Bipartisan Infrastructure Law Gulf Hypoxia Program

Mississippi River Gulf of Mexico Watershed Nutrient Task Force

Partner Cooperative Agreement Workplans

The Gulf Hypoxia Program, or GHP, is funded through the *2021 Bipartisan Infrastructure Law*, or BIL, which provides $60 million over five years for EPA to issue grants to advance the goals of the *Gulf Hypoxia Action Plan*. The BIL provides, for the first time, funding specifically authorized to implement the Action Plan, and this historic investment will allow the Hypoxia Task Force to make significant strides towards achieving the HTF's goals.

Through the GHP, Task Force member states, Tribes, sub-basin committees, and a Land Grant University consortium will have the resources to make significant progress toward reducing nutrient loads and track the results. These efforts will improve water quality in the Gulf and throughout the Mississippi River/Atchafalaya River Basin. Through improved water quality, communities across the basin will benefit from safer drinking water, protected fisheries, and a more stable economy. Partnerships will provide farmers and urban communities with a more resilient landscape and improved local water quality and support to implement watershed plans and expand business plans to include conservation systems.

In FY24, EPA awarded BIL Gulf Hypoxia Program grants to the Task Force Partners, which comprise of two of the three sub-basin committees and a Land Grant University consortium. This document presents the HTF Partners' workplans, which support the following strategic outcomes:

- Engage with and convene stakeholders through the Mississippi River Basin;
- Coordinate nutrient reduction strategies, actions, and data as they relate to the Gulf Hypoxia Action Plan goals;
- Promote communication of nutrient reduction progress towards the Action Plan goals at the basin scale and facilitate communication between and amongst HTF members and stakeholders;
- Advance Research in support of nutrient reduction strategies.

More Information

Read more about the Hypoxia Task Force, the Gulf Hypoxia Action Plan, HTF member State Nutrient Reduction Strategies and the Gulf Hypoxia Program.

Partner Cooperative Agreement Workplans

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Project Workplan

Project Approach:

The project for the Ohio River Sub-Basin will be in two parts.

Task 1: Nutrient Sampling for Load Calculations

The Monitoring Workgroup identified critical sampling locations to allow for annual nutrient load estimates. Many of these locations do not have sufficient samples over the year to allow for load estimates. Locations on the Ohio River or on the lower reaches of major tributaries have traditionally been within ORSANCO's purview. Below is a list of the previously identified locations as well as some additional locations that could be considered.

Table 1: Nutrient sampling locations

River	Location (Mile)	Lat/Long	Rationale	Priority
Cumberland	Pinkneyville (16)	37.18573, -88.24003	Identified by Mon Workgroup	1
Ohio	McAlpine Dam (606.8)	38.28205, -85.78137	Identified by Mon Workgroup	1
Ohio	Greenup Dam (341.0)	38.64637, -82.86042	Identified by Mon Workgroup	1
Big Sandy	Louisa (20.3)	38.17108, -82.63474	Identified by Mon Workgroup	1
Muskingum	Marietta (0.8)	39.420191, -81.462729	Major Tributary (OH)	2
Scioto	Lucasville (15.0)	38.881448, -83.017686	Major Tributary (OH)	2
Wabash	New Harmony (51.5)	38.12990, -87.94262	Major Tributary (IN)	2
Ohio	JT Myers Dam (846.0)	37.79326, -87.99046	Near IN border	2
Kentucky	Carrolton (4.1)	38.65834, -85.14490	Major Tributary (KY)	2
Great Miami	Elizabethtown (5.2)	39.15315, -84.79523	Major Tributary (OH)	3
Little Miami	Newtown ((7.5)	39.13690, -84.35325	Major Tributary (OH)	3

The first four locations were identified by the monitoring workgroup as high priority needs so they are listed as priority 1 sites for this project. Discussion with the state Coordinating Committee members of Ohio, Kentucky, Indiana and Illinois identified a number of other locations that would be beneficial to both the HTF and the states. These locations are given a priority 2 ranking.

Sample locations at Ohio Tributaries may be adjusted at the request of Ohio EPA. Two of the locations were more likely to change so these were given a priority 3 ranking. Ohio samples tributaries on a rotating basis for their nutrient mass balance project and the upcoming sampling period has not had the

locations defined. ORSANCO will work with OEPA to provide sample locations that are beneficial to both OEPA and the HTF goals.

Samples will be collected monthly for 45 months at each of these locations. The samples will be sent to a contract laboratory and analyzed for Nitrate/Nitrite, Total Kjeldahl Nitrogen (TKN), Total Phosphorus, and ortho-Phosphate. Total nitrogen will be calculated by adding Nitrate/Nitrite and TKN. Quality assurance samples will be collected at a rate of 10%.

Where possible the sample locations will be co-located with USGS gauges to improve model results. Figure 1 below shows the locations of the proposed sample locations as well as the USGS gauges.

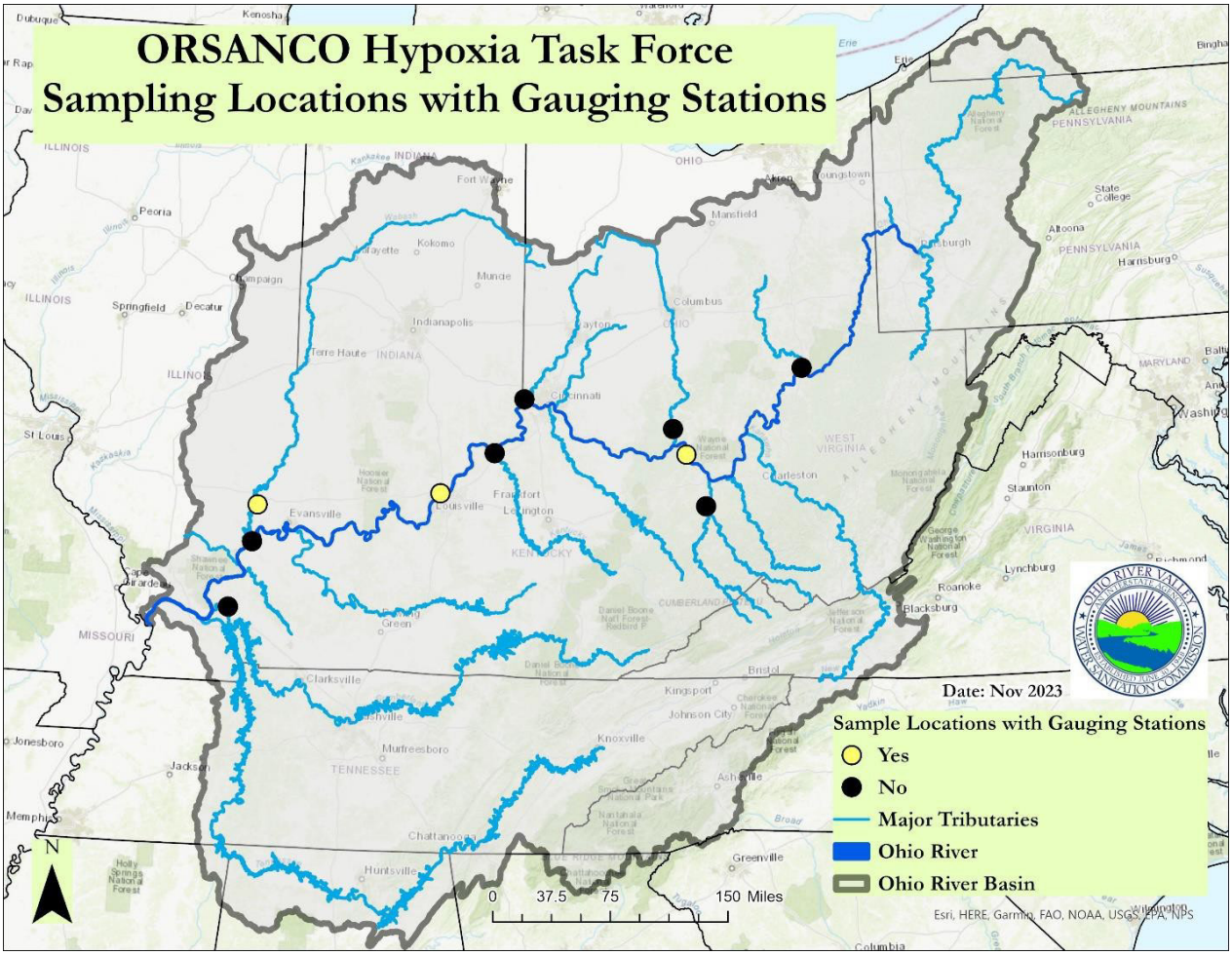

Figure 1: Sample locations

Task 2: Sub-Basin Committee meetings

The Hypoxia Task Force currently meets once per year, typically in December. The states of the Ohio River Basin have identified a need for an additional annual meeting to allow for focused discussions on the basin including success stories and state messaging for the HTF annual report. This meeting will provide an opportunity to engage with disadvantaged communities in the Ohio River Basin as well as states outside of the Task Force. The meetings will include a listening session to promote public involvement in the activities of the Hypoxia Task Force.

Under this task ORSANCO will organize an annual meeting of the Ohio River Sub Basin states. Disadvantaged communities in the area will be identified and encouraged to attend the public portion of the meeting. ORSANCO will also identify appropriate members of state environmental and agriculture agencies from West Virginia and Pennsylvania to include in these annual meetings. The meeting locations will rotate through the 4 Task Force states in the Ohio River basin. The meeting will be held in May/June of each year, opposite the annual Task Force meeting.

The complete project will run 4 years starting April 1, 2024 and ending March 31, 2027.

This project will support EPA Strategic Plan Goal 5: Ensure Clean and Safe Water for All Communities, Objective 5.2: Protect and Restore Waterbodies and Watersheds by allowing more detailed nutrient load estimates from the Ohio River Basin which gives the states the tools needed to focus their efforts in priority areas. This project will also engage states outside of the HTF, expanding the knowledge of the issues which drive the HTF and potentially increase resources to focus on nutrient reductions in the Ohio River basin.

Environmental Results:

The proposed nutrient sampling will meet goal 3 in the grant guidance:

> Goal 3: Support states in the respective sub-basins as they implement and coordinate comprehensive nutrient reduction strategies across boundaries. For example, where states are looking to adopt programs or practices of other sub-basin states, provide coordination and assistance where possible to ensure data generated across state programs will provide a regional picture of progress.

The data from this sampling will improve the assessment of nutrient loads from identified tributaries and Ohio River locations.

The annual meeting of the Ohio River Sub Basin Committee will meet goals 1 and 2 of the grant guidance:

> Goal 1: Convene regional, state, and other stakeholders not represented on the Task Force, including additional basin states, basin tribes, agencies, and interested parties and organizations to gather input, facilitate peer-to-peer learning opportunities, and encourage collaboration across boundaries.
>
> Goal 2: Help the states engage disadvantaged communities in nutrient reduction planning and activities within their boundaries.

ORSANCO will identify interested stakeholders in West Virginia and Pennsylvania to attend the annual Sub Basin meeting. Disadvantaged communities will be identified and encouraged to attend the public portion of the annual meeting.

Anticipated results

Sufficient data at 3 Ohio River locations and 9 tributaries to improve nutrient load estimates from the Ohio River basin.

Engagement of disadvantaged communities as well as states outside of the Hypoxia Task Force (West Virginia and Pennsylvania).

Milestone Schedule:

This project will be completed over 4 years.

Samples will be collected monthly except for the final three months of the grant period. This will allow the final samples to be analyzed within the grant period and a final report written.

Data will be entered into WQX on a quarterly basis and an annual report will be submitted to USEPA's Grants Tracking and Reporting System.

The annual meeting of the Ohio River Sub Basin Committee will be scheduled for May of each year. Assuming a project start date of January 1, 2024, this will be in the second quarter of each project year.

Results of the annual meeting will be reported to the ORSANCO Commission at the June Commission meeting. The results of the sampling and annual meeting will be reported to the HTF at the annual Task Force meeting (typically December of each year.

Table 2: Quarterly Milestones

		Activities
Year 1	Q1	Collect 3 monthly samples at 11 sites.
	Q2	Collect 3 monthly samples at 11 sites. Enter data from Q1 Sampling into WQX. Plan and manage 1 annual meeting of the Sub Basin Committee
	Q3	Collect 3 monthly samples at 11 sites. Enter data from Q2 sampling into WQX.
	Q4	Collect 3 monthly samples at 11 sites. Enter data from Q3 sampling into WQX. Report results of Y1 of the project at the HTF annual meeting.
Year 2	Q1	Collect 3 monthly samples at 11 sites. Enter data from Y1Q4 sampling into WQX. Prepare Year 1 annual report and enter the report into the Grants Tracking and Reporting System.
	Q2	Collect 3 monthly samples at 11 sites. Enter data from Y2Q1 Sampling into WQX. Plan and manage 1 annual meeting of the Sub Basin Committee
	Q3	Collect 3 monthly samples at 11 sites. Enter data from Y2Q2 sampling into WQX.
	Q4	Collect 3 monthly samples at 11 sites. Enter data from Y2Q3 sampling into WQX. Report results of Y2 of the project at the HTF annual meeting.
Year 3	Q1	Collect 3 monthly samples at 11 sites. Enter data from Y2Q4 sampling into WQX. Prepare Year 2 annual report and enter the report into the Grants Tracking and Reporting System.
	Q2	Collect 3 monthly samples at 11 sites. Enter data from Y3Q1 Sampling into WQX. Plan and manage 1 annual meeting of the Sub Basin Committee
	Q3	Collect 3 monthly samples at 11 sites. Enter data from Y3Q2 sampling into WQX.
	Q4	Collect 3 monthly samples at 11 sites. Enter data from Y3Q3 sampling into WQX. Report results of Y3 of the project at the HTF annual meeting.

		Activities
Year 4	Q1	Collect 3 monthly samples at 11 sites. Enter data from Y3Q4 sampling into WQX. Prepare Year 3 annual report and enter the report into the Grants Tracking and Reporting System.
	Q2	Collect 3 monthly samples at 11 sites. Enter data from Y4Q1 Sampling into WQX. Plan and manage 1 annual meeting of the Sub Basin Committee
	Q3	Collect 3 monthly samples at 11 sites. Enter data from Y4Q2 sampling into WQX.
	Q4	Enter data from Y2Q3 sampling into WQX. Prepare final grant report. Report results of Y4 of the project at the HTF annual meeting. Enter the report into the Grants Tracking and Reporting System.

Transferability of Results and Dissemination to the Public:

All data generated from this effort will be entered into WQX to make it available for state and federal agencies as well as private researchers. This supports basin-wide progress tracking by increasing the number of tributaries which can have nutrient loads assessed.

The results of the sampling and the annual meeting of the Sub Basin Committee will be reported at the annual Hypoxia Task Force meeting, at 3 ORSANCO Commission meeting and on ORSANCO's website. Additionally, an annual report will be submitted to USEPA's Grants Tracking and Reporting System.

Detailed Budget Narrative:

This project is divided into two tasks.

Task 1: Nutrient Sampling for Load calculations

Personnel costs are for ½ FTE to complete the sampling of 11 locations monthly for 45 months. In addition to sampling tasks this person will input data into WQX and assist with Task 2 below. This person will require 10 days per month to accomplish this task. Additional personnel costs are for existing senior staff to train the sampling staff, manage the grant and submit the QAPP and progress reports.

Travel costs are for sampling at the 11 locations located throughout the Ohio River Basin. The sampling will be accomplished with 7 days travel per month including hotel stays for 2 nights calculated at approved per diem rates.

Supply costs are for cleaning/calibration supplies and de-ionized water. Additional supplies are ice and coolers for shipping the samples to the laboratory.

Contractual services costs are the laboratory costs for analysis of the collected samples as well as quality assurance samples. Fifty three samples will be collected at each location for a total of 212. All samples will be analyzed for Nitrate/Nitrite, Total Kjeldahl Nitrogen, Total Phosphorus, and Ortho Phosphate.

Other costs under contractual services include overnight shipping of the collected samples and sample disposal.

Indirect costs are calculated as a percentage of payroll per ORSANCO's approved indirect cost rate.

Task 2: Sub-Basin Committee meetings

Personnel costs are for 2 weeks of a Senior Environmental Scientist to plan and run 1 annual meeting of the Sub-Basin Committee.

Travel costs are to support the travel of up to 21 attendees and include car rental/mileage, meals, and lodging for a 2 day meeting. Costs include airfare for up to 3 of the attendees. The number of attendees is assumed to be 3 each from the HTF states (Ohio, Kentucky, Indiana, and Illinois), 3 each from West Virginia and Pennsylvania, and 3 from ORSANCO.

Quality Assurance:

This project will follow the approved QAPP for ORSANCO's Bimonthly Monitoring Program. The QAPP will be updated to include this proposed sampling and submitted to USEPA prior to start of the project.

Under EPA's Policy To Assure The Competency Of Organizations Generating Environmental Measurement Data Under Agency-Funded Assistance Agreements (FEM-2012-02), "non-competitive EPA awards expected to exceed $200,000 (in federal funding) in total maximum value that will involve the generation or use of environmental data should ensure that the applicant demonstrates their competency to perform such activities prior to award." To demonstrate ORSANCO's competency to undertake this project, the following QA related documented will be submitted to EPA for review by the Project Officer and Quality Assurance Team.

- Quality Management Plan For the *Ohio River Valley Water Sanitation Commission*[1] *(ORSANCO, 2020)*
- *Quality Assurance Program Plan For The Bimonthly Manual Sampling Network (ORSANCO, 2023)*
- *Standard Operating Procedures Bimonthly Sampling Program Fiscal Year 2024 (ORSANCO, 2023)*

EPA requires that all parties receiving EPA assistance agreements under which environmental information is produced or used include a QAPP that has been prepared in accordance with EPA's *Quality Assurance Project Plan Standard*, *CIO 2105S02.0* (https://www.epa.gov/system/files/documents/2024-04/quality_assurance_project_plan_standard.pdf) or equivalent program documentation. This project proposes to follow the QAPP for ORSANCO's Bimonthly Water Quality Sampling Program, which will be updated as needed to discuss proposed sampling to be undertaken for this project specifically. The QAPP will be submitted to EPA Region 5 for review and approval prior to start of any aspect of the project involving the collection, production or use of environmental information (i.e., Task 1). ORSANCO will follow their existing Quality Management Plan, approved by the EPA Region 5 Quality Assurance Team, which describes how ORSANCO will plan, implement and assess the effectiveness of its quality assurance and quality control operations as applied to environmental programs.

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[1] The word version of this document listed as 2020 QMPD1.1 for USEPA in ORSANCO directory files was submitted electronically by ORSANCO and reviewed and approved by USEPA Region 5 Quality Assurance staff. USEPA converted the word document to .pdf format which restricts editing. The USEPA signed copy of ORSANCO's 2020 QMP in the .pdf format contains the notation of "draft 2020" on the header. Because of COVID-19, teleworking, and limited office capabilities, the draft notation cannot be removed and converted to "final copy" notation. Even though the signed copy contains the "draft 2020" notation, this copy serves as the Final approved Quality Management plan which is valid until June 23, 2025.

Summary Information Page

Project Title:
Cooperative Agreement for LGU GHP Activities through SERA-46

Organization Information:
Host Organization:
University of Wisconsin-Madison
Research and Sponsored Programs
21 N. Park Street, Suite 6301
Madison, WI 53715-1218
Contact Person: Brian Kline, tel. 608-262-1369, brian.kline@wisc.edu.

Proposed Funding Request.
$600,000

Brief Project Description.
Through this agreement, the Land Grant University consortium (LGU) will maintain and facilitate a network of faculty and extension personnel that assist state and federal partners in addressing coordination, communication, research, and outreach activities advancing the Gulf Hypoxia Action Plan. Activities will help: document and communicate progress towards nutrient reduction goals at state and basin scales including actions that involve climate co-benefits; support networks of state, tribal, and sub-basin stakeholders including disadvantaged communities, farmers, and watershed professionals; and advance the application of new research findings in support of nutrient reduction strategies.

Environmental Results:
Enhanced coordination, communication, and project activities leading to increased public support, increased awareness of and willingness to adopt relevant conservation practices, adoption of those practices, and continued learning regarding conservation practice effectiveness and impact (through stakeholder communities and forums) are expected to reduce nutrient loss and nutrient loading to tributary streams and rivers across watersheds throughout the Mississippi River/Atchafalaya River Basin (MARB) resulting in their meeting nutrient standards for nitrogen and phosphorus and improved surface water quality and aquatic health in MARB and Gulf of Mexico through higher dissolved oxygen levels and fewer Harmful Algal Blooms (HABs).

Place of Performance:
Project activities will occur throughout the Mississippi River/Atchafalaya River Basin (MARB) in all 12 HTF member states.

Project Period:
Proposed project period: September 1, 2023 – August 31, 2028.

Project Workplan

Project Approach:

Through this agreement, the SERA-46 Land Grant University (LGU) consortium will maintain and facilitate a network of faculty and extension personnel that assist state and federal partners in addressing coordination, communication, and application of research and outreach activities advancing the Gulf Hypoxia Action Plan and goals of the EPA Gulf Hypoxia Program (GHP). The project supports EPA Strategic Plan Goal 5/Objective 5.2 (Ensure Clean and Safe Water for All Communities: Protect and Restore Waterbodies and Watersheds) by engaging stakeholders and LGUs in coordination, interpretation, and applied extension/research activities regarding restoring and protecting Mississippi Atchafalaya River Basin (MARB) watersheds.

SERA-46 is Southern Extension and Research Activities committee number 46. It is one of a group of formal USDA National Institute of Food and Agriculture (NIFA) and land-grant university supported committees designed to promote multi-state, research and extension activities. SERA-46 was created to operationalize a Non-funded Cooperative Agreement between the Hypoxia Task Force (HTF) and LGU Extension and Experiment Stations in the North Central and Southern Regions of the United States. SERA-46 brings together researchers and extension specialists who share a common interest and expertise related to the environmental, social, and economic factors that contribute to nutrient loss from agricultural lands, state-level nutrient impairments, and hypoxia in the Gulf of Mexico.

SERA-46 values co-production approaches that engage stakeholders in developing, refining, and applying new research priorities and findings. This project will emphasize a co-production approach including efforts to engage under-represented and disadvantaged communities in partnership with states and Sub-Basin Committees (SBCs), recognizing the importance of and time involved in building sustainable and trusting relationships essential for this work. The project team anticipates summarizing and amplifying new information gained across states and communities and for various target audiences engaged in MARB conservation and nutrient management initiatives.

Workplan activities center around the three areas of strategic outcomes described for LGU in the May 31, 2023, Implementation Memorandum.

Strategic Outcome 1: *"Document and communicate nutrient reduction progress towards the goal at the basin scale to the public, particularly progress made by agricultural producers to implement conservation practices, including those with climate co-benefits, without federal and state financial assistance, which are often omitted from current practice inventories."*

In support of strategic outcome 1, the project will:

- Coordinate with the GHP and Sub Basin Committees (SBCs) to develop and implement a basin-wide communications strategy to advance progress toward HTF goals. This will include direct outreach with states and stakeholders to get input and through virtual and/or in- person workshops/meetings to synthesize ideas into a shared strategy. Carry out communications and outreach tactics that will work to achieve the goals identified in the basin-wide strategy; these tactics, among others, could include publications, digital media production, news media outreach, social media, other informational materials, or outreach events. Related to this work and broader state and basin-level coordination efforts, the project will also showcase successful nutrient management and conservation projects and programs to demonstrate progress to target audiences and increase public support for such efforts.
- Coordinate and collaborate with HTF members and affiliates, including the SBCs, to synthesize and share progress made in monitoring, the implementation of nutrient reduction strategies and practices across the basin, and challenges and opportunities for addressing the inherent complexity of Gulf hypoxia. This will include participation in meetings and workgroups, exchange information via SERA-46 events, and engagement between university staff and in-state partners. Forums and platforms for conducting this work will be developed cooperatively with GHP and partners and would likely include online interactions and internet-based platforms such as project websites and webinar venues.

Strategic Outcome 2: *"Support networks of state, tribal, and sub-basin stakeholders including tribes, disadvantaged communities, farmers, and watershed professionals including state and tribal agency staff in reporting and communicating results to the public."*

In support of strategic outcome 2, the project will:

- Support, expand, and sustain existing LGU initiatives, such as The Confluence for Watershed Leaders and One Good Idea, which are already collaborative efforts of SERA-46 and are serving to advance progress on nutrient loss reduction goals. The Confluence for Watershed Leaders supports a network of watershed professionals and farmer leaders, and One Good Idea supports a network of farmers. Delivery details for those programs are available through the website links.
- Through LGU networks, coordinate with SBCs, states, and tribal partners to help form and strengthen connections with disadvantaged communities throughout the basin supporting communication and information sharing about actions that advance conservation, nutrient loss reduction, and associated climate-related benefits. For example, building upon LGU relationships with tribal colleges and Historically Black Colleges and Universities (HBCUs) in the region, we will seek to identify partner and joint priorities and opportunities for reporting, communication, and related mutual goals in support of disadvantaged communities. As stated above, this project will emphasize a co-production approach, recognizing the importance of and time involved in building sustainable and trusting relationships essential for this work. The project team anticipates summarizing and amplifying new information gained across states and communities and for various target audiences engaged in MARB conservation and nutrient management initiatives.
- Host regional and basin-wide meetings of the consortium to share information, support workplan implementation, and strengthen networks with stakeholders and partners.

Strategic Outcome 3: *"Advance research in support of nutrient reduction strategies, including coordination with HTF federal member research agencies/offices, e.g., USDA's Agricultural Research Service and EPA's Office of Research and Development."*

In support of strategic outcome 3, the project will:

- Engage researchers from land grant universities within HTF states to assist with research needs that support nutrient reduction strategies. Expertise may include data and information synthesis to help advance innovative practices to reduce nutrient loss and seed subsequent collaborations and publications. Engagement activities may involve hosting state-level or regional forums for coordinating related research with HTF federal member research agencies and HTF state agencies. For example, joint forums and training sessions might focus on identifying state and regional challenges needing further research, identifying additional state measurement and reporting activities that would be beneficial for long-term research initiatives, and aligning resources to accomplish goals and inform state nutrient reduction strategies. Engagement events will occur at least once each year throughout the five-year project, with the intention of expanding a network that will continue beyond the project through SERA46.

Specific meeting dates and locations for project activities will be established and updated throughout the duration of the project workplan.

Environmental Results:

Anticipated outputs and outcomes:

- Increased public awareness of solutions for and progress made on reducing nutrient loss in the Basin that will lead to increased public support for efforts.
- Increased peer learning among farmers about conservation practices that increases farmer willingness and capacity to adopt practices.
- Increased peer learning among watershed professionals that increases their success at engaging farmers and communities in nutrient loss reduction and facilitating practice adoption.
- Clear direction and research agenda for progress toward nutrient reduction goals.
- Ultimately, activities leading to increased public support, increased awareness of and willingness to adopt relevant conservation practices, adoption of those practices, and continued learning regarding conservation practice effectiveness and impact (through stakeholder communities and forums) are expected to reduce nutrient loss and nutrient loading to tributary streams and rivers across MARB watersheds resulting in their meeting nutrient standards for nitrogen and phosphorus and improved surface water quality and aquatic health in MARB and Gulf of Mexico through higher DO and fewer HABs.

Anticipated products and results:

Strategic Outcome 1:

- A communication strategy document outlining goals, audiences, messages, tactics, and evaluation metrics for communicating progress on nutrient loss reduction goals and showcasing successful nutrient management projects and programs from across the Basin.

- Communications materials such as publications, digital media products, and other informational materials that serve to advance the goals of the communication strategy.
- Outreach and engagement with media and target audiences to advance the goals of the communications strategy, resulting in increased media coverage and public awareness of progress and success stories for reducing nutrient loss in the Basin.

Strategic Outcome 2:

- Additional growth of One Good Idea results, including an increase in videos and podcasts that feature farmers from around the MARB sharing their ideas and experiences with implementing conservation practices; an increase in audience numbers that translate to more farmers and farm advisors using the platform to support the implementation of practices; and the potential continuation of a virtual meet-up series for farmers that will support farmer-to-farmer learning.
- Additional growth of The Confluence for Watershed Leaders, including an increase in the number of watershed professionals and farmer leaders engaged; continued peer learning events to support their professional development; and a continuation of the Confluence Collaborative, a group of institutions and organizations with a shared mission of supporting watershed leaders and who collaborate to implement regional activities in support of this mission.
- A blog series highlighting success stories of watershed professionals across the Basin, to be housed on The Confluence for Watershed Leaders' website.

Strategic Outcome 3:

- A research agenda outlining research priorities important for advancing knowledge in support of nutrient reduction strategies
- Collaborative efforts among state, federal, university, and other personnel to pursue new research directions regarding conservation practices and relationships to nutrient loss and climate-change adaptation.
- An active LGU network of research and extension personnel engaged in activities advancing the goals of the HTF Gulf Hypoxia Action Plan.

Approach to measure, track, and report results from subaward projects.

The subaward project will report annually and subaward personnel will participate in regularly scheduled project meetings and activities. University of Wisconsin-Madison will coordinate fiscal management with University of Arkansas for the subaward.

Milestone Schedule:
The project will begin on September 1, 2023, and activities will extend through August 31, 2028. Major milestones are included in the table below, grouped by Strategic Outcome (SO1, SO2, SO3). Additional details will be developed in cooperation with state and GHP partners.

Among the meetings and activities described with Strategic Outcomes 1-3, the project intends to host meetings targeting researchers and extension educators involved with nutrient reduction and water quality, focused on sharing lessons and findings across states. Initial targets are to host meetings in years 2 and 4 with at least one in the upper basin and at least one in the lower basin.

Milestone		Year 1	Year 2	Year 3	Year 4	Year 5
SO1	Develop and Publish Communication Strategy	X				
	Create communication materials to implement strategy (schedule to be developed with communication strategy)		X	X	X	X
	Conduct outreach and engagement activities with target audiences following strategy (schedule to be developed with communication strategy)		X	X	X	X
	Review and refine communication strategy based on feedback and metrics				X	X
SO2	Convene meetings of SERA-46/project team with anticipated LGU participation from all 12 HTF states	X	X	X	X	X
	Convene in-person meetings of SERA-46 around project activities		X		X	
	Coordinate activities with SBCs through regular interaction		X	X	X	X
	Strengthen communication/information exchange networks among universities	X	X	X	X	X
	Conduct activities and create materials that support One Good Idea programs	X	X	X	X	X
	Conduct activities and create materials that support the Confluence for Watershed Leaders	X	X	X	X	X
SO3	Convene researchers (from SERA-46 LGUs and others)	X		X		X
	Convene researchers and state, federal partners	X		X		X
	Develop and make public summaries of research priorities and opportunities for sharing resources					
	Provide a forum for university researchers and extension educators for sharing information and findings that inform overall nutrient reduction strategies and individual actions.		X		X	
	Update and review research priorities and opportunities for sharing resources			X	X	X
	Produce and make public a research agenda to advance nutrient reduction goals	X				X
General	Attend annual meetings of the Hypoxia Task Force	X	X	X	X	X
	Report on project activities	X	X	X	X	X

Transferability of Results and Dissemination to Public:

Throughout the project, SERA-46 partners will provide updates on activities and share new findings as they emerge. In addition to regular reporting to EPA's Gulf Hypoxia Program, project representatives will attend annual meetings of the Hypoxia Task Force, circulate information through various electronic platforms, and maintain current information through project websites (for example through SERA-46, One Good Idea, and Confluence). Regular reporting information will be available for dissemination through GHP, SBCs, and related state outlets.

Detailed Budget Narrative:
University of Wisconsin-Madison will serve as the host institution for this Cooperative Agreement. One subaward will provide funds to the University of Arkansas. Participant support costs for the project will be funded through both University of Wisconsin-Madison and University of Arkansas. Expenses associated with this proposal:

a. Personnel: Salary

UW-Madison faculty member, Dr. Ken Genskow, is PI on this project but his salary is not supported through project funds. He will provide project oversight and be involved in activities supporting all three strategic outcomes outlined in this agreement.

Funds will provide partial salary for a Watershed Outreach Specialist at UW-Madison over five years to support coordination and activities in this project, including development and implementation of a communication plan in year 1 plus other activities on subsequent years. For Years 1 and 2, the appointment will support 0.25 FTE, and in Years 3, 4 and 5 will support 0.5 FTE. Total salary request is $151,189.

b. Fringe Benefits.

Fringe rates are calculated based on a fiscal year 2023 published rate of 36.6% for academic staff. No annual increase is budgeted. Total fringe request is $55,335.

c. Travel

Annual Travel budgets provide for vehicle, mileage, lodging, per diem, airfare, registration, and other associated costs for UW-Madison employees to attend meetings and organized events in support of the project. These include joint meetings with the Hypoxia Task Force and related activities through SERA46. Travel costs are higher in Years 1 and 2 as Project PI is serving in leadership roles in SERA46 and less in subsequent years. Year 1 travel costs are $9,000, year 2 are $7,000, years 3-5 each at $5,000. Total travel request is $31,000.

e. Supplies

Budgeted amounts for supplies and services support programming materials and related costs for meeting project goals. Costs for year 1 are budgeted at $250 with subsequent years at $200, $200, $200, and $227. Total supplies request is $1,077.

h. Other

h1. Service units within UW-Madison are budgeted to support website hosting and maintenance activities (at $3,000 per year for multiple websites) as well as development and production of digital and print materials for project activities (at $3,000 per year). Service budgets are $6,000 each year for a five-year total of $30,000.

h2. Meeting space: Budgeted amounts for space rental, A/V equipment, and other expenses associated with meetings needed for this project. Costs are estimated at $700 each year. Total request is $3,500.

h3. Sub-award to University of Arkansas: A sub-award to University of Arkansas will provide support focused on Strategic Outcome 3 seeking to engage researcher partners to advance research in support of nutrient reduction strategies. Funds will primarily support project team member's travel and event costs as outlined in their sub-award budget. The total sub-award to University of Arkansas is $150,000.

h4. Participant support costs: The project will support participant costs such as stipends, travel, subsistence expenses for attending informational sharing activities, meetings, and trainings associated with the project. These organized events are expected to occur throughout the five-year project period with most funding budgeted for years 3, 4, and 5. Participants may include students, scholars, researchers, and staff at other academic institutions. Total participant support costs are $65,000.

Total Other request is $248,500.

Total Direct request is $487,101.

j. Indirect Charges

Indirect costs are calculated at the federally negotiated, Public Service indirect cost rate for UW-Madison which is 38% of modified total direct costs. This excludes the participant support costs plus all but the first $25,000 of the sub-award to University of Arkansas. The modified total direct costs for this project are $297,101; the total indirect costs budgeted for UW-Madison are $112,899.

Total Budget Requested $600,000. Summary – 5-year Project Totals

Category	Amount
a. Salary (UW)	$151,189
b. Fringe (UW)	$55,335
c. Travel (UW)	$31,000
d. Equipment	$0
e. Supplies (UW)	$1,077
h1. Other Services	$30,000
h2. Meeting space	$3,500
H3. Sub-award (Univ of Ark)	$150,000
H4. Participant Support costs (UW)	$65,000
i. Total Direct Costs	$487,101
MTDC	$297,101
j. Indirect costs (UW)	$112,899
Total Budget Requested	$600,000

University of Arkansas (UAF) Budget Narrative
Co-PI Shannon Speir, Department of Crop, Soil, and Environmental Sciences

A. Personnel Salary & Wages **$0**

Co-PI Speir has a 12-month, fully funded tenure-track appointment. Therefore, Co-I Speir does not request any salary support for the duration of the grant.

B. Travel **$13,500**

All travel will be according to travel policy set by UAF (https://travel.uark.edu/travel-policy/index.php).

Co-PI Speir requests domestic travel funds sufficient to support travel related to Strategic Outcome 3 activities. Funds are requested to cover travel, lodging, and other travel related expenses (Years 1-4 = $3,000; Year 5 = $1,500; Total = $13,500).

C. Materials and Supplies **$8,000**

Co-PI Speir requests funds to cover materials and supplies for workshop activities (Years 1-3 = $2,000; Year 4-5 = $1,000; total = $8,000). Funds will cover printing costs, basic office supplies (e.g., paper, pens, markers, post-it notes), and other materials to support participant engagement at the workshop.

D. Other Direct Costs **$103,000**

Workshop Meeting Space: Co-PI Speir requests funds for workshop space over the duration of the project to convene researchers across institutions in the Hypoxia Task Force states. (Years 1-5 = $1,500; total = $7,500).

Forum for Research and Extension: Co-PI Speir requests funds for meeting space to convene researchers and extension specialists across institutions in the Hypoxia Task Force states to develop actionable outcomes for our research agenda (Years 1-4 = $3,000; total = $12,000).

Research Agenda Development: Co-PI Speir requests funds to support the development of a forward-looking research agenda to achieve reductions in nutrient loss the the Gulf of Mexico (Years 1-5 = $2,000; total = $10,000).

Participant Support Costs: Co-PI Speir requests funds to support participant attendance at workshops, including a final summary/synthesis workshop in Year 5 (Years 1-4 = $16,000; Year 5 = $9,500; total = $73,500).

E. Total Direct Costs (sum of A-D): **$124,500**

F. Indirect Costs: **$25,500**

50.0% of MTDC, in accordance with F&A Rate Agreement, DHHS, signed 5/20/2022.

G. Total Request (E+F): **$150,000**

Quality Assurance:

The project does not fund direct collection of environmental data or information. Research data potentially shared as part of project activities will include detailed descriptions of methodological approaches used in data collection, interpretation, and analysis. Any secondary data used for information synthesis or compiled for reporting purposes, for example through state and federal agencies, will rely on their internal oversight mechanisms such as quality assurance and Institutional Review Boards. In cases where secondary data might be used, we would not be incorporating those data into our own analyses or otherwise reproducing the data but rather would only be referencing or sharing published (presumably peer-reviewed) research papers and reports, or potentially discussing unpublished research may be presented or shared with others. By internal oversight mechanisms, we are referring to university or department level quality reviews established to ensure research integrity at each institution. Institutional Review Boards (IRBs) are specifically required by universities using federal funds to ensure oversight of anything dealing with human subjects research (to ensure quality and fair/non-manipulative treatment of research subjects). For example, here is a link to the IRB for UW-Madison https://irb.wisc.edu/.

Hypoxia Task Force
Upper Mississippi River Sub-Basin Committee
Work Plan for FY 2024 through FY 2026

Grant Information
U.S. Environmental Protection Agency
Non-State Member Support for the Gulf Hypoxia Action Plan Cooperative Grant Application
Funding Opportunity Number: EPA-I-OW-OWOW-HTF-02

Grantee Information
Organization
Upper Mississippi River Basin Association
7831 East Bush Lake Road, Ste 302
Bloomington, MN 55439

Point of Contact
Kirsten Wallace, Executive Director
Email: kwallace@umrba.org
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Project Description

Project Description

The states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin have directed the Upper Mississippi River Basin Association to convene and facilitate its Hypoxia Task Force Sub-Basin Committee for the Upper Mississippi River Basin. Through the project period, and with the available funding, the states have determined that their shared priorities for the Committee are to create an Upper Mississippi River Nutrient Reduction Strategy, an interstate system for continuous learning (also known as adaptive management), and an interstate communications strategy. UMRBA will participate in the Hypoxia Task Force and integrate the Sub-Basin Committee's actions into other interstate water planning.

Environmental Results

Through its workplan, the Upper Mississippi River Basin Association (UMRBA) aims to increase engagement and participation by traditional and non-traditional stakeholders in the Upper Mississippi River Basin (UMRB), more effectively collaborate among states and their executive agencies, and ultimately reduce nutrient pollution in the UMRB.

Organizational Information

UMRBA is the Governor-established forum for interstate water resource planning and management on the Upper Mississippi River, representing the common interests of its member states: Illinois, Iowa, Minnesota, Missouri, and Wisconsin. In part, UMRBA does this by facilitating and fostering cooperative planning and coordinated management and by creating a forum for discussion, study, and evaluation of major issues. UMRBA also serves as the Governors'-designated interstate water quality entity.

Through UMRBA, its member states work together to leverage their capacities and pull together towards common strategies or strategies that are compatible towards a common goal. Within the past few years, the states have collectively agreed to focus on building relationship and enhancing cooperative action across the Upper Mississippi River basin scale – beyond their individual state borders – to accelerate nutrient runoff reduction, including through collaborative implementation of conservation practices.

Place of Performance

Project activities will occur throughout the Upper Mississippi River Basin in the five states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin.

Project Period

UMRBA is proposing that it will accomplish its work plan tasks between October 1, 2023 through September 30, 2026.

Upper Mississippi River Basin Association
Hypoxia Taks Force
Upper Mississippi River Sub-Basin Committee
Project Workplan

Project Approach

Background

The Upper Mississippi River Basin Association (UMRBA) is a Governor-established forum for interstate water resource planning and management on the Upper Mississippi River, representing its member states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. Through their steady, 40-year commitment to UMRBA, the states have worked diligently with federal partners and stakeholders to advance multi-use management of the river, facilitating and fostering cooperative planning and coordinated management of the Upper Mississippi River Basin's water and related land resources. In acknowledging the complex nature of the river system and array of human uses, UMRBA has always held that river management requires thoughtful and inclusive dialogue among the diverse suite of stakeholder representatives throughout the region.

UMRBA is the interstate, regional collaborative of state agencies implementing the Clean Water Act and nutrient reduction strategies on the Upper Mississippi River and its basin. UMRBA initiates and maintains collaborative decision-making, cooperative action, and information sharing among the five UMRBA member states regarding water quality issues on the Upper Mississippi River. UMRBA provides a policy link between collective actions and individual actions by the states. In fulfilling this role, UMRBA promotes, supports and maintains the Hypoxia Task Force's (HTF) Upper Mississippi River Sub-Basin Committee.

The proposed workplan is in support of USEPA's Goal 5: Ensure Clean and Safe Water for All Communities (Table 1).

Workplan Approach

Through this workplan, UMRBA proposes to enhance nutrient management on the Upper Mississippi River's interstate waters through the following set of tasks:

1. Compile the separate state nutrient reduction strategies into an integrated Upper Mississippi River Nutrient Reduction Strategy and identify important interstate actions that will reduce nutrient pollution in the Upper Mississippi River
2. Evaluate implementation of important interstate actions to reduce nutrient pollution in the Upper Mississippi River and incorporate insights into ongoing implementation efforts
3. Communicate with stakeholders and other actors in the Basin about important interstate actions that will reduce nutrient pollution in the Upper Mississippi River and gain their commitment to ongoing implementation efforts
4. Maintain and enhance interstate collaboration that will reduce nutrient pollution in the Upper Mississippi River by supporting the Hypoxia Sub-Basin Committee and its various work teams
5. Integrate the important interstate actions that will reduce nutrient pollution in the Upper Mississippi River with other important interstate actions, such as flood mitigation and resilience planning

Table 1: UMRBA's alignment with USEPA's Strategic Goal 5

Strategic Goal	Strategic Objective	Proposed UMR Hypoxia Sub-Basin Committee Workplan	Workplan Alignment with USEPA Strategies
Goal 5: Ensure Clean and Safe Water for All Communities	Objective 5.2: Protect and Restore Waterbodies and Watersheds	• Compile the separate state nutrient reduction strategies into an integrated Upper Mississippi River Nutrient Reduction Strategy and identify important interstate actions that will reduce nutrient pollution in the Upper Mississippi River • Evaluate implementation of important interstate actions to reduce nutrient pollution in the Upper Mississippi River and incorporate insights into ongoing implementation efforts • Communicate with stakeholders and other actors in the Basin about important interstate actions that will reduce nutrient pollution in the Upper Mississippi River and gain their commitment to ongoing implementation efforts • Maintain and enhance interstate collaboration that will reduce nutrient pollution in the Upper Mississippi River by supporting the Hypoxia Sub-Basin Committee and its various work teams • Integrate the important interstate actions that will reduce nutrient pollution in the Upper Mississippi River with other important interstate actions, such as flood mitigation and resilience planning	• Protect and restore water quality, especially in historically underserved and underrepresented communities • Share water quality data to inform decision making of policies and natural resource management • Inform progress of the Hypoxia Task Force member states to reducing nutrient pollution to the Gulf of Mexico "Dead Zone" • Understand how climate change is impacting nonpoint source pollution and water quality • Amplify and coordinate successful state programs to make further progress in reducing nonpoint source nutrient pollution

Each workplan action as stated above is in line with USEPA's strategic goals for sub-basin committees (Table 2).

Table 2: UMRBA's workplan tasks and their alignment to USEPA's strategic goals for sub-basin committees. Each workplan task is associated with strategic goals one through four.

UMR Hypoxia Sub-Basin Committee Workplan Task	**Alignment with Strategic Goals 1-4 for Sub-Basin Committees**
Compile the separate state nutrient reduction strategies into an integrated Upper Mississippi River Nutrient Reduction Strategy and identify important interstate actions that will reduce nutrient pollution in the Upper Mississippi River	1. Convene regional, state, and other stakeholders not represented on the Task Force, including additional basin states, basin tribes, agencies, and interested parties and organizations to gather input, facilitate peer-to-peer learning opportunities, and encourage collaboration across boundaries 2. Help the states engage disadvantaged communities in nutrient reduction planning and activities within their boundaries 3. Support states in the respective sub-basins as they implement and coordinate comprehensive nutrient reduction strategies across boundaries. For example, where states are looking to adopt 4. Coordinate, consolidate, and improve access to data and present regional progress towards the Action Plan goals
Evaluate implementation of important interstate actions to reduce nutrient pollution in the Upper Mississippi River and incorporate insights into ongoing implementation efforts	This action relates to all four strategic goals for the Sub-Basin Committee.
Communicate with stakeholders and other actors in the Basin about important interstate actions that will reduce nutrient pollution in the Upper Mississippi River and gain their commitment to ongoing implementation efforts Maintain and enhance interstate collaboration that will reduce nutrient pollution in the Upper Mississippi River by supporting the Hypoxia Sub-Basin Committee and its various work teams Integrate the important interstate actions that will reduce nutrient pollution in the Upper Mississippi River with other important interstate actions, such as flood mitigation and resilience planning	These actions relate to all four strategic goals for the Sub-Basin Committee.

Outreach Strategies

UMRBA and the UMR HTF Sub-Basin Committee will maintain existing relationships and reach out to new individuals and organizations as UMRBA implements the proposed workplan. UMRBA will focus on developing new relationship with individuals and communities that have not been engaged effectively by past pollution reduction activities, such as native nations, ethnically diverse individuals, and economically disadvantaged communities.

UMRBA will utilize social research and professional experience to identify individuals, communities and organizations with whom we want to develop new relationships.

UMRBA will employ communication activities (focused by our communications plan) and convene in-person and virtual meetings (focused by our collaborative management strategies) to enhance participation among existing and new stakeholders.

Equity Statement

As the leading organization in the Midwest dedicated to solving the complex water resource challenges facing the Upper Mississippi River Basin, UMRBA recognizes the essential importance of including all people and communities in the process of creating and implementing solutions to these challenges. UMRBA welcomes, respects, and appreciates all of the ways individuals identify by race, ethnicity, gender identity, sexual orientation, religion, disability, and socioeconomic stratum, and is consistently striving to expand the range of voices, experiences, and perspectives that are heard in the discussions we convene throughout the Basin. UMRBA is also committed to understanding and addressing the impact that its policies and programs have on different people and communities, and working to ensure equity in opportunity and outcomes.

Budget Resources

A quality management plan and quality assurance project plan are not applicable to this workplan.

UMRBA will not be utilizing subawards for this workplan.

Environmental Results

Anticipated Outcomes

- Reduced nutrient pollution in the Upper Mississippi River
- More engagement and participation by traditional and non-traditional stakeholders in the Basin
- More effective collaboration among states and their executive agencies

Anticipated Outputs

- Data, analysis, and information about status and trends in nutrient pollution in the Upper Mississippi River
- Interstate actions that contribute to nutrient pollution reduction in the Upper Mississippi River
- Annual evaluations of interstate actions to continuously improve design and implementation
- Messages, meetings, workshops, and other stakeholder participation opportunities
- Regular meetings of the UMR Hypoxia Sub-Basin Committee and its work teams

Anticipated Products

- An integrated Upper Mississippi Nutrient Reduction Strategy
- An Adaptive Management Framework
- An Upper Mississippi Nutrient Reduction Communications Plan
- Notes and records of meetings of the UMR Hypoxia Sub-Basin Committee and its work teams

Milestone Schedule

For the project period of October 1, 2023 to September 30, 2026 (federal fiscal years 2024 through 2026), the proposed milestone schedule is as follows in Table 3.

Table 3: Milestones for accomplishing workplan tasks. An "X" denotes when the tasks are expected to be completed. Note that subtasks associated with each task are potential routes to accomplish the tasks but are subject to change.

Tasks	FY 2024	FY 2025	FY 2026
Compile the separate state nutrient reduction strategies into an integrated Upper Mississippi River Nutrient Reduction Strategy and identify important interstate actions that will reduce nutrient pollution in the Upper Mississippi River • Compare the Upper Mississippi River state nutrient reduction strategies, identifying shared priorities and illuminate opportunities for interstate collaboration • Develop an Upper Mississippi River Basin Nutrient Runoff Reduction Strategy, aligning the states' priorities for interstate collaboration	X		
Communicate with stakeholders and other actors in the Basin about important interstate actions that will reduce nutrient pollution in the Upper Mississippi River and gain their commitment to ongoing implementation efforts • Develop and implement a communications strategy related to the Upper Mississippi River Nutrient Reduction Strategy Nutrient • Develop a communications strategy and materials regarding the HTF Interim Nutrient Targets in 2025, and implementing strategies and messaging in coordination with HTF members and partners • Coordinate with SERA-46 in the development of a HTF Coordinating Committee Communications Plan Mississippi River communications plan	This work is ongoing.		
Maintain and enhance interstate collaboration that will reduce nutrient pollution in the Upper Mississippi River by supporting the Hypoxia Sub-Basin Committee and its various work teams • Routinely participate in Hypoxia Task Force meetings and workgroups • Attend relevant nutrient reduction strategies meetings in the Upper Mississippi River basin –e.g., Illinois NLRS Annual Meeting	This work is ongoing.		

Tasks	FY 2024	FY 2025	FY 2026
Integrate the important interstate actions that will reduce nutrient pollution in the Upper Mississippi River with other important interstate actions, such as flood mitigation and resilience planning • Convene the UMRBA Board and Water Quality Executive Committee (and other groups) to align priorities and share information and leverage resources as possible • Develop information papers describing the overlapping nature of nutrient management with other state water resource priorities	This work is ongoing.		
Evaluate implementation of important interstate actions to reduce nutrient pollution in the Upper Mississippi River and incorporate insights into ongoing implementation efforts • Develop and prioritize a suite of learning objectives • Develop a proposal(s) for obtaining the desired information (e.g., research or analysis) • Develop generalized processes for integrating learned information into nutrient management		X	X

Transferability of Results and Dissemination to Public

UMRBA will utilize its existing networks to disseminate information by email, newsletters, and listservs, UMRBA's and USEPA's HTF website, social media, webinars and presentations. UMRBA will utilize its partnerships, both those are existing and cultivated as part of developing the UMR Interstate Nutrient Reduction Strategy, Adaptive Management Framework, and an Interstate Communications Strategy to further bolster the distribution of information – e.g., UMRBA Board, HTF, the North Central Region Water Network, Upper Mississippi River Restoration program, and the Navigation and Ecosystem Sustainability Program.

UMRBA will report on these activities annually as part of USEPA's Grant Tracking and Reporting System.

Detailed Budget Narrative

The budget for the workplan is below and is intended to be evenly divided among three FYs (October 1, 2023 through September 30, 2026).

Budget Category	Amount
Personnel	195,000.00
Fringe	78,146.00
Travel	7,500.00
Supplies	2,102.00
Contractual	16,000.00
Other	5,805.00
Total Direct Cost	304,552.00
Indirect Cost	95,447.00
Total	**$400,000.00**

The budget for this workplan by project is estimated as follows:

Workplan Task	**Amount**
Upper Mississippi River Nutrient Reduction Strategy	131,870.00
Upper Mississippi River Interstate Communications Strategy	142,065.00
Upper Mississippi River Nutrient Reduction Continuous Learning Framework	126,066.00
Total	**400,000.00**

Personnel

The personnel costs include the covering the time of five UMRBA staff amount to $195,000.00.

Fringe

Fringe benefits total $78,146.00. Note that fringe benefits include benefits (30%), paid non-working rate (0.173 of wages and benefits), and SS/Med (0.0765 of wages and benefits).

Travel

Proposed spending for travel is $7,500.00 to cover lodging, airfare or rental car, and food per diem for travel to HTF CC meetings, planned meetings hosted by UMRBA to fulfill workplan needs, and other relevant nutrient meetings – e.g., Illinois Nutrient Loss Reduction Strategy annual conference.

Supplies

The requested amount for supplies is $2,102.00. The amount includes a computer and necessary technology supplies for the Project Coordinator to be able to perform their role. A computer will be used for a number of reasons, but not limited to email communication, hosting meetings, and writing documents.

Contractual

A communications consultant will help provide strategic direction for the components of a communications strategy for the UMRB. The estimated cost is $16,000.00.

Other

Meeting expenses such as renting a venue are estimated at $5,805.00.

Indirect Costs

For an indirect rate of 31.34 percent, the estimated indirect costs are $95,447.00.

Quality Assurance

The project does not include funding for the collection of environmental data, nor will the project create new information. If existing data are collected as part of project activities, they will be used to inform potential project objectives, milestones, and activities.