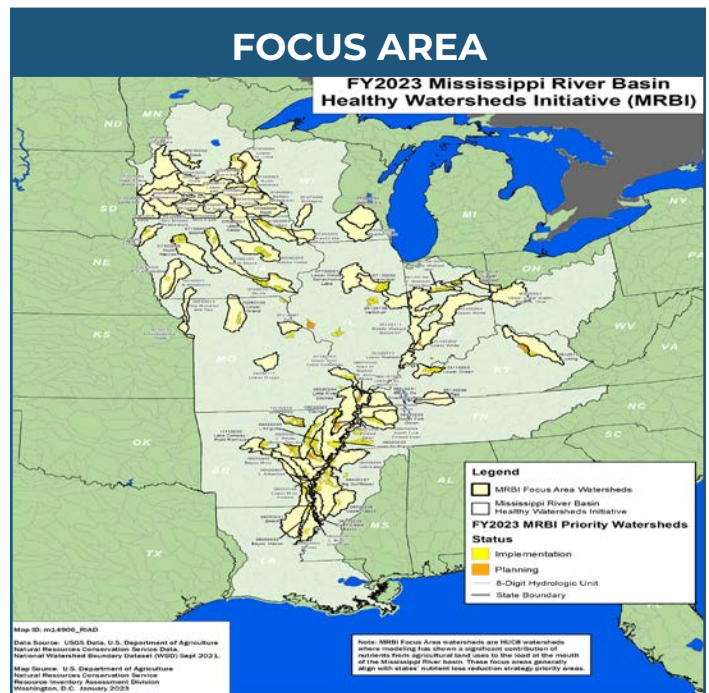
Known as “America’s River,” the Mississippi River flows over 2,300 miles through America’s heartland to the Gulf of Mexico. The basin not only provides drinking water, food, industry, and recreation for millions of people, it also hosts a globally significant migratory flyway and home for over 325 bird species.

This vital river’s elevated levels of nutrients and sediment can impact the quality of life for the tens of millions of people who live in and rely on the Mississippi River Basin. NRCS works with farmers and conservation partners to implement conservation practices in small watersheds that help trap sediment and reduce runoff of nutrients to improve local water bodies. Collectively, local watershed efforts contribute to improvement in the overall health of the Mississippi River. MRBI is one of many efforts that support the goals of the Hypoxia Task Force action plan to reduce nutrient loads to the Gulf of Mexico.

NRCS and the Mississippi River Basin Healthy Watersheds Initiative

Launched in 2009, the 12-state Mississippi River Basin Healthy Watersheds Initiative (MRBI) uses several Farm Bill programs, including the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP), to help landowners sustain America’s natural resources through voluntary conservation. The primary goal of MRBI is to improve water quality while ensuring economic viability of agricultural lands. Additional benefits include restoration of wetlands and wildlife habitat enhancement.

States within the Mississippi River Basin have developed nutrient reduction strategies to minimize the contributions of nitrogen and phosphorus to surface waters within the basin, and ultimately to the Gulf of Mexico. MRBI uses a small watershed approach to support the states’ reduction strategies. Avoiding, controlling and trapping practices are implemented to reduce the amount of nutrients flowing from agricultural land into waterways and to improve the resiliency of working lands.



Outcomes and Impacts

MRBI has shown that focused water quality efforts in high priority areas can be effective in building strong partnerships, increasing trust and collaboration with landowners and farmers, and getting more conservation systems on the ground.

From 2010 to 2023, over \$480 million was obligated for MRBI project contracts through EQIP, providing treatment on over 1.93 million acres. These targeted investments have increased the adoption of critical water quality conservation practices, such as cover crops, no-till, residue management, grassed waterways and nutrient management by over 30% (based on practice obligations) compared to Focus Area watersheds without MRBI.

To date, segments of the Cache River, Fork Point and St. Francis River in Arkansas, and Flowers Creek in Indiana, have had measured water quality improvement and now meet water quality standards, so they have been scheduled for delisting from the states’ impaired waters list.



Fiscal Year 2023 Mississippi River Basin Healthy Watersheds Initiative NRCS Financial Assistance (EQIP FA) for Active and Completed Contracts			
State	Acres	NRCS Investments	Contracts
Arkansas	37,998	\$15,054,094	205
Illinois	1,778	\$333,864	11
Indiana	2,366	\$430,932	10
Iowa	14,320	\$5,311,459	92
Kentucky	1,484	\$699,991	16
Louisiana	3,503	\$515,146	7
Minnesota	613	\$225,794	11
Mississippi	34,157	\$16,488,944	142
Missouri	2,703	\$1,695,147	30
Ohio	4	\$87,202	2
Tennessee	6,291	\$2,507,937	34
Wisconsin	1,832	\$262,041	17
Total	107,048	\$43,612,550	577

Data source: FPAC Economics and Policy Analysis Division, January 2024

Focus on Critical Source Areas

Through watershed assessment, critical areas for treatment are identified using a variety of tools and approaches, and practice implementation within critical areas is being tracked at the project level. One tool that can help identify critical source areas is the CEAP Soil Vulnerability Index (SVI). It identifies soils most vulnerable to runoff loss of sediment and nutrients on cropland. Tracking conservation implementation on these vulnerable acres is one way to estimate progress towards meeting water quality objectives nationally. The NRCS Resource Inventory and Assessment Division provides annual reports on treatment on SVI acres for all MRBI watersheds (HUC12).

High SVI Acres Treated.....43%

NRCS Goals

NRCS developed edge-of-field pollutant reduction goals for MRBI to show progress in supporting the states' nutrient reduction strategies. Original goals were based on reductions achieved through FY 2018, and were met or exceeded in FY 2018. For FY 2019, those milestones were expanded to include expected reductions by FY 2023. MRBI exceeded these milestones by FY 2022, reducing sediment loss by 2.4 million tons, phosphorous loss by 4.8 million pounds, and nitrogen loss by 18.6 million pounds on cropland from 2010 to 2023. These reductions are the collective results across all MRBI watershed projects, and complement the Conservation Effects Assessment Project basin-level results.

Overall Summary FY 2010–23

Total NRCS Investment \$480,607,328
 Number of Contracts 10,821
 Total Acres Contracted..... 1,933,268

2023 Milestones		
Reduce Sediment Loss (tons)		
Milestone	Achieved	Percentage Toward Milestone
2,410,200	3,129,839	130%
*2,751,836 tons reduced in FY 2010–2022; 378,003 tons in FY 2023		
Reduce Phosphorus Loss (lbs)		
Milestone	Achieved	Percentage Toward Milestone
4,849,300	7,337,759	151%
*6,455,965 lbs reduced in FY 2010–2022; 881,794 lbs in FY 2023		
Reduce Nitrogen Loss (lbs)		
Milestone	Achieved	Percentage Toward Milestone
18,596,100	26,410,036	142%
*23,159,273 lbs reduced in FY 2010–2022; 3,250,763 lbs in FY 2023		

Data source: FPAC Economics and Policy Analysis Division, January 2024

