



## 2022 Hypoxia Task Force Public Meeting Summary Accomplishments and Next Steps

The [Mississippi River/Gulf of Mexico Watershed Nutrient Task Force \(Hypoxia Task Force, HTF\)](#) is a partnership of [12 states, 5 federal agencies, and a tribal representative](#) who work collaboratively to reduce the hypoxic zone in the northern Gulf of Mexico and improve water quality throughout the Mississippi and Atchafalaya River Basin (MARB). The [HTF goal](#) is to reduce the 5-year average size of the hypoxic zone in the northern Gulf of Mexico to less than 5,000 square kilometers by 2035, with an interim target of reducing nitrogen and phosphorus loads delivered to the Gulf by 20 percent by 2025. The HTF hosted a public meeting on December 14-15, 2022, including a hybrid public meeting, executive session, and coordinating committee meeting; public meeting materials can be found [here](#). This document summarizes the main outcomes of the meetings.

### State Progress

The HTF and the public heard from Arkansas, Illinois, Indiana, Iowa, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Ohio, Tennessee, and Wisconsin on their [Bipartisan Infrastructure Law \(BIL\) Gulf Hypoxia Program \(GHP\)](#) workplans, summarized below. EPA's new GHP is funding each state for up to five years. Attendees also heard remarks from Co-chair Michael Naig, Secretary of the Iowa Department of Agriculture and Land Stewardship, regarding states' commitment to sustained progress.

**Arkansas** will implement goals and strategies identified in the recently updated [Arkansas Nutrient Reduction Strategy](#). Projects implemented will focus on water quality monitoring and conservation practice implementation in Tier 1 and Tier 2 watersheds, according to the 2022 update to how the state will prioritize watersheds for nutrient reduction. In its presentation, Arkansas discussed installing two-stage ditches to reduce erosion and nutrient loss, tools for tracking practices and nutrient trends, and supplementing American Recovery Plan Act funding for wastewater projects in communities with less than \$42,000 annual median household income.

**Illinois** will advance seven projects in implementing the [Illinois Nutrient Loss Reduction Strategy](#) by creating new initiatives and scaling up existing programs. Projects include water quality monitoring in surface and groundwater, agriculture conservation practice implementation, watershed education and outreach, data metrics collection, and nutrient strategy update and reporting, with an emphasis on benefiting disadvantaged communities. In its presentation, Illinois discussed partnerships with USGS and agricultural retailers, and a crop insurance strategy to advance their strategy.

The **Indiana** State Department of Agriculture will hire a staff person to help manage the GHP work and to provide support for the [Indiana State Nutrient Reduction Strategy](#) efforts. This staff will manage and coordinate a new soil sampling program and coordinate other on-farm trial programs. These programs will aim to increase the frequency in which landowners soil sample as

well as improve nutrient use efficiency. Indiana is also proposing the creation of the Indiana Nutrient Research & Education Program that will focus on the work of the [Indiana Science Assessment](#). This program will allow for continued management and research analysis to determine conservation practices' efficiency in improving water quality.

**Iowa** will implement the [Iowa Nutrient Reduction Strategy](#) and advance the Gulf Hypoxia Action Plan by promoting the voluntary adoption of proven nutrient reduction practices on private lands that also provide multiple benefits (wildlife habitat, carbon sequestration, etc.). The work will focus on expanding an innovative approach to leverage farmers' trusted advisors to identify, plan, and support implementing these practices in priority watersheds. Iowa's presentation focused on providing additional capacity to reach additional farmers and providing a more streamlined and efficient approach to installing multiple practices, utilizing funding from multiple sources.

**Kentucky** will provide staffing for nutrient reduction strategy deployment and nutrient management planning in support of the state's [Nutrient Reduction Strategy](#). Also, Kentucky will prioritize nutrient investments in municipal stormwater and wastewater treatment systems and increase funding for agriculture conservation practices. Funding will expand outreach and marketing of the state's new Agriculture Water Quality Act Planning Tool and fill gaps in its stream gaging network. Kentucky's presentation highlighted partnerships in place to support the implementation of its nutrient reduction strategy.

**Louisiana**, in support of the state's [Nutrient Reduction Strategy](#), will target implementing agricultural best management practices within prioritized tracts in northeast Louisiana and transect monitoring in coastal Louisiana. The presentation highlighted efforts to target best management practices within the Lake St. Joseph and Cypress Bayou watersheds to reduce agricultural nutrient loading and provide other water quality improvements. Coastal monitoring along a transect from Barataria Pass, Louisiana to the inner shelf of the Gulf of Mexico will inform the interactive effects of multiple ecosystem change drivers (restoration, riverine nutrient loading, hypoxia, climate change) on living resources in the Gulf of Mexico.

**Minnesota** will focus on eight areas integral to the state's nutrient reduction goals. This work will set strategic directions for scaling up the most critical agricultural best management practices to achieve the remaining nutrient reduction goals at the state lines and at the upstream watershed outlets. Minnesota will develop point source nitrogen reduction management plan templates for use at the highest priority municipal wastewater facilities, map priority watersheds, and enhance the effectiveness of tools for local watershed nutrient reduction planning. Minnesota's [Nutrient Reduction Strategy](#) and tracking system will be updated to more effectively achieve and track nutrient reductions through 2035.

**Mississippi** will implement projects as part of the state's [Nutrient Reduction Strategy](#). The presentation outlined the first set of GHP funded activities, which focus on collecting data and building tools that can help Mississippi establish a strong foundation for making management decisions. These activities will support program staffing, characterize delivered nitrogen loads to the Mississippi River, estimate load reductions achieved through implementation of conservation practices using data from 2008 to present, and build a new biological response metric that can help measure the success of nutrient reduction activities.

**Missouri** will implement five projects under this GHP workplan that achieve actions promised under the state's [Nutrient Loss Reduction Strategy](#). Project deliverables discussed include the development of a statewide nutrient progress tracking dashboard, expansion of monitoring capabilities at stations on three of the state's largest rivers, study of municipal wastewater nutrient removal optimization, investment in public outreach and education, and a study evaluating nutrient reduction effectiveness for common agricultural best management practices, including for grazing operations. These GHP workplan efforts will complement the over \$80 million in agricultural best management practice cost share implemented annually by the state Soil and Water Conservation program and the Parks, Soil and Water Conservation Sales Tax and Missouri NRCS.

**Ohio** will increase training and technical staff available for planning and designing management and structural practices that reduce agricultural nutrient loading, assessing home septic treatment systems maintenance and disposal of septage, increasing watershed-based planning to develop implementation projects, updating Ohio's [Nutrient Reduction Strategy](#), and measuring effectiveness of cascading waterways and/or other innovative practices to be utilized in concert with USDA efforts. Funding will also allow for an increase in staff assigned to Ohio River Basin implementation strategies and evaluation of the nutrient reduction strategy, along with continuing water quality monitoring at three newly established monitoring network gages in the Ohio River Basin.

**Tennessee's** nutrient reduction strategy relies on controlling point sources where the Department of Environment and Conservation has regulatory authority and working with the agriculture sector to reduce nonpoint sources through incentives, public meetings, outreach, and education. Work products will leverage resources and coordination with federal partners, advance research and communicate progress of nutrient reductions, advance multi-state collaboration, and scale up implementation of Tennessee's [Nutrient Reduction Strategy](#). Major components of the workplan include nutrient load monitoring, flow gaging and sampling, optimization of wastewater facilities, nutrient loss reduction with cover crops in priority watersheds, and research support.

**Wisconsin** will support implementation, coordination, and reporting of the state [Nutrient Reduction Strategy](#). Wisconsin intends to fund innovative practices and pilot projects to reduce agricultural nonpoint source nutrient losses, expand support for key initiatives related to agriculture and water quality, and improve state capability to track, report, and demonstrate progress. The presentation highlighted support for producer-led conservation groups, development of watershed plans, hiring a new nutrient reduction strategy coordinator, innovation and performance-based grants, and enhancement of data systems.

## Federal Agency Updates

### EPA

EPA is implementing the BIL, including \$50 billion to address drinking water, storm water, and other water quality projects, and \$60 million over five years to help HTF states implement the Gulf Hypoxia Action Plan. A few examples of progress since the Office of Water's [2022 Nutrient Reduction Memorandum](#) in April include the release of a [Lagoon Action Plan](#), with technical and financial assistance to improve public health and protect waterways in small, rural,

and tribal communities that rely on wastewater treatment lagoons; technical support to help HTF and other states develop nutrient criteria for their lakes, reservoirs, rivers, and streams; and completion of a [Compendium of State and Regional NPDES Nutrient Permitting Approaches](#) that highlights the diverse approaches states are using to reduce point source discharges of nutrients.

## U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) is a member of the HTF, with representation within its [Civil Works](#) program. USACE's mission is to manage and conserve America's waterways for navigation and commerce and stay consistent with ecosystem management principles, in addition to providing quality public outdoor recreation experiences to serve the needs of present and future generations, in line with HTF's goal to address Gulf hypoxia.

## U.S. Department of Agriculture

### Farm Production and Conservation

USDA is providing \$20 billion in increased funding for conservation under the Inflation Reduction Act (IRA). USDA is investing \$3.1 billion in 141 selected projects through [Partnerships for Climate-Smart Commodities](#), including in HTF states. Additionally, USDA is assisting in upgrading wastewater and drinking water infrastructure through the BIL and continues to support its priority watersheds programs such as the Mississippi River Basin Healthy Watersheds Initiative and the National Water Quality Initiative through the Farm Bill. USDA is also supporting the Regional Conservation Partnership Program and activities of the America the Beautiful initiative, which includes development of an American Conservation and Stewardship Atlas.

### Research, Education, and Economics

The USDA Research, Education, and Economics mission area offers support for HTF states through the services of thousands of scientists, researchers, and research staff through the Agricultural Research Service, the Economics Research Service, and the National Institute of Food and Agriculture (NIFA). NIFA supports the SERA-46 Land Grant University collaborative that works to strengthen networks, conservation systems research, outreach, monitoring, and tracking progress to achieve the HTF goal.

## National Oceanic and Atmospheric Administration

National Oceanic and Atmospheric Administration (NOAA) provided an update to the HTF summarizing its 2022 cruise survey to measure the extent of the 2022 hypoxic zone and retrospective analysis of hypoxic dynamics over the past year. This data supports the HTF's goal of measuring and reducing the size of the hypoxic zone on an annual basis.

## U.S. Department of Interior

United States Geological Survey (USGS) continues to support the HTF in sharing trends in five-year moving average and "flow-normalized" nitrogen and phosphorus loads to the Gulf of Mexico. These data are available on the [Tracking Water Quality in U.S. Streams and Rivers website](#). Additional USGS support includes the [National Water Dashboard](#) website, a "one-stop"

perspective of real-time hydrologic conditions, and the Next Generation Water Observing System (NGWOS), which provides high-resolution, real-time data to support scientific efforts in the MARB. DOI is also supporting the activities of the America the Beautiful initiative, which includes development of an American Conservation and Stewardship Atlas.

## National Tribal Water Council

The representative from the National Tribal Water Council (NTWC) noted that the Council will work with EPA to follow up with tribes eligible for GHP funding, help tribes build their capacity to reduce nutrient losses and improve water quality, communicate regarding collaboration with tribes, and discuss how work can benefit tribes that call the Mississippi River home.

## Public Comments, Wrap-Up/Next Steps

The HTF heard comments from three members of the public and received a number of written materials as input; members of the public can reach out to the HTF at any time throughout the year by writing to [OW-hypoxia@epa.gov](mailto:OW-hypoxia@epa.gov) or contacting any state regarding their [nutrient reduction strategy](#).

The HTF Co-chairs thanked the Task Force members for their engagement, recognized state members for their efforts to implement their nutrient strategies and thanked federal agencies for supporting the states' efforts. The Co-chairs offered support to all the states and workgroups as they continue to make progress.