

Measuring Nonpoint Source Nutrient Reductions in the Mississippi River Basin

As of summer 2017:

Many federal and state agencies collect, store, and report on progress and activities.



There is no consistent framework for all twelve HTF states to report NPS metrics.



Rather, states have a variety of conservation practice tracking and reporting methods, making data aggregation across the MARB difficult.



This NPS measurement framework will fill gaps in our ability to consistently track and report conservation practice implementation and associated water quality improvement.

The Mississippi River/Gulf of Mexico Hypoxia Task Force (HTF) is a collaboration of 5 federal agencies, 12 state agricultural and environmental agencies and the National Tribal Water Council. The HTF develops and implements workable solutions to reduce nutrient inputs into the Mississippi and Atchafalaya River Basin (MARB) and the hypoxic zone in the northern Gulf of Mexico. The HTF has a challenging goal of 20% nutrient reduction by 2025 and 45% nutrient reduction by 2035 to reduce the size of the hypoxic zone to less than 5000 km². States implement unique Nutrient Reduction Strategies while federal agencies provide support through financial, technical and other measures. Collaboration with diverse stakeholders and partners in the MARB is key to achieving the HTF goals.

Tracking nonpoint source (NPS) metrics is complex because of the scale and scope of NPS pollution in the MARB and disparate data sources. Thus a private-public partnership formed consisting of the HTF, pilot states, SERA-46 (multi-state research and extension committee of 12 Land Grant Universities) and the Walton Family Foundation to support the development of NPS metrics and a measuring framework. The HTF is distinctly interested in working with private entities, including ag industry and NGOs to ensure that reductions across the HTF states are accounted for collectively in the MARB.

Centralizing and making data more accessible is key for states and stakeholder participants to assess progress. Accessible data means states and stakeholder participants will more likely integrate the data into planning and implementing priority watershed projects and share results. The goal of the NPS measurement framework under development is to support each state as they implement their individual nutrient strategies. This framework will help ensure agricultural conservation practices adopted across the MARB will be accurately and consistently reported to the HTF, partners and the public.

Funding from the Walton Family Foundation will allow the project team to work with two pilot states, Indiana and Arkansas, to develop and test the framework. The HTF sees the framework as imperative to determine if current and planned actions will generate reductions to reach the milestone goals and help states to adaptively manage their nutrient reduction strategies.



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