May 23, 2023

Upper Mississippi River Basin Association

166th Quarterly Meeting

Agenda
with
Background
and
Supporting
Materials

Hampton Inn Downtown
St. Paul, Minnesota

166th Quarterly Meeting
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St. Paul

Upper Mississippi River Basin Association

May 23, 2023

Agenda

Time		Topic	Presenter
9:30 a.m.		Call to Order and Introductions	*Rick Pohlman, Illinois DNR*
9:35	A1-A13	Approval of Minutes of February 28, 2023 Meeting	
9:40	B1-B27	Executive Director's Report	*Kirsten Wallace, UMRBA*
9:50		April 2023 Train Derailment in Wisconsin ▪ Overview of Response	*Jayson Schrank and Brenda Kelly, Wisconsin DNR*
10:05		Upper Mississippi River 2023 Flooding ▪ Conditions ▪ Management Responses ▪ Case Study: City of St. Paul ▪ Case Study: Fort Snelling State Park	*Craig Schmitt, NWS* *UMRBA Board and Federal Liaisons* *Lisa Hiebert, City of St. Paul* *Jess Althoff, Minnesota DNR*
11:00		Break	
11:15	C	Cooperative Institute for Research to Operations in Hydrology (CIROH) ▪ Overview ▪ CIROH Members and Partners in the Upper Mississippi River Basin	*Steve Buan, NOAA* *Melissa Kenney, University of Minnesota* *Witold Krajewski, University of Iowa* *Ana Barros, University of Illinois Urbana-Champaign*
12:00 noon		Lunch	
1:00 p.m.		Federal Fiscal Reports	*UMRBA Federal Liaisons*
2:15		Navigation and Ecosystem Sustainability Program	*Andrew Goodall, USACE*
2:45	D1-D8	Administrative Issues ▪ FY 2024 Budget ▪ Future Meeting Schedule	
3:00 p.m.		Adjourn	

ATTACHMENT A

Minutes of the February 28, 2023 UMRBA Quarterly Meeting

(A-1 to A-13)

Minutes of the 165th Quarterly Meeting
of the
Upper Mississippi River Basin Association

February 28, 2023
Virtual Conference Meeting

Tim Hall called the meeting to order at 9:00 a.m. Participants were as follows:

UMRBA Representatives and Alternates:

Rick Pohlman	Illinois Department of Natural Resources
Chad Craycraft	Illinois Department of Natural Resources
Loren Wobig	Illinois Department of Natural Resources
Tim Hall	Iowa Department of Natural Resources
Jake Hansen	Iowa Department of Agriculture and Land Stewardship
Grant Wilson	Minnesota Department of Natural Resources
Dana Vanderbosch	Minnesota Pollution Control Agency
Patrick Phenow	Minnesota Department of Transportation
Erin Fanning	Missouri Department of Natural Resources
Chris Klenklen	Missouri Department of Agriculture
Matt Vitello	Missouri Department of Conservation
Cheryl Ball	Missouri Department of Transportation
Jim Fischer	Wisconsin Department of Natural Resources

Federal UMRBA Liaisons:

Brian Chewning	U.S. Army Corps of Engineers, Mississippi Valley Division

Others in Attendance:

Brian McCoy	Illinois Department of Transportation
BJ Murray	Illinois Department of Transportation
Kirk Hansen	Iowa Department of Natural Resources
Randy Schultz	Iowa Department of Natural Resources
Caleb Whitehouse	Iowa Department of Transportation
Samuel Sturtz	Iowa Department of Transportation
Kevin Stauffer	Minnesota Department of Natural Resources
Megan Moore	Minnesota Department of Natural Resources
Neil Rude	Minnesota Department of Natural Resources
Nick Schlesser	Minnesota Department of Natural Resources
Vanessa Perry	Minnesota Department of Natural Resources
Ken Henderson	Missouri Department of Agriculture
Aaron Goddard	Missouri Department of Natural Resources
Bob Bacon	Missouri Department of Natural Resources
Elizabeth Kirby	Missouri Department of Natural Resources

Zachary Becker	Missouri Department of Natural Resources

Stacey Fowler	Missouri Department of Transportation
Dan Baumann	Wisconsin Department of Natural Resources
Patrick Kelly	Wisconsin Department of Natural Resources
Doug Daigle	U.S. Army Corps of Engineers, Lower Mississippi River Sub-basin Committee
LeeAnn Riggs	U.S. Army Corps of Engineers, Mississippi Valley Division
Richie McComas	U.S. Army Corps of Engineers, Mississippi Valley Division
Thatch Shepard	U.S. Army Corps of Engineers, Mississippi Valley Division
James Briggs	U.S. Army Corps of Engineers, New Orleans District
Breann Popkin	U.S. Army Corps of Engineers, Rock Island District
Jodi Cresswell	U.S. Army Corps of Engineers, Rock Island District
Marshall Plumley	U.S. Army Corps of Engineers, Rock Island District
Rachel Hawes	U.S. Army Corps of Engineers, Rock Island District
Greg Kohler	U.S. Army Corps of Engineers, St. Louis District
Jasen Brown	U.S. Army Corps of Engineers, St. Louis District
Joan Stemler	U.S. Army Corps of Engineers, St. Louis District
Lance Engle	U.S. Army Corps of Engineers, St. Louis District
Shawn Sullivan	U.S. Army Corps of Engineers, St. Louis District
Kevin Wilson	U.S. Army Corps of Engineers, St. Paul District
Kimberly Warshaw	U.S. Army Corps of Engineers, St. Paul District
Samantha Thompson	U.S. Army Corps of Engineers, St. Paul District
Karen Hagerty	U.S. Army Corps of Engineers, UMRR LTRM
Jim Cole	U.S. Army Corps of Engineers, Vicksburg District
Travis Black	U.S. Department of Transportation, Inland Waterways Gateway Office
Elisabeth Lang	U.S. Environmental Protection Agency
Katie Flahive	U.S. Environmental Protection Agency
Whitney King	U.S. Environmental Protection Agency
Zachary Liebowitz	U.S. Environmental Protection Agency, Region 7
Matt Mangan	U.S. Fish and Wildlife Service, Illinois Ecological Services
Kraig McPeek	U.S. Fish and Wildlife Service, Illinois-Iowa Ecological Services
Sara Schmuecker	U.S. Fish and Wildlife Service, Illinois-Iowa Field Office
Lauren Larson	U.S. Fish and Wildlife Service, Illinois-Iowa Field Office
Greg Conover	U.S. Fish and Wildlife Service, MICRA
Mary Stefanski	U.S. Fish and Wildlife Service, UMR National Wildlife and Fish Refuge
Neal Jackson	U.S. Fish and Wildlife Service, UMRCC
JC Nelson	U.S. Geological Survey, Midcontinent Region
Kim Lutz	America's Watershed Initiative
Anshu Singh	Corn Belt Ports
Jill Crafton	Izaak Walton League of Minnesota
Fritz Funk	Lake Onalaska Protection and Rehabilitation District
Brent Newman	National Audubon Society
Michael Welvaert	National Weather Service
Steve Buan	National Weather Service
Bryan Hopkins	The Nature Conservancy
Bryan Piazza	The Nature Conservancy
Randy Smith	The Nature Conservancy
Ashley Peters	University of Minnesota
Melissa Kenney	University of Minnesota
Kirsten Wallace	Upper Mississippi River Basin Association

Mark Ellis	Upper Mississippi River Basin Association
Natalie Lenzen	Upper Mississippi River Basin Association
Lauren Salvato	Upper Mississippi River Basin Association
Andrew Stephenson	Upper Mississippi River Basin Association
Erin Spry	Upper Mississippi River Basin Association

Minutes

Rick Pohlman moved and Jim Fischer seconded a motion to approve the draft minutes of the November 15, 2022 UMRBA quarterly meeting as provided in the agenda packet. The motion was approved unanimously.

Executive Director's Report

Kirsten Wallace pointed to the Executive Director's report in the agenda packet for a summary of the Association's work efforts since the November 2022 meeting.

Wallace showcased the Upper Mississippi River Restoration program's new communications flyers describing the state of the Upper Mississippi River ecosystem. Thanks to the Upper Mississippi River Restoration program, through USGS's administration on long term resource monitoring, we now have the most robust knowledge of any large riverine ecosystem in the world. That was underscored in a scientific report published in 2022 of the ecological status and trends, of which USGS's Jeff Houser has presented before the Board twice. Wallace noted that the UMRR partnership has wanted to make that information available and accessible to decision makers and partners and the public. Wallace applauded the UMRR team, including UMRBA staff Andrew Stephenson and Erin Spry, for their work in developing the series of flyers that communicate the most important observations about the river's ecological health and how long term monitoring can inform how the river's ecological resources can be sustained and restored. There will be five brochures – with a focus on floodplain forests, fisheries, sediment, water quality, aquatic vegetation.

Wallace announced that, on March 2, 2023, UMRBA and Waterways Council will co-host a bicameral, non-partisan briefing among Congressional staff for the purposes of informing new members about NESP and getting all staff to coalesce around a FY 2024 appropriation request of $120 million for NESP. UMRBA will provide a general overview of the program purpose and history, dual purpose authorization, the FY 2023 planned program, and the FY 2024 appropriation request. Waterways Council and The Nature Conservancy provided specific information about the navigation and ecosystem investments, respectively.

Wallace thanked USGS for hosting the February 15-16, 2023 Mississippi River Forum, which illuminated questions about the scope of current information available, what gaps in knowledge exist, and what science could be done to address those gaps. A report to congress on the results of the Forum will be published by USGS.

Tim Hall pointed to UMRBA's October 2022 to January 2022 financial statements provided on pages B-6 to B-11 of the agenda packet. Grant Wilson moved and Rick Pohlman seconded a motion to approve the Association's budget report and balance sheet as included in the agenda packet. The motion carried unanimously. Wallace mentioned that the UMRBA Board has reviewed the Association's biennial audit covering FYs 2021 and 2022.

Wallace thanked the UMRBA Board for renewing UMRBA's Personnel Manual, which adds new policies that will help UMRBA be competitive for retaining existing employees and attracting new employees. Tim Hall acknowledged Wallace and Natalie Lenzen, UMRBA's Operations Manager, for their assistance to the Board in drafting and evaluating recommendations for the Board's consideration. In response to a prompt from Hall, Pohlman moved and Jim Fischer seconded a motion to adopt the new UMRBA Personnel Manual effective March 1, 2023. The motion passed unanimously.

Wallace presented an update of various income and expenditure assumptions related to UMRBA's FY 2023 budget. In response, Loren Wobig moved and Grant Wilson amended UMRBA's budget that now estimates total income of $876,057.60 and total expenditure of $935,532.50 resulting in an anticipated net loss of $59,474.90. The motion carried nimously with no comments.

Wallace recalled that, at its November 15, 2022 quarterly meeting, the UMRBA Board authorized her to enter into a cooperative contract with USGS of up to $200,000 to receive financial compensation for UMRBA's involvement in the Navigation and Ecosystem Sustainability Program (NESP). Wallace explained that the Corps will now transfer the funds directly to UMRBA. In follow up and in response to a prompt from Hall, Fischer moved and Pohlman seconded a motion to amend the authorization from USGS to the Corps. The motion passed unanimously.

Interbasin Diversion Consultation

Annual Reporting

Kirsten Wallace explained that the five states are party to the 1989 Upper Mississippi River Basin Charter, which sets forth a notification and consultation process for any new or increased water diversion out of the basin that will exceed an average of five million gallons per day during any 30-day period. The Charter requires the signatory states to report on their involvement in qualifying diversion requests at UMRBA's annual meeting. The states reported as follows:

Illinois, Rick Pohlman — no qualifying diversion requests
Iowa, Tim Hall — no qualifying diversion requests
Minnesota, Grant Wilson — no qualifying diversion requests
Missouri, Erin Fanning — no qualifying diversion requests
Wisconsin, Jim Fischer — no qualifying diversion requests

Water Availability Cumulative Impact Assessment

Wallace reminded that the Governor's representatives directed UMRBA to convene state experts to assess the Charter's current provisions and identify any recommended revisions to the Charter to ensure that it advances the Charter's stated principles. In 2022, the *ad hoc* group implemented several scenarios for the purposes of better understanding 1) how their unique approaches and authorities to regulating water use may influence implementation of the Charter and 2) evaluate important contextual questions around the Charter's provisions. Each state developed and implemented a proposal for a diversion originating within their state, and then reviewed scenarios that the other states had identified. That led to many recommendations. Wallace explained that the Board's top priorities are to i) renew the Charter text reflecting the states' current value of water resources, ii) develop communications related to

UMRBA's efforts to review the UMR Basin Charter, and iii) develop a water availability cumulative impact assessment.

Wallace explained that the goal of the cumulative impact assessment is to assess vulnerabilities in water availability in the Upper Mississippi River Basin (UMRB) that support multiple water users and uses. The purpose is to inform the Upper Mississippi River states' evaluation of potential out-of-basin water diversions. The cumulative impact assessment will explore questions relating to the known and estimated impacts to water availability through the UMRB resulting from any current and potential future out-of-basin water diversions and consumptive uses. As a first step, the *ad hoc* group is working collaborative to align their water data categories and develop a database to organize the data.

Navigation Channel Management

USACE Beneficial Use Implementation Guidance Update

Richie McComas of USACE Mississippi Valley Division provided updates to Section 125 of WRDA 2020. Section 125 renews the Congressional commitment to beneficial reuse of dredged material by:

a) Establishing a national policy to maximize the beneficial use of material obtained from Corps projects, requiring the Corps to calculate the economic and environmental benefits of the beneficial use of dredged material when calculating the Federal Standard
b) Increasing the number of beneficial use of dredged material demonstration projects to 35 projects
c) Directing the Corps to develop five-year regional dredged material management plans
d) Emphasizing greater coordination among the Corps' dredging contracts

McComas reported that USACE Headquarters issued implementation guidance for Section 125(a) on November 7, 2022. McComas anticipates that updating regional dredged material management plans (DMMPs) will be more effective and easier to implement.

McComas explained that the new beneficial use policy allows the Corps to transition from calculating the federal standard based on a specific event to the full lifecycle of sediment management. McComas detailed the costs and benefits that comprise the federal standard, including the direct and incidental costs of dredging and dredged material transportation to a placement site and the placement along with estimated value of economic, environmental, and social benefits.

To facilitate quicker updates to the 20-year DMMPs, a beneficial use decision document integration (BUDDI) can be attached as an addendum to a DMMP updating the federal standard, adding new beneficial use sites, and identifying other means for adding capacity of placement sites.

The Corps has established a goal of reusing 70 percent of dredged material by 2030, and believes that reaching that goal will depend upon collaboration and partnerships. In response to a question from Tim Hall, McComas clarified the current rate of beneficial use is between 30 percent and 40 percent. Kirk Hansen asked how the cost share above the federal standard is calculated and whether projects costing above the federal standard require a non-federal sponsor. McComas believed it required a non-federal sponsor and would respond to the UMRBA Board with more detailed information about cost-sharing.

In response to a question from Jill Crafton, McComas explained that the Corps tests dredged material for water quality contaminants prior to reuse application and records the results in associated documentation.

McComas reported that the Corps intends to reevaluate all DMMPs to update them with the new policy. Breann Popkin clarified that part of the regional, five-year DMMP (5-year DMMP) is to outline the existing federal standard sites and then identify the additional beneficial reuse opportunities.

OSIT Recommendations

Jodi Creswell, as its co-Chair, conveyed the recommendations of the of the Rock Island District River Resources Coordinating Team (RRCT) channel maintenance policy and strategy, communications, and efforts to reduce sediment delivery to the Upper Mississippi River from its tributaries. Creswell pointed to pages D-22 to D-24 of the meeting agenda packet for the RRCT's February 13, 2023 letter to the Rock Island District Commander Col. Jesse Curry. The letter includes nine recommendations for resolving implementation barriers, sharing electronic documents, developing a charter for the On-Site Inspection Team (OSIT), and supporting state efforts to reduce sediment input from tributaries. The RRCT is evaluating which recommendations can be advanced in the near term. Jim Fischer thanked the RRCT for its work to develop the suite of recommendations, especially in light of the changes to the river. Kraig McPeek expressed appreciation for the ongoing discussion that is occurring through the RRCT.

Emerging Contaminants Monitoring

Popkin explained the various laws and regulations that govern dredge material though its lifecycle, concluding that USACE has been identified as the responsible party when dredged material has elevated contaminants. Based on historic boring data, the sands of the UMR lack the capacity to accumulate contaminants as readily as other areas. However, emerging contaminants are not yet understood and may behave differently. Because of the unknown properties of emerging contaminants, the Corps is taking a risk-based approach to manage dredged materials at this time.

Lauren Salvato provided a general overview of UMRBA's effort to develop an emerging contaminant monitoring plan for the UMRS. PFAS is a suite of synthetic, long-lasting chemicals with widespread use since the 1940s that can bioaccumulate in organisms. Most current PFAS monitoring data is obtained from surface water samples and lacks a comprehensive scope. PFAS is present throughout multiple media (e.g., sediment, water, fish tissue), but it is unknown how PFAS moves through the system. Some states have developed their own PFAS standards while others wait for USEPA guidance.

The Unregulated Contaminants Monitoring Rule (UCMR) has provided some PFAS data in community drinking water sources. Other data sources in the Upper Mississippi River include a 2019 Wisconsin DNR study of PFOS present in fish tissue and Minnesota PCA's monitoring on PFOS concentrations in sediment and macroinvertebrates as part of the 3M lawsuit on PFAS. The Wisconsin DNR study compared concentration of PFOS in water in nanograms per liter to concentration of PFOS in fish tissue in nanograms per gram.

Salvato said UMRBA is seeking funding to support its Interstate Water Quality Monitoring Program, which involves probabilistic and fixed site sampling to support the states' ability to determine whether Clean Water Act goals are being met related to four major designated uses (aquatic life, drinking water, fish consumption, recreation). The monitoring would allow for characterizing the river's condition, addressing information gaps, aid in public health and environmental justice, and improving down river conditions.

Salvato provided the following resources for additional information:

- Minnesota Department of Health PFAS testing of community water sources: https://mdh.maps.arcgis.com/apps/MapSeries/index.html?appid=63515695237f425ea7120d1aac1fd09a
- Illinois EPA PFAS dashboard: https://illinoisepa.maps.arcgis.com/apps/dashboards/d304b513b53941c4bc1be2c2730e75cf
- Missouri DNR PFAS viewer: https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=386c71927569476ebd2d0e6910424d17
- Wisconsin DNR PFAS reports: https://dnr.wisconsin.gov/topic/PFAS/SWFish.html
- Iowa DNR PFAS sampling: https://experience.arcgis.com/experience/b04e0e828a974e6e8962e47895ebb520

In response to a question from Megan Moore, Salvato confirmed that PFOS monitoring was not included in the CWA Reaches 0-3 pilot that occurred in 2016. Jill Crafton asked for a portal to submit fish tissue data from a local watershed district board. Salvato suggested submitting the information to the WQX portal. Salvato explained that UMRBA is planning to create a centralized UMR database in the near future but it is not available yet.

Resilience Planning

Iowa Drought Plan

Tim Hall explained that, during a 2021 drought meeting hosted by the Iowa State Emergency Operations Center, Iowa DNR, the Iowa climatologist's office, and the Iowa Department of Homeland Security (HSEMD) called for a statewide drought plan that would answer two questions: i) what information is needed and when is that information needed and ii) what actions are needed and when are those actions needed? Iowa established a core drought team with members from HSEMD, DNR, IDALS, National Drought Mitigation Center (NDMC), and the USDA Climate Hub located in Ames, Iowa. And, Iowa established a science and data team to ensure the plan is data-driven. Hall reported that the new Iowa Drought Plan is complete with the Directors of Iowa DNR, HSEMD, and the Iowa Secretary of Agriculture all providing their formal endorsement. The Plan is available the Iowa DNR website at https://www2.illinois.gov/dnr/WaterResources/Documents/SWPTF_Report_Dec2022.pdf.

The Iowa Drought Plan sections the state into five drought regions based on similarities in geology and hydrology and classifies drought as normal, watch, warning, and emergency. Drought triggers are determined for each drought region separately. Three of four individual "triggers" must be met in order to declare drought in any of the four classifications; the trigger categories are streamflow, USDM drought designation, precipitation, and standardized precipitation index. Internal and external communication systems are enacted following a declaration of a drought classification.

The Iowa Drought Plan is intended to serve as a catalyst for county or local planning. Iowa anticipates updating the Drought Plan following the scheduled five-year updates to the State Hazard Mitigation Plan.

Plans to update the Iowa Drought Information System include establishing a statewide soil moisture network and a web-based portal to support the drought information system.

Crafton suggested efforts to encourage farmers of larger agricultural systems to hold more water. She also suggested modeling the Practical Farmers of Iowa's regenerative agriculture work. Hall responded that the Drought Plan is part of a larger effort to understand water flow through drain tile systems.

In response to a question from Dan Baumann, Hall explained that Iowa does declare a drought emergency as a means to receive allows federal funding for response efforts. The purpose for the declarations in the Iowa Drought Plan is to convey information to local authorities in their response efforts. Iowa intends to integrate those efforts collaboratively rather than have one supersede the other.

Illinois Water Plan

Loren Wobig presented the 2022 Illinois State Water Plan update, which represents opportunities to improve water related programs and policies, educate, protect water quality and supply, better address water-related social and environmental injustices, better engage with concerned citizens and organizations, implement measurable water related actions, and ensure that the water resources of the state are available to all people in Illinois. This new plan includes social and environmental justice considerations and involves dynamic data, is accessible to the public, and considers climate change impacts. The Plan highlights 13 critical issues and 147 recommendations for resolving, improving, or advancing those issues. Wobig pointed out that 33 percent of the 147 recommendations relate to climate change.

The Illinois State Water Plan Task Force is pursuing an executive order or joint resolution to establish credibility of the Plan. The Task Force will continue to meet and measure the results of the updated Plan. The Task Force is also launching an Integrated Water Information Center (IWIC): a central library for all water information in the state. The library will include groundwater and well data to flood damage assessment information. Wobig offered the following web link for partners to track the Task Force's efforts: https://www2.illinois.gov/dnr/WaterResources/Pages/StateWaterPlanTaskForce.aspx. Legislation is needed to formally recognize the State Water Plan Task Force and support it through funding.

Bryan Hopkins expressed appreciation to the state of Illinois for updating the statewide Water Plan and expressed The Nature Conservancy's interest to engage in efforts related to the integrated watershed portion of the Plan. Hopkins noted that The Nature Conservancy is also re-evaluating its water policy. In response to a question from Hopkins, Wobig explained that the levee database will support information about levee height, levee issues, pump station maintenance, regulatory needs, and funding.

2023 UMRS Flood and Drought Forecast

Mike Welvaert explained that, as of February 21, 2023, soil moisture conditions are dry across Minnesota and Iowa. Conditions were wetter earlier in the winter season, but most of the region has returned to "near normal" conditions.

Welvaert reported that current flood risks are high for areas with deeper snowpack. Frost depths are generally a foot or less in Minnesota, Wisconsin, and Iowa. This should allow for infiltration of melt water into soil and will reduce flooding risk. The outlook for temperatures in the region within the next month are projected to be below normal whereas precipitation looks to be above normal. The National Central

River Forecast Center (NCRFC) flood outlook has assigned an above normal flood risk for the Minnesota River and the Upper Mississippi River mainstem, where there is potential for moderate to major level flooding. Spring temperatures and precipitation will drive the melt rate and timing, affecting the potential and severity for flooding.

Water Levels to Support Navigation in Middle Mississippi River (Open River)

Joan Stemler presented an overview of low water conditions and operations in the St. Louis District. In October 2022, the Mississippi River surpassed the 10 daily-low records at the St. Louis gage. The fall 2022 extended river forecast for the Middle Mississippi River predicted extremely low stages from spring. Multiple dredges were working to prepare the 9-foot navigation channel and the Corps used extra storage at Lake Shelbyville and Carlyle Lake to raise river levels. Stemler credited the use of storage to reduce the impact of "ice bite" or water level decrease at ice formation.

Megan Moore asked if there was any concern for floodplain forests while water was held high. Stemler explained that high water held at reservoirs is maintained at a level that does not affect the floodplain forests. The Corps consults biologists to inform water management decisions.

Multi-Benefit Conservation Practices

Outcomes from November 2022 Workshop

Lauren Salvato explained UMRBA members states are working collaboratively through the UMRBA Water Quality Executive Committee and Hypoxia Task Force federal-state partnerships. In recent years, the UMRBA Water Quality Executive Committee has had focused conversations for states to learn from one another in their state nutrient reduction strategies as well as to work collectively to accelerate nutrient reduction efforts. As part of that larger conversation, UMRBA is convening leading experts and organizations to discuss opportunities and challenges associated multi-benefic conservation practices on agricultural lands.

Salvato reported that UMRBA hosted a workshop in November 2022 for the purposes of improving shared knowledge of conservation techniques, strengthening regional collaboration, and identifying collaborative solutions for accelerating the adoption of conservation practices. The workshop included panel presentations and facilitated discussions related to finance, research, and communications. Salvato provided an overview of the many resulting recommendations raised during the facilitated discussions, and said UMRBA will soon publish a summary of presentations and recommendations.

Another workshop is being planned for October 2023. Salvato thanked the workshop planning committee, which included state natural resource and agricultural agencies and USEPA.

Navigation and Ecosystem Sustainability Program and Upper Mississippi River Restoration Program

Navigation and Ecosystem Sustainability Program (NESP)

Andrew Goodall reported that the first NESP Coordinating Committee meeting is scheduled for April 5, 2023. A charter for the NESP Coordinating Committee Charter remains in development, and partner funding agreements are under review. The Rock Island District submitted a proposal for convening the Advisory Panel to MVD, and it will be considered by the USACE vertical team. NEPA compliance

evaluation and Endangered Species Act coordination remain ongoing. Goodall reported on the status of ecosystem restoration projects: construction for one project will begin this summer, construction contracts will be awarded for six projects, and planning will continue on two projects. In response to a question from Kirsten Wallace, Goodall confirmed that UMRBA's comments regarding the Advisory Panel were incorporated into the proposal submitted to MVD.

JC Nelson said that, during the recent Mississippi River Science Forum, it was clear that there are a many unmet data and research needs in the river system. In response to a question from Nelson, Goodall explained that NESP's monitoring and adaptive management efforts in FY 2023 will depend upon funding. In response to a question from Stephenson, Rachel Hawes reported that development on the NESP Systemic Forest Stewardship Plan is delayed.

Bryan Hopkins stated that The Nature Conservancy is a strong supporter of NESP, but has serious concerns about the program's current lack of transparency. Hopkins emphasized a need for systemic restoration planning, expressing concern that the quick project selection cycle minimized partner engagement and removed the ability to focus on large scale issues. Goodall expressed appreciation for TNC's support for NESP. Goodall underscored that NESP is maturing and anticipates that NESP will foster collaborative, systemic restoration planning in the future. Goodall stated that he hopes partner engagement will be fostered through the NESP Coordinating Committee quarterly meetings going forward.

Financial Update / Program Efforts

Marshall Plumley said UMRR anticipates receiving $55 million in FY 2023 for the first time, and that the program has the potential to expand further following Congress's action in WRDA 2022 that increased its annual authorized appropriation to $90 million – i.e., $75 million for HREPs and $15 million for LTRM. Plumley applauded the partnership for this recognition by Congress.

Plumley said Headquarters is still reviewing the draft 2022 UMRR Report to Congress. The UMRR Coordinating Committee is reviewing of progress in implementing the 2015-2025 UMRR Strategic and Operational Plan and evaluating and prioritizing actions for advancing remaining priorities through 2025. Plumley applauded the success of in communicating the third UMRR ecological status and trends analysis. UMRR is drafting concise flyers to a) increase accessibility to the long term monitoring dataset and b) improve knowledge of the ecosystem to key decision makers, partners, and interested public.

Plumley explained that the UMRR Coordinating Committee tasked an *ad hoc* group to identify and prioritize information needs that can be advanced through UMRR long term resource monitoring and science. The group has identified 29 specific information needs in four categories: hydrogeomorphic change, floodplain ecology, aquatic ecology, and restoration applications.

UMRR will soon initiate scoping for planning future HREPs, with the goal of identifying a suite of potential projects by 2025. UMRR is also planning to host a workshop among habitat project practitioners and resource experts in winter 2023 or 2024.

State Priorities

Kirk Hansen underscored the value of the Upper Mississippi River's partnership among states, federal agencies, and nongovernmental partners. Hansen encouraged partners to lean into the foundational building blocks of NESP: strategic planning, communications, adaptive management, and partnership.

At this stage of NESP implementation, there is a need to reduce redundancies with UMRR and instead leverage capacities. Hansen hopes that formalizing partner roles through the NESP Coordinating Committee, including through the development of a charter, will strengthen the opportunities through NESP. Hansen stated UMRBA priority for implementing Section 8004(a) of NESP's authorization – i.e., integrated ecological sustainability in the 9-foot navigation channel management. Hansen stated that UMRBA and its member states remain committed to advancing the multi-purpose management of the Upper Mississippi River.

Nongovernmental Program Initiatives

Mississippi River Basin Monitoring System

Bryan Piazza introduced The Nature Conservancy's (TNC's) proposal for a comprehensive monitoring system for the Mississippi River Basin. The purpose for the monitoring system is to inform management that will improve water quality, make the river more flood resilient, and create a healthier Gulf of Mexico. TNC has found that the current monitoring system in the Mississippi River Basin is inadequate to determine the levels of risk and the effects of actions to mitigate those risks. Although monitoring efforts exist, these efforts are truncated geographically and are challenged by inconsistent monitoring. Therefore, TNC is recommending the establishment of a fully federally funded sentinel monitoring system across the Mississippi River basin. Three critical levels are identified to achieve the goal: align funding, recruit champions and advisors, and target places and solutions.

TNC is fostering a coalition of over 50 active members to design the program and to advocate for funding. The coalition has named four priorities (i.e., water quality and hypoxia, flood risk management and resilience, navigation and safety, and ecosystems and habitat quality) and three objectives:

- Obtain consistent and comparable information on loads and trends in streamflow, water quality, and sediment
- Provide real-time information needed to guide decisions on flood risk management and resilience
- Develop a data interface for transparent and timely data availability.

TNC's technical design group is recommending a publicly accessible data interface for the sentinel monitoring system. The proposed "sentinel system" will require $23.4 million annually whereas the current system costs $20 million annually.

Mississippi River Basin Framework for Improving Ecosystem Health

Eileen McLellan said the Environmental Defense Fund (EDF) convened group of experts from federal agencies, universities, and river organizations met to develop a plan for promoting ecosystem health on the Mississippi — Atchafalaya River Basin. The workshop group concluded that ecological health is dependent more on the "function" than the "form" of the ecosystem. EDF developed a series of pathways for ecosystem health improvement, incorporating strategies for decreasing ecosystem stressors, increasing ecosystem function, and increasing ecosystem resilience. EDF is proposing several ecosystem health indicators that collectively indicate the ability of an ecosystem to provide a service. As an example, indicators of reduced stressors could include length of tile drainage and channel sinuosity. EDF hopes to encourage ecosystem managers to think of ecosystem functions rather than forms, to

expand water quality and species monitoring to test leading indicators of change, and to better communicate how things that managers can control affect ecosystem health.

Mississippi River Partnership Initiative

Kim Lutz shared the America's Watershed Initiative's collaborative work to develop a basin-wide organizational structure to improve water quality, mitigate the impacts of climate change, improve inland transportation, and engage social justice communities. The purpose is to improve efficiency and effectiveness of federal spending, improve data and its utilization to inform decision making, and encourage integrated, multi-purpose management of the basin's water resource management. AWI has developed a work plan that involves assessing existing Federal programs and funding, identifying gaps in governance, and building relationships with states and multi-state alliances. AWI plans to use that assessment to develop action plans and funding priorities. The group is currently engaging federal agencies to gather support and information.

In response to a question from Lauren Salvato, Lutz acknowledged the many unique partnerships, authorities, and water resources within each of the Mississippi River sub watersheds. AWI's proposal would provide the forum for the thoughtful conversations needed for integrated management.

Wallace asked whether Piazza, McLennen, or Lutz had a specific request for UMRBA at this time. In response, Piazza requested UMRBA's continued leadership as an example of a well functioning organizational structure. McLellan requested further information on success stories across the Upper Mississippi River Basin. Lutz requested that the UMRBA board to share questions and concerns about AWI's proposal.

Administrative Issues

Kirsten Wallace announced that the Corps released its FY 2023 workplan that included $18.379 million for the ecosystem element of NESP. This is in addition to the $49 million appropriation for NESP.

Election of Officers

Kirsten Wallace expressed gratitude to Tim Hall for his second chair rotation. Wallace explained that Minnesota was scheduled to serve as Chair in 2023, but has requested to swap terms with Illinois given that Minnesota recently transitioned its primary membership. On behalf of Illinois, Rick Pohlman agreed to serve in the Chair capacity in 2023 with Minnesota serving in 2024.

In response to a prompt from Tim Hall, Grant Wilson moved and Erin Fanning seconded a motion to elect Rick Pohlman as Chair of the UMRBA Board in 2023. The motion was unanimously approved.

Rick Pohlman moved and Jim Fischer seconded a motion to appoint Grant Wilson as Vice Chair of the UMRBA Board. The motion was unanimously approved.

Rick Pohlman moved and Rick Pohlman seconded a motion to elect Jason Tidemann as Treasurer. The motions unanimously approved.

Future Meeting Schedule

May 2023 – St. Paul, Minnesota

- UMRBA Quarterly Meeting – May 23
- UMRR Coordinating Committee quarterly meeting – May 24

August 2023 – La Crosse, Wisconsin

- UMRBA Quarterly Meeting – August 8
- UMRR Coordinating Committee quarterly meeting – August 9

October 2023 – St. Louis, Missouri

- UMRBA Quarterly Meeting – October 24
- UMRR Coordinating Committee quarterly meeting – October 25

With no further business, the meeting adjourned at 2:50 p.m.

ATTACHMENT B

Executive Director's Report

- **Executive Director's Report** *(B-1 to B-6)*
- **UMRBA FY 2024 Appropriation Request Letter for USACE (3/20/2023)** *(B-7 to B-8)*

  [Note: There is a similar letter to the Senate Appropriations Committee. The letters are available at: https://umrba.org/document/FY2024-appropriations-priorities.]
- **UMRBA FY 2024 Appropriation Request Letter for USEPA Gulf Hypoxia Program (3/20/2023)** *(B-9 to B-10)*

  [Note: There is a similar letter to the Senate Appropriations Committee. The letters are available at: https://umrba.org/document/FY2024-appropriations-priorities.]
- **Interstate Council on Water Policy FY 2024 Appropriation Request Letter for Streamgaging Program** *(B-11 to B-19)*
- **UMRBA NRCS Mississippi River Basin Healthy Watersheds Initiative (MRBI) and the National Water Quality Initiative (NWQI) Comment Letter (4/7/2023)** *(B-20 to B-22)*
- **Treasurer's Quarterly Statement (5/9/2023)** *(B-23)*
- **FY 2023 Budget Report and Balance Sheet (5/9/2023)** *(B-24 to B-27)*

Executive Director's Report
May 2023

UMRBA Staff

Brian Stenquist is joining UMRBA staff as assistant to the Executive Director though a contractual relationship with *Meeting Challenges*. UMRBA is expanding its retainer with *Meeting Challenges* to include support in advancing UMRBA's strategic initiatives.

Advocacy

FY 2024 Appropriations Requests

UMRBA has submitted to the UMR delegation the following FY 2024 appropriations requests: $120 million for the Navigation and Ecosystem Sustainability Program (NESP), $55 million for the Upper Mississippi River Restoration (UMRR) program, $1.2 million for a UMR flow frequency study, and $25 million for the Gulf Hypoxia Program. UMRBA submitted appropriations requests through members' online portals, letters to individual member offices in support of those requests, and letters to the House and Senate Appropriations Committees. The letters to the Appropriations Committees are provided on pages B-7 to B-10 of the agenda packet.

UMRBA joined the Interstate Council on Water Policy's multi-signatory letter to the House and Senate Appropriations Committees requesting FY 2024 appropriations of $32 million for USGS federal priority streamgages, $68 million for USGS Cooperative Matching Funds (including $33 million for streamgage support), and $35 million for Next Generation Water Observing System and data delivery modernization. The letter is provided on pages B-11 to B-19 of the agenda packet.

Navigation and Ecosystem Sustainability Program

On March 2, 2023, UMRBA and Waterways Council co-hosted a bicameral, non-partisan briefing among Congressional staff for the purposes of informing new members about NESP and getting all staff to coalesce around a FY 2024 appropriation request of $120 million for NESP. UMRBA presented on the overall program history, dual purpose authorization, the FY 2023 planned program, and the FY 2024 appropriation request. Waterways Council and The Nature Conservancy provided specific information about the navigation and ecosystem investments, respectively.

Rep. Betty McCollum Mississippi River Meeting

On March 16, 2023, Rep. Betty McCollum held a "State of our River: Mississippi River Dialogue" meeting. UMRBA staff attended. Minnesota climatologist Luigi Romolo provided a briefing about how climate change may impact the Mississippi River. The meeting also included panel discussions among state, tribal, federal and local government leadership as well as river stakeholders. Rep. McCollum reported that she plans to re-introduce in this Congress a revised version of her legislation, the Mississippi River Restoration and Resilience Initiative.

COMMERCIAL NAVIGATION

Inland Waterways Users Board

The Inland Waterways Users Board (IWUB) held its April 13, 2023 quarterly meeting in Pittsburgh, Pennsylvania. The IWUB hosted briefings on the overall USACE navigation program, the status of the Inland Waterways Trust Fund (IWTF), and low water operations on inland waterways. The Rock Island District presented on the L&D 25 and La Grange lock modernization projects, sharing anticipated impacts from inflation and other issues on the projects' schedule and cost. UMRBA staff attended the IWUB quarterly meeting via a virtual connection.

Upper Pool 4 Beneficial Reuse for Habitat Restoration Groundbreaking

UMRBA staff provided remarks in celebration of the Upper Pool 4 habitat restoration project, held on May 16, 2023 at the Saratoga Park in Bay City, Wisconsin. This project was one of ten projects selected across the nation under a pilot program for exploring beneficial use of dredged material authorized in Section 1122 of the Water Infrastructure Investment for the Nation (WIIN) Act of 2016. UMRBA's remarks underscored the value of this project in exemplifying the increased capability and cost-savings of integrating river management that this pilot program is exploring.

Beneficial Use Work Group

UMRBA staff participated in the Corps' Beneficial Use Work Group meeting on May 5, 2023. The meeting included updates on the Corps' beneficial use policies, agency updates (e.g., potential projects that might utilize dredged material), relevant research through ERDC, and other unfolding developments related to beneficial reuse of dredged material.

ECOSYSTEM HEALTH

Upper Mississippi River Restoration

Beaver Island Tour

On April 10, 2023, the UMRR Program Manager Marshall Plumley and the Corps Rock Island District hosted the Assistant Secretary of the Army for Civil Works [ASA(CW)] Michael Connor on a tour of Beaver Island habitat rehabilitation and enhancement project (HREP). UMRBA staff joined the tour along with representatives from USFWS, USGS, and state agencies. Iowa DNR volunteered an electrofishing experience for ASA(CW) Connor. The tour was held during high water, underscoring the benefits of the elevated forest floor for restoring and protecting the forests. Plumley also briefed ASA(CW) Connor on the UMRR long term monitoring program and recent analyses.

LTRM-Information Needs

UMRR is employing an implementation planning process for LTRM, focusing on the potential to expand knowledge of the UMRS and to inform ecosystem restoration and management. The objective is to work under the umbrella of the UMRR 2015-2025 Strategic Plan to identify specific unmet information and research needs and determine a set of priority actions to address those needs.

The *ad hoc* planning team initially identified 29 information needs, and prioritized 11 of those information needs in light of existing and anticipated future funding. The team is scheduled to present this suite of priority information needs to the UMRR Coordinating Committee at its May 24, 2023 meeting. The planning team is

refining associated cost estimates, and plans to present those estimates to the UMRR Coordinating Committee at its August 9, 2023 meeting.

Navigation and Ecosystem Sustainability Program

NESP Coordinating Committee Meeting

The NESP Coordinating Committee convened an April 5, 2023 meeting in East Moline, Illinois. The meeting was the first formal, public-facing convening of the Coordinating Committee since NESP received construction funding in 2022. The agenda included briefings of the ecosystem program's status, particularly focusing on ecosystem project implementation and plans for future project selection. The NESP Coordinating Committee also featured the L&D 22 fish passage project, including monitoring and design activities. UMRBA staff participated in the meeting.

Groundbreakings

UMRBA attended the NESP groundbreakings on April 12, 2023 for the L&D 14 mooring cell and on May 18, 2023 for the L&D 22 fish passage and L&D 25 lock modernization projects.

Upper Mississippi River Conservation Committee

The Upper Mississippi River Conservation Committee (UMRCC) convened its annual conference on March 20-23, 2023 in Red Wing, Minnesota. UMRCC's conference included presentations about climate, forests, aquatic vegetation, and water quality conditions affecting the river ecosystem; comparisons to other large river systems; and tribal perspectives on river management. UMRBA staff attended the conference.

RESILIENCE PLANNING

Midwest Climate Adaptation Science Center Workshop

On March 21-23, 2023, USGS Upper Midwest Environmental Sciences Center (UMESC) hosted at the Forest Products Laboratory in Madison, Wisconsin. The purpose was to inform and inspire collaborative project opportunities centered on nature-based solutions to reduce impacts from extreme precipitation events in the Upper Mississippi River Basin. The workshop was funded by the Midwest Climate Adaptation Science Center. UMRBA staff served as a workshop project advisor and participated in the workshop.

National Integrated Drought Information System (NIDIS) Executive Council

On behalf of the Interstate Council on Water Policy, Kirsten Wallace participated in the National Integrated Drought Information System (NIDIS) Executive Council meeting on April 27, 2023 in Washington, D.C. The Council discussed a series of focused questions regarding climate-adapted drought planning for long term resilience, including the state of existing research. This informed a subsequent conversation on developing a research agenda to advance knowledge of drought impacts and expanding decision-support resources for drought planning. The meeting also featured the 2022 drought that spanned the Mississippi River Basin as well as the White House Council on Environmental Quality's work on interagency drought resilience partnerships.

HAZARDOUS SPILLS COORDINATION, MAPPING, AND PLANNING

Oil Pollution Act (OPA) Planning and Mapping

UMRBA continues to update the Illinois statewide Inland Sensitivity Atlas. UMRBA staff incorporated partial updates from the Great Lakes Commission (GLC) for Michigan and Ohio into the regional geodatabase. The most recent geodatabase was delivered to USEPA Region 5 on May 1, 2023.

UMRBA staff participated in the following engagements:

- Mapping Group virtual meetings on March 6, 2023 and May 1, 2023 as well as an Inland Zone Planning meeting on May 18, 2023.
- The Joint Regional Response Teams 5 and 7 meeting held in St. Charles, Missouri on April 5-6, 2023, presenting a briefing on the October 2022 St. Louis area response strategy field reconnaissance.
- Greater St. Louis Sub-area virtual planning meeting held on May 4, 2023.

As part of its ongoing spills program, UMRBA staff provided general support for spill response planning in the Upper Mississippi River and Minneapolis/St. Paul sub-areas.

Upper Mississippi River Hazardous Spills Coordination Group

The Upper Mississippi River Spills Group held its spring meeting on April 4, 2023 at the Great River National Museum in East Alton, Illinois. The primary purpose for this meeting was to discuss response planning activities scheduled to be implemented in 2023.

UMRBA staff supported response to the BNSF derailment at De Soto, Wisconsin on April 27, 2023. This support mostly involved providing planning materials to responders and disseminating incident updates to Upper Mississippi River Spills Group members.

WATER QUALITY

Water Quality Task Force

The UMRBA Water Quality Task Force (WQTF) met virtually on March 8, 2023 for the purposes of refining the UMRBA UMR Interstate Water Quality Monitoring Plan and preparing for the next iteration of implementation. Currently, the WQTF is planning to implement the fixed-site component of the monitoring plan in 2025.

Nutrient Management

On March 1, 2023, Minnesota Pollution Control Agency hosted the fourth annual Ag-Urban Partnership Forum in St. Joseph, Minnesota. The Forum is organized through a collaboration among state agencies, local entities, and agriculture interest groups throughout Minnesota. The theme for this year's Forum was extreme weather resiliency. Minnesota Climate Adaptation Partnership Director Dr. Heidi Roop was featured as the keynote speaker. Other presentations showcased successful partnerships that improved the resilience of local communities and small watersheds to extreme precipitation. UMRBA staff attended the Forum.

NRCS Mississippi River Basin Healthy Watersheds Initiative (MRBI) and the National Water Quality Initiative (NWQI)

On April 7, 2023, the UMRBA Water Quality Executive Committee submitted a letter to USDA NRCS providing suggestions for improving NRCS's Mississippi River Basin Healthy Watersheds Initiative (MRBI) and the National Water Quality Initiative (NWQI). This letter was provided to NRCS in response to NRCS's request for comments. In particular, the Water Quality Executive Committee calls for improving connection to state and local watershed plans, efficiency in applications, and planning assistance. This letter is provided on pages B-20 to B-22 of the agenda packet.

USACE Harmful Algal Bloom Demonstration Program

Under a short-term authorization, USACE has established a freshwater harmful algal bloom (HAB) research and development program. In WRDA 2022, Congress recently added the Upper Mississippi River basin as a priority focal area for the Corps' HAB technology demonstration program, which focuses on developing scalable technologies to minimize HAB frequency and effects across scales, ecoregions, and system types. On April 20, 2023, USACE Engineer Research and Development Center (ERDC) provided a briefing to the UMRBA Water Quality Executive Committee about the program and potential opportunities for in the Upper Mississippi River basin.

Fish Forum

On March 9, 2023, UMRBA staff presented at the 2023 Fish Forum on UMRBA's Interstate Water Quality Monitoring Program and its fish tissue monitoring. The Fish Forum was hosted virtually over four days and included topics such as fish consumption advisories, PFAS monitoring studies, fish consumption and equity, risk communication, and climate change.

COLLABORATION

Mississippi River Cities and Towns Initiative

UMRBA staff attended the Mississippi River Cities and Towns Initiative's (MRCTI's) reception with the U.S. Army Corps of Engineers on March 2, 2023. The reception hosted remarks from the Deputy ASA(CW) Jaime Pinkham, Acting Director of USACE Civil Works Eddie Belk, and FEMA Associate Administrator of Resilience David Maurstad. Additionally, MRCTI and the Embassy of the Kingdom of the Netherlands announced a new partnership focused of flood resilience.

Interstate Council on Water Policy

The Interstate Council on Water Policy (ICWP) co-hosted with the National Water Supply Alliance the Annual Roundtable on April 4-5, 2023 and Water Policy Summit on April 5, 2023. The events were held in Washington, D.C. In addition to association business meetings, the Roundtable hosted panels of various federal agencies regarding their water-related programs and projects. The Policy Summit convened leading organizations working on climate resilience, water data and science, water resources planning and pre-disaster mitigation, and infrastructure. In addition, the Policy Summit hosted a Congressional Panel featuring the House Transportation and Infrastructure Subcommittee on Water Resources and the Environment and the Senate Energy and Natural Resources Committee. As a member of ICWP, UMRBA staff attended the series of events.

UMRBA staff represented ICWP as a member of the NIDIS Steering Committee at its April 27, 2023 meeting in Washington, D.C. (More information provided above.)

FINANCIAL REPORT

Attached as page B-23 is UMRBA Treasurer Jason Tidemann's statement regarding his review of UMRBA's financial statement for the period of January 1, 2023 to March 31, 2023.

Attached as pages B-24 to B-27 are UMRBA's 2023 budget reports and balance sheet. As of May 9, 2023, ordinary income for FY 2023 totaled $736,320.59 and expenses totaled $744,566.95 for net ordinary income of -$8,246.36. As of this date, UMRBA's cash assets totaled $189,851.85.

UMRBA
Upper Mississippi River Basin Association

March 20, 2023

The Honorable Kay Granger
Chair
U.S. House of Representatives
Appropriations Committee
H-307, The Capitol
Washington, D.C. 20515

The Honorable Rosa DeLauro
Ranking Member
U.S. House of Representatives
Appropriations Committee
H-307, The Capitol
Washington, D.C. 20515

The Honorable Chuck Fleischmann
Chair
U.S. House of Representatives
Energy and Water Appropriations Subcommittee
2362-B Rayburn House Office Building
Washington, D.C. 20515

The Honorable Marcy Kaptur
Ranking Member
U.S. House of Representatives
Energy and Water Appropriations Subcommittee
2362-B Rayburn House Office Building
Washington, D.C. 20515

Dear Chairs Granger and Fleischmann, Ranking Members DeLauro and Kaptur:

As Congress develops its Fiscal Year 2024 appropriations priorities for the U.S. Army Corps of Engineers, I am writing on behalf of the Upper Mississippi River Basin Association (UMRBA) to respectfully request funding for the following programs and projects:

— $120 million for the Navigation and Ecosystem Sustainability Program (NESP)

In 2024, NESP will initiate construction of a second 1,200-foot lock chamber at La Grange L&D, construct mooring cells on the Mississippi River to improve navigation efficiency and fish passage at L&D 22, and advance planning and design on six to ten ecosystem restoration projects. In addition, NESP will advance strategic planning and adaptive management of its ecosystem restoration program.

— $55 million for the Upper Mississippi River Restoration (UMRR) Program

In FY 2024, UMRR will construct 9 habitat projects and advance planning and design on 14 to 16 habitat projects. These projects integrate a broad range of restoration techniques that strive to use or mimic the

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Bloomington, MN 55439
651-224-2880
www.umrba.org

river's natural processes to enhance and protect important fish and wildlife habitat, restore the river's floodplain structure and function, and counteract the factors degrading the river's ecological health. UMRR will continue its long term resource monitoring and research, providing a much clearer understanding of the complex, dynamic relationships among various ecosystem components and watershed drivers.

— $1.2 million for renewed flow frequency probabilities and water surface profiles for the Upper Mississippi and Illinois Rivers

In FY 2024, the U.S. Army Corps of Engineers will compete the hydraulic routing model and associated flow and climate assessments, employ the analyses, and develop a report of the findings. Flood risk assessments and forecasting capabilities will help to reduce damages and loss of life associated with increasingly frequent and extreme flood events in the Upper Mississippi River. Accurate and accessible information will improve our ability to develop a systemic flood plan and improve management capabilities.

— Funding to support full capability of the Upper Mississippi River System 9-foot navigation channel operations and maintenance

UMRBA is the 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 and working collaboratively with the federal agencies as well as the navigation industry, environmental organizations, local communities, and others who work directly to improve the Upper Mississippi River System. UMRBA's member states are strongly committed to the principles of sustainability and multi-use as the foundation of the river's management. The programs and projects listed above collectively help to improve the health and resilience of the navigation system and ecosystem as well as the many river communities of the Upper Mississippi River System.

We appreciate your consideration of this request. Please contact me at 651-224-2880 or kwallace@umrba.org to arrange an opportunity to discuss our request in more detail.

Sincerely,

Kirsten Wallace
Executive Director
Upper Mississippi River Basin Association

cc: House Upper Mississippi River Delegation

UMRBA
Upper Mississippi River Basin Association

March 20, 2023

The Honorable Kay Granger
Chair
U.S. House of Representatives
Appropriations Committee
H-307, The Capitol
Washington, D.C. 20515

The Honorable Rosa DeLauro
Ranking Member
U.S. House of Representatives
Appropriations Committee
H-307, The Capitol
Washington, D.C. 20515

The Honorable Mike Simpson
Chair
U.S. House of Representatives
Interior and Environment Appropriations
Subcommittee
2007 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Chellie Pingree
Ranking Member
U.S. House of Representatives
Interior and Environment Appropriations
Subcommittee
2007 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairs Granger and Simpson, Ranking Members DeLauro and Pingree:

As Congress develops its Fiscal Year 2024 appropriations priorities for the U.S. Environmental Protection Agency, I am writing on behalf of the Upper Mississippi River Basin Association (UMRBA) to respectfully request $25 million for the Gulf Hypoxia Program.

UMRBA is the 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. UMRBA believes that the Gulf Hypoxia Program (and the Hypoxia Task Force) is a model of good government, focusing on collaboration among states as well as between federal agencies, landowners, commodity groups, land-grant universities, conservation interests, and the private sector.

Through the Gulf Hypoxia Program (and Hypoxia Task Force), a partnership of 12 states, five federal agencies, and tribal partners work collaborative to advance comprehensive water quality solutions designed to reduce nutrient loads in waterways throughout the greater Mississippi River Basin, consistent with the Gulf Hypoxia Action Plan. Additionally, conservation practices to reduce nutrient runoff from nonpoint sources have many supplemental national benefits such as habitat for wildlife and pollinator species and water storage.

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Bloomington, MN 55439
651-224-2880
www.umrba.org

In FY 2024, the funding request would support the implementation of state nutrient reduction strategies and modeling tools to understand the cumulative effects of these strategies on mitigating hypoxia.

Please contact me at 651-224-2880 to arrange an opportunity to discuss our request in more detail.

We appreciate your consideration of this request. Please contact me at 651-224-2880 or kwallace@umrba.org to arrange an opportunity to discuss our request in more detail.

Sincerely,

Kirsten Wallace
Executive Director
Upper Mississippi River Basin Association

cc: House Upper Mississippi River Delegation

Coalition Support for USGS Streamgage Networks and Modernization

Congresswoman Betty McCollum
2426 Rayburn House Office Building
Washington, DC 20515

February 28, 2023

RE: WATER DATA & SCIENCE PROGRAM FUNDING
Interior Department Appropriations for FY2024

Summary of Coalition's Requests for FY2024:
Federal Priorities Streamgages = $32.0 M
Cooperative Matching Funds Program = $68M
(includes $33M streamgage support and studies)
NGWOS/data modernization = $35M

Dear Congresswoman McCollum:

Our coalition of 96 water management and use stakeholders urges your support to sufficiently fund the United States Geological Survey's Federal Priorities Streamgage (FPS) network and supportive programs for the upcoming Fiscal Year 2024 budget appropriation.

A fully funded streamgage network – one that keeps pace with inflationary and routine maintenance overhead – is critical to ensuring the nation's socioeconomic and cultural wellbeing. These streamgages are crucial as we embark on new efforts to understand, plan for, and build our collective capacity to improve the nation's resilience to extreme weather events. A summary of our funding request is detailed below. The final section of this letter explains in more detail why we as a nation simply cannot risk an inadequately funded network of streamgages.

There are approximately three USGS FPS streamgages in your district: two are fully-funded by the federal government, none are cooperatively funded, and one is private party-funded. The SECURE Water Act of 2009 envisions that the federal cost share of the network to be 100 percent of the cost of carrying out the network. At the current rate, 66 percent of your district's USGS streamgages meet that goal.

Summary of funding request

Our broad coalition of state agencies, interstate commissions, associations, universities, non-governmental organizations, and private industry request a total USGS Fiscal Year 2024 budget appropriation. This request consists of **$32M** dedicated to Federal Priorities

Streamgages, **$68M** for the Cooperative Matching Funds Program (including $33M for streamgage support) and **$35M** for Next Generation Water Observing System and data delivery modernization.

Supporting details

Federal Priority Streamgages (FPS) -- $32M

We envision the need for a $2M increase over our FY2023 $30M funding request which was designed to cover the costs of existing gages and preclude any loss of sites. This request does not include a cost-share takeover for any FPS gages; it is just to keep the current gages going.

> *Justification*: Funding for FPS has been flat since 2016, yet operational costs have grown by approximately one to three percent per year due to increases in salary, travel, equipment and communication costs. Inflationary costs associated with streamgage site maintenance, operations and reporting have also generated a $1M per year shortfall since 2022.

Cooperative Matching Funds (CMF) Program -- $68M

The CMF program should be funded at $68M to adequately support cooperative matching funds for streamgaging. Of that appropriation, $33M for CMF-supported streamgages is needed to protect the approximately 5,275 CMF-supported streamgages that are already in place and functioning nationwide.

> *Justification:* The USGS works with more than 1,400 partners nationwide (federal, state, tribal, local and non-governmental organizations) using CMF to jointly support streamgages. This matching program began as a 50/50 cost share but has seen the federal contribution decrease to less than 30 percent. When an increasing share of the streamgages must be funded by reimbursable and private parties, they become ever more susceptible to having the funding pulled, thus rendering the FPS program less stable overall.

Next Generation Water Observing System (NGWOS) – $35M

Our coalition appreciates Congress' support of the Next Generation Water Observation System (NGWOS). We stand by last year's FY2023 request for $35M to allow for further buildout of the NGWOS program. Funding at this level for FY2024 would complete rollout for the fifth Integrated Water Science (IWS) basin and ultimately move NGWOS toward the goal of 10 IWS basins nationwide.

Justification: The FY2023 appropriation of $29.5M was only a $500,000 increase over the FY2022 appropriation which allowed planning to begin in the fifth basin but with fewer resources than originally intended.

USGS Streamgage network data improve our resilience to extreme weather events

A fully funded and implemented streamgage network will augment our nation's resilience in response to extreme weather events. Without water data from this widespread system of sites, we are less equipped to make informed decision making, such as flood and hurricane risk predictions, drought determinations, and water supply forecasts.

The USGS recently completed an analysis of the USGS Streamflow Monitoring Network to determine priority areas to maintain or improve coverage, resolution, and representation throughout the United States.[1] This analysis identified network gaps in three important areas in context to building resilience to extreme weather events:

1) Most coastal watersheds (83 percent) do not have streamgages. More gages are needed in coastal areas; a robust streamgage network implemented in coastal areas would provide important data to reduce flood risk in context to sea level rise through improved flood forecasting and warning.
2) Thirty-nine states lack streamflow information in areas to assess how local climate is affecting floods and droughts. More streamgages are needed to understand how climate variability affects different parts of the Nation. The findings indicate that more gages are needed in 30 percent of NOAA Climate Divisions.
3) The USGS network has streamgages in many areas where water supply is vulnerable to reduced snowpack because of climate warming. Some of these areas may require additional gages because they are particularly vulnerable to changes in snowpack.

With your help and continued support, Congress can enable the USGS to fulfill its Water Resources Mission Area goals by adequately funding the Federal Priority Streamgages network, Cooperative Matching Funds program, and NGWOS to move water science into the 21st century.

We are happy to answer your questions or provide any additional information. Please contact any of us or Beth Callaway at the Interstate Council on Water Policy at: beth@icwp.org or (307) 772-1999.

[1] Konrad, C.P., Anderson, S.W., Restivo, D.E., and David, J.E., 2022, Network Analysis of USGS Streamflow Gages: U.S. Geological Survey data release, https://doi.org/10.5066/P9C8NYTO.

CC:
Appropriations Subcommittee Members
Secretary of the Interior
Director, Office of Management and Budget
Director, US Geological Survey

Organizations Signing on to FY 2024 Streamgage Support Letter (February 28, 2023)

Organization	Signor	Title
Alabama Office of Water Resources	Tom Littlepage	Division Chief
American Fisheries Society	Dr. Douglas J. Austen	Executive Director
American Rivers	Ted Illston	Senior Director-Policy
American Society of Civil Engineers	Thomas W. Smith	Secretary & Exec. Dir.
American Water Resources Association	Dresden Farrand	Executive VP/CEO
American Water Works Association	Tracy Mehan	Exec. Dir./Gov't Affairs
American Whitewater	Mark Singleton	Executive Director
America's Watershed Initiative	Kimberly A. Lutz	Executive Director
Appalachian Mountain Club	Susan Arnold	Interim President & CEO
Association of American State Geologists	James Faulds	President
Association of California Water Agencies	David Reynolds	Director/Fed. Relations
Association of Clean Water Administrators	Mary Ann Nelson	ACWA President
Association of Fish & Wildlife Agencies	Kurt Thiede	Gov't Affairs Director
Association of Metropolitan Water Agencies	Tom Dobbins	CEO
Association of State Dam Safety Officials, Inc.	Lori C. Spragens	Executive Director
Association of State Floodplain Managers	Chad Berginnis	Executive Director
Bear River Commission	Don A. Barnett	Engineer-Manager
Big Hole Watershed Committee	Pedro Marques	Executive Director
Big Horn River Alliance	Anne Marie Emery	Executive Director
California Sportfishing Protection Alliance	Bill Jennings	Executive Director
Cascade Water Alliance	Ray Hoffman	CEO
CDM-Smith	Timothy D. Feather	Vice President
Cobb County-Marietta Water Authority	Cole Blackwell	General Manager
Colorado Lake & Reservoir Management Assn.	Caleb Owen	President
Colorado River Basin Salinity Control Forum	Don A. Barnett	Executive Director
Delaware River Basin Commission	Steven J. Tambini	Executive Director
Environmental Defense Fund	Steve Cochran	Assoc. VP State Affairs
Fly Fishers International	Patrick Berry	President & CEO
Freshwater Mollusk Conservation Society	Steve McMurray	President
Great Lakes Commission	Erika Jensen	Executive Director
Great Lakes Observing System	Kelli Paige	CEO
Henry's Fork Foundation	Brandon Hoffner	Executive Director
Hawaii Commission on Water Resource Management	Kaleo Manuel	Deputy Director
Hoopa Tribal Land Management/EPA	Ken Norton	Director
Hydrological Services America	Peter Ward	General Manager
Idaho Rivers United	Nic Nelson	Executive Director
Idaho Water Users Association	Paul L. Arrington	Executive Director
Interstate Commission on the Potomac River Basin	Michael Nardolilli	Executive Director
Interstate Council on Water Policy	Matt Unruh	ICWP Chair
Kansas-Oklahoma Arkansas River Compact Comm.	Earnie Gilder	Federal Chair
Kansas Water Office	Connie Owen	Director
KISTERS North America, Inc.	Becca Emery	Business Dev. Mgr.
Madison River Foundation	Jonathan Malovich	Executive Director
Metropolitan North Georgia Water Planning District	Katherine Zitsch	Director

Organization	Signor	Title
Missouri Department of Natural Resources	Erin Fanning	DNR Deputy Director
Minnesota Department of Natural Resources	Katie Smith	Director/Ecol & Water
Montana Department of Environmental Quality	Lindsey Krywaruchka	Water Division Admin.
Montana DNRC	Anna Pakenham -Stevenson	Admin-Water Res. Div.
Montana Trout Unlimited	David Brooks	Executive Director
Montana Watershed Coordination Council	Ethan Kunard	Executive Director
Nat'l. Assoc. Flood & Stormwater Mgt. Agencies	Susan Gilson	Executive Director
National Assoc. State Boating Law Administrators	John Fetterman	Depty Exec. Director
National Association of Wetland Managers	Marla J. Stelk	Executive Director
National Audubon Society	Julie Hill-Gabriel	VP/Water Consv.
National Drought Mitigation Center	Dr. Mark Svoboda	Director
National Ground Water Association	Terry S. Morse	CAE, CIC, CEO
National Hydrologic Warning Council	Bruce Rindahl	President
National Hydropower Association	Malcolm Woolf	President and CEO
National Society of Professional Surveyors	Tim Burch	Executive Director
National Water Resources Association	Dale Nellor	Exec. Vice President
National Water Supply Alliance	Dave Mitamura	Executive Director
National Wildlife Federation	Abby Tinsley	Assoc. VP Policy/Gov't
Nebraska Department of Natural Resources	Thomas E. Riley	Director
New Engl. Interstate Water Pollution Control Comm.	Susan J. Sullivan	Executive Director
North American Lake Management Society	Lisa Borre	President
Ohio R. Valley Water Sanitation Commission	Richard Harrison	Executive Director
Oklahoma Water Resources Board	Julie Cunningham	Executive Director
Oregon Water Resources Congress	April Snell	Executive Director
Phycological Society of America	Eric W. Linton	President
Red River Compact Commission	Sue Lowry	Chairman
Republican River Compact Commission	Thomas E. Riley	Nebraska Commissioner
Rivers Alliance of Connecticut	Alicea Charamut	Executive Director
Society of Wetland Scientists	Loretta L. Battaglia	President
Southwest Kansas Groundwater Mgt District	Mark Rude	Executive Director
Susquehanna River Basin Commission	Drew Dehoff	Executive Director
Tacoma Water	Scott Dewhirst	Water Superintendent
The Nature Conservancy	Jimmy Hague	Sr. Water Policy Adv
Three Rivers QUEST	Melissa O'Neal	Associate Director
Tri-State Water Resource Coalition	Gail Melgren	Executive Director
Trout Unlimited	Kate Miller	Gov't Affairs Director
University of Georgia River Basin Center	Sechindra Vallury/ Seth Wegner	Directors
Upper Colorado River Commission	Chuck Cullom	Exec. Director
Upper Mississippi River Basin Association	Kirsten Wallace	Executive Director
Upper Missouri Watershed Alliance	Sherry Meador	Board Chair
Washington State Water Resources Association	Tom Myrum	Executive Director
Water Environment Federation	Walter Marlowe	Executive Director
West Virginia Rivers Coalition	Angie Rosser	Executive Director

Organization	Signor	Title
West Virginia Water Research Institute	Paul Ziemkiewicz	Director
Western Landowners Alliance	Lesli Allison	Executive Director
Western States Water Council	Tony Willardson	Executive Director
Wild Salmon Center	Jessica Helsley	Gov't Affairs Director
Wyoming State Engineer's Office	Brandon Gebhart	State Engineer
Wyoming Water Association	Jodee Pring	President
Wyoming Water Development Office	Jason Mead	Interim Director
Xylem Analytics	Randy Hadland	Senior Manager
Yellowstone River Compact Commission	Brandon Gebhart	Commissioner

Additional information:

The SECURE Water Act of 2009 authorized implementation of not less than 4,700 streamgage sites funded by the national streamflow information program. The total cost of a fully implemented network would have required $130M initially and $80M for ongoing operations and maintenance.

To-date, Congressional streamgage funding priorities have not lined up to meet this goal. The USGS is unable to complete its development for a fully implemented network as directed by Congress in 2009 without additional funding.

Why are Federal Priority Streamgage (FPS) gage data important?

Authorized by Congress in the SECURE Water Act as the National Streamflow Information Program, the FPS is meant to comprise a stable "federal backbone" network of streamgages. Data provided by FPS inform critical life and property saving information. They augment research management decisions, maintain water dependent infrastructure and provide essential public health and environmental condition information. Insufficient funding seriously compromises our national ability to address federal, state, tribal, local socioeconomic issues, including international treaty obligations.

Who uses the data and for what purpose?

State/local/tribal stakeholders: The members of our undersigned organizations rely on these streamgaging networks to ensure our national ability to address critical environmental and socio-economic issues such as:

- Forecasting extreme stream flow and water level events such as floods, droughts, and hurricanes;
- Conducting longer-term climate resilience planning such as coastal flood risk and snowpack drought;
- Performing infrastructure design, operations and capacity for facilities such as roads, bridges, high-rises, dams and coastal development;
- Meeting municipal, public and private water supply needs;
- Completing temperature and other water-quality related assessments of major rivers, lakes, reservoirs and estuaries, and other wetlands;
- Conducting energy generation and exploration;
- Oversight and implementation of many federal laws such as the SECURE Water Act, Clean Water Act, Safe Drinking Water Act, and Endangered Species Act;
- Compliance and implementation of interstate and international compacts, court decrees, and treaties;
- Determining environmental impacts to disadvantaged communities;

- mitigating environmental impacts to disadvantaged communities;
- Balancing competing consumptive water uses with instream flows and water level needs that are essential for sustaining aquatic, riparian and terrestrial ecosystems.

Federal stakeholders: The vital data provided by the streamgages support critical water management activities across the nation by carrying out the mission and operations of federal agencies such as the U.S. Army Corps of Engineers, NOAA, FEMA, EPA, USDA, Department of Interior, NASA, Department of Defense, Homeland Security, and others.

The utility of the network is not singular to USGS -- a recent survey conducted by the agency of 28 sister federal agencies solicited input on the importance and prioritization needs of streamgage information. The results from this survey will be shared this spring; USGS will adapt the FPS program to federal priorities to meet the responses of the survey.

Why is there a current FPS funding shortfall?

Federal Priority Streamgages: Historically, FPS cost increases have previously been covered by USGS partners, including state and other federal agencies (where gages are jointly funded) or by delaying planned network enhancements. Enhancements include, but are not limited to, cyclical upgrades to equipment and activities to flood-harden existing FPS sites.

Unfortunately, after multiple years of flat funding, the USGS reached a breaking where network enhancements could no longer be delayed and operational costs continue to increase. Operations at some streamgages have already been discontinued and more shutdowns will continue into the future unless funding shortages are addressed resulting in losses to long-term data that cannot be re-created.

Additional references:

USGS List of Threatened Gages:
https://water.usgs.gov/networks/fundingstability/

National Water Dashboard/Map of USGS Streamgages:
https://dashboard.waterdata.usgs.gov/app/nwd/?aoi=default

"U.S. Geological Survey Streamgaging Network: Overview and Issues for Congress":
https://crsreports.congress.gov/product/pdf/R/R45695

Coverage, Resolution, and Representation of Public Interests by the USGS Streamflow Monitoring Network:
https://wa.water.usgs.gov/projects/NetworkAnalysis/NetworkAnalysis_index.html

Statement by Michael Connor, Bureau of Reclamation Commissioner before the Energy and Natural Resources Subcommittee on Water and Power on the implementation of the SECURE Water Act – March 16, 2010:
https://www.doi.gov/ocl/hearings/111/SECUREWaterAct_031610

UMRBA
Upper Mississippi River Basin Association

April 7, 2023

The Honorable Robert Bonnie
Under Secretary for Natural Resources and Environment
USDA Natural Resources Conservation Service
1400 Independence Ave SW
Washington, D.C. 20250

Dear Mr. Bonnie:

The Upper Mississippi River Basin Association (UMRBA) works on behalf of Illinois, Iowa, Minnesota, Missouri, and Wisconsin to facilitate and foster interstate water resource planning and cooperative management in the Upper Mississippi River basin. UMRBA serves as the interstate water quality entity. On behalf of the UMRBA Water Quality Executive Committee, I am pleased to provide comments about the implementation of the Mississippi River Basin Healthy Watersheds Initiative (MRBI) and the National Water Quality Initiative (NWQI). Both MRBI and NWQI are vitally important programs that address water quality and natural resource concerns in the Upper Mississippi River basin. UMRBA appreciates that the Natural Resource Conservation Service (NRCS) is working to increase efficiencies in the programs and expand access to underserved communities and producers.

The following comments are organized below by questions NRCS provided on the Federal Register.

1) *How should NRCS improve the effectiveness of MRBI and NWQI when addressing water quality concerns?*

- Streamline financial assistance processes to remove barriers for landowners to implement conservation practices. For example, if conservation practices are identified as part of a watershed plan for MRBI and NWQI to address the resource concerns, then planning steps to implement those practices can be reduced.
- Structure incentives to factor in the benefits to both the watershed(s) and the landowner(s). An example is a practice that reduces income from less crop production or leads to less opportunity costs has a higher incentive compared to a practice that provides economic benefits to the applicant. Another example is to increase the cost share match for more costly structural practices that may have larger impacts on water quality.
- Increase opportunities for non-NRCS partners to engage and provide technical assistance in MRBI and NWQI projects. This can reduce personnel requirements of NRCS staff to implement the program(s).
- Understand i) factors that lead to successful implementation MRBI and NWQI (quantity of projects and delisting impaired waterbodies) and where there is opportunity for increasing

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more projects and ii) barriers to MRBI and NWQI applications — e.g., staffing needs, connections with states, and participation in MRBI and NWQI.

2) *To effectively deliver water quality improvement and protection, MRBI and NWQI require watershed assessments to guide conservation assistance. How should NRCS improve the watershed assessment process to target delivery of conservation assistance achieved through MRBI and NWQI?*

- Continue to provide support for the planning phases to ensure implementation plans address resource concerns and prioritize locations for practices to help minimize these concerns. Ensure flexibility to project sponsors for watershed plans accepted by NRCS. The Agriculture Conservation Planning Framework and similar tools are good options to provide high level assessments and to prioritize practices based on these assessment-based conditions within a given watershed. However, on the ground practitioners are still vital to ensure practices meet requirements for implementation.
- Utilize ArcGIS online mapping tools to support the annual project submittal process and outreach activities throughout the various phases of MRBI and NWQI. Suggested ArcGIS layers include state nutrient reduction strategy priority watersheds (applicable to the 12 Hypoxia Task Force states), MRBI and NWQI watersheds, Section 319 watersheds, and waterbodies on the Section 303(d) and 305(b) lists.
- Utilize existing plans and programming at the state and local level to propose MRBI and NWQI watersheds to help increase implementation successes. In the State of Wisconsin, examples include nine key element plans, producer-led watershed groups, and demonstration farm networks.
- Align NWQI watershed assessments with USEPA's nine elements for watershed-based plans. This could allow for a single assessment or plan to make a watershed eligible for multiple federal funding sources.
- Provide resources for new NRCS staff and partners to understand the process of submitting watersheds for consideration for MRBI and NWQI – e.g., training materials.
- Streamline training opportunities for state level NRCS staff to provide technical assistance in the planning phases of MRBI and NWQI. Potential tools include Agriculture Conservation Planning Framework and Operational Tillage Information System.

3) *How can NRCS ensure that MRBI and NWQI provide the benefits of water quality conservation to disadvantaged communities and underserved producers?*

- Utilize existing assessment tools to identify disadvantaged communities and USDA resources for identifying underserved producers — e.g., EJ Screen. The identified communities can be overlain on ArcGIS with locations eligible for MRBI and NWQI projects.
- Provide outreach to disadvantaged communities and underserved producers on the opportunities and process for developing projects under MRBI and NWQI.
- Streamline the enrollment process and increase financial assistance for disadvantaged communities and underserved producers.

4) *Under the Clean Water Act, water quality impairments have been removed from many water bodies in MRBI and NWQI watersheds, and in-stream monitoring in many NWQI watersheds has shown improvements related to agricultural conservation. How should NRCS improve and potentially expand the metrics for the measurement of outcomes targeted and achieved through MRBI and NWQI?*

   - Layer in metrics for climate resilience — e.g., greenhouse gas reduction and carbon sequestration.
   - Provide annual and final updates to MRBI and NWQI sponsors of the implementation status of the project(s) and other USDA program financial assistance in the project area.

Thank you for the opportunity to provide comments. Please contact me at 651-224-2880 or kwallace@umrba.org if you have questions or would like to discuss UMRBA's comments in further detail.

Sincerely,

Kirsten Wallace
Executive Director
Upper Mississippi River Basin Association

cc: Martin Lownefish, NRCS Areawide Planning Branch Chief
UMRBA Water Quality Executive Committee

Natalie Lenzen

From: Tidemann, Jason (DNR) <jason.tidemann@state.mn.us>
Sent: Friday, May 5, 2023 8:08 AM
To: Natalie Lenzen
Subject: UMRBA January 1 - March 31 Treasurer Report

Hello Kirsten,

As Treasurer, I have reviewed the monthly financial statements for the period 1/1/23-3/31/23. Activity reported on the Balance Sheet, Profit/Loss Budget Overview, Check Register, Visa statements and Open Invoices Report provide a reasonable and consistent representation of the monthly financial activity for the referenced period.

Jason Tidemann

From: Natalie Lenzen <nlenzen@umrba.org>
Sent: Thursday, May 4, 2023 9:49 AM
To: Tidemann, Jason (DNR) <jason.tidemann@state.mn.us>
Subject: UMRBA January 1 - March 31 Treasurer Report

Jason –

I would like to request your statement of review of our January 2023 through March 2023 financials for the Treasurer's report in the May 23, 2023 UMRBA Board meeting packet.

Please let me know if you have any questions or need any further information.

Thank you,
Natalie

Natalie Lenzen
Operations Manager | Upper Mississippi River Basin Association (UMRBA)
7831 E. Bush Lake Rd., Suite 302, Bloomington, MN 55439
nlenzen@umrba.org | 651-224-2880 *(office)*
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Upper Mississippi River Basin Association
FY 2023 Profit & Loss Budget Overview
July 2022 through June 2023

	Jul '22 - Jun 23	Budget	$ Over Budget
Ordinary Income/Expense			
Income			
Contracts and Grants			
NESP	0.00	1.00	-1.00
USEPA NRS Workshops	56,731.59	82,000.00	-25,268.41
COE (UMRR)	47,514.73	85,716.60	-38,201.87
COE (RTC)	33,500.00	33,500.00	0.00
EPA (OPA)	170,512.43	240,000.00	-69,487.57
Interstate WQ Pilot	2,641.40	2,640.00	1.40
Total Contracts and Grants	310,900.15	443,857.60	-132,957.45
State Dues			
Illinois Dues	63,500.00	63,500.00	0.00
Iowa Dues	63,500.00	63,500.00	0.00
Minnesota Dues	63,500.00	63,500.00	0.00
Missouri Dues	63,500.00	63,500.00	0.00
Wisconsin Dues	63,500.00	63,500.00	0.00
WQ Assessment	102,500.00	102,500.00	0.00
Total State Dues	420,000.00	420,000.00	0.00
Interest Income			
Short Term Interest			
Short Term (Checking)	2,264.78	4,800.00	-2,535.22
Short Term (Savings)	405.56	400.00	5.56
Short Term (Sweep)	1,683.41	3,000.00	-1,316.59
Short Term (CD)	0.00	4,000.00	-4,000.00
Total Short Term Interest	4,353.75	12,200.00	-7,846.25
Total Interest Income	4,760.44	12,200.00	-7,439.56
Total Income	736,320.59	876,057.60	-139,737.01
Gross Profit	736,320.59	876,057.60	-139,737.01
Expense			
Benefits Administration	759.00	1,000.00	-241.00
USEPA NRS Workshops			
Meeting Expenses	5,081.03	40,000.00	-34,918.97
Communications	21,558.28	3,900.00	17,658.28
Supplies	0.00	100.00	-100.00
Travel Assistance	4,851.85	10,000.00	-5,148.15
Travel	2,745.33	4,700.00	-1,954.67
Total USEPA NRS Workshops	34,236.49	58,700.00	-24,463.51
Gross Payroll			
Salary	334,783.30	470,000.00	-135,216.70
UMRBA Time Wages	1.75	0.00	1.75
OPA Wages	70,154.07	0.00	70,154.07
Benefits	86,911.15	125,000.00	-38,088.85
Benefits OPA	3,372.24	0.00	3,372.24
Total Gross Payroll	495,222.51	595,000.00	-99,777.49
Payroll Expenses			
SocSec Company	30,703.80	36,890.00	-6,186.20
Medicare Company	7,506.22	8,627.50	-1,121.28
SUTA (Minnesota UC)	529.20	297.50	231.70

Upper Mississippi River Basin Association
FY 2023 Profit & Loss Budget Overview
July 2022 through June 2023

	Jul '22 - Jun 23	Budget	$ Over Budget
Workforce Enhancement Fee	306.29	297.50	8.79
Total Payroll Expenses	39,045.51	46,112.50	-7,066.99
Travel	34,715.78	40,000.00	-5,284.22
Space Rental			
Office Rental	46,460.21	53,000.00	-6,539.79
Total Space Rental	46,460.21	53,000.00	-6,539.79
Reproduction			
Copy Service	322.58	600.00	-277.42
Total Reproduction	322.58	600.00	-277.42
Meeting Expenses	25,167.67	30,000.00	-4,832.33
Supplies	766.37	1,500.00	-733.63
Equipment			
Equipment (Maint./Rental)	864.76	1,000.00	-135.24
Total Equipment	3,587.13	1,000.00	2,587.13
Legal and Financial			
Insurance	4,290.55	6,200.00	-1,909.45
Legal and Tax Services	12,870.00	15,000.00	-2,130.00
Bank Charges	69.00	70.00	-1.00
Total Legal and Financial	17,229.55	21,270.00	-4,040.45
Telephone/Communications	7,127.95	8,000.00	-872.05
Postage	119.89	300.00	-180.11
Other Services	8,281.31	6,000.00	2,281.31
Communications/Publications	20,061.00	35,000.00	-14,939.00
State Travel Reimbursement			
Illinois	420.54	5,000.00	-4,579.46
Iowa	2,851.19	5,000.00	-2,148.81
Minnesota	0.00	5,000.00	-5,000.00
Missouri	0.00	5,000.00	-5,000.00
Wisconsin	0.00	5,000.00	-5,000.00
State WQ Travel	0.00	3,500.00	-3,500.00
Total State Travel Reimbursem...	3,271.73	28,500.00	-25,228.27
OPA Expenses			
Equipment OPA	0.00	1,000.00	-1,000.00
Equipment (Maint./Rental) O...	5,611.98	6,500.00	-888.02
Travel OPA	2,430.29	2,000.00	430.29
Other OPA	0.00	50.00	-50.00
Total OPA Expenses	8,042.27	9,550.00	-1,507.73
Interstate WQ Expenses			
Other Interstate WQ	150.00	0.00	150.00
Total Interstate WQ Expenses	150.00	0.00	150.00
Total Expense	744,566.95	935,532.50	-190,965.55
Net Ordinary Income	-8,246.36	-59,474.90	51,228.54
Net Income	**-8,246.36**	**-59,474.90**	**51,228.54**

Upper Mississippi River Basin Association
Balance Sheet
As of May 9, 2023

	May 9, 23	
ASSETS		
Current Assets		
Checking/Savings		
Checking HT 2732		189,851.85
Investment		
Sweep HT 5401	223,161.03	
CD	407,100.42	
Total Investment		630,261.45
Total Checking/Savings		820,113.30
Other Current Assets		
Prepaid Expense		
Office Rental Prepaid Expense	8,244.10	
Prepaid Expense - Other	8.00	
Total Prepaid Expense		8,252.10
Total Other Current Assets		8,252.10
Total Current Assets		828,365.40
Fixed Assets		
Accum. Deprec. UMRBA		-31,613.35
Accum. Deprec. OPA		-21,703.53
Accum. Deprec. WQ		-1,290.00
Accum. Deprec. 604(b)		-568.95
Accum. Deprec. STC		-2,989.68
UMRBA Equipment		34,524.70
OPA Equipment		21,705.26
WQ Equipment		1,290.47
604(b) Equipment		568.95
STC Equipment		4,332.67
Total Fixed Assets		4,256.54
TOTAL ASSETS		**832,621.94**
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Credit Cards		
Visa Chase 5294		2,733.56
Total Credit Cards		2,733.56
Other Current Liabilities		
Deferred MO DoC (WLM) Revenue		4,206.05
Office Expense Liabilities		
Travel Expense	1,619.60	
Total Office Expense Liabilities		1,619.60
Payroll Liabilities		
SUTA (Minnesota UC)	-0.42	
Workforce Enhancement Fee	280.67	
Accrued Vacation	45,786.20	
Accrued Vacation FICA	3,502.65	
Total Payroll Liabilities		49,569.10
Total Other Current Liabilities		55,394.75
Total Current Liabilities		58,128.31
Total Liabilities		58,128.31
Equity		
Retained Earnings		782,739.99

Upper Mississippi River Basin Association
Balance Sheet
As of May 9, 2023

	May 9, 23
Net Income	-8,246.36
Total Equity	774,493.63
TOTAL LIABILITIES & EQUITY	**832,621.94**

ATTACHMENT C

Cooperative Institute for Research to Operations in Hydrology (CIROH)

- **CIROH general information website:** https://ciroh.ua.edu/
- **University of Alabama Awarded CIROH Administration News Announcement (4/6/2022):** https://news.ua.edu/2022/04/ua-awarded-360-million-to-lead-national-water-effort/
- **Upper Mississippi River Basin Consortium Members:**
    - **University of Iowa:**
        - **Membership News Announcement (4/6/2022):** https://now.uiowa.edu/2022/04/university-iowa-key-partner-360m-national-water-consortium
        - **Center for Hydrologic Development (2/1/2023):** https://engineering.uiowa.edu/news-all/2023/02/ui-expands-national-reach-new-center-hydrologic-development
    - **University of Minnesota Institute on the Environment Membership News (4/12/2022):** https://twin-cities.umn.edu/news-events/umn-included-national-partnership-improve-water-management
    - **University of Illinois Partner News Announcement (4/7/2022):** https://cee.illinois.edu/news/new-institute-will-work-improve-prediction-water-related-hazards

ATTACHMENT D

Additional Items

- **Future Meeting Schedule** (*D-1)*
- **Frequently Used Acronyms (4-29-2022)** *(D-2 to D-8)*

QUARTERLY MEETINGS
FUTURE MEETING SCHEDULE

AUGUST 2023	
La Crosse, WI	
August 8	UMRBA Quarterly Meeting
August 9	UMRR Coordinating Committee Quarterly Meeting

OCTOBER 2023	
St. Louis, MO	
October 24	UMRBA Quarterly Meeting
October 25	UMRR Coordinating Committee Quarterly Meeting

Acronyms Frequently Used on the Upper Mississippi River System

AAR	After Action Report
A&E	Architecture and Engineering
ACRCC	Asian Carp Regional Coordinating Committee
AFB	Alternative Formulation Briefing
AHAG	Aquatic Habitat Appraisal Guide
AHRI	American Heritage Rivers Initiative
AIS	Aquatic Invasive Species
ALC	American Lands Conservancy
ALDU	Aquatic Life Designated Use(s)
AM	Adaptive Management
ANS	Aquatic Nuisance Species
AP	Advisory Panel
APE	Additional Program Element
ARRA	American Recovery and Reinvestment Act
ASA(CW)	Assistant Secretary of the Army for Civil Works
A-Team	Analysis Team
ATR	Agency Technical Review
AWI	America's Watershed Initiative
AWO	American Waterways Operators
AWQMN	Ambient Water Quality Monitoring Network
BA	Biological Assessment
BATIC	Build America Transportation Investment Center
BCOES	Bid-ability, Constructability, Operability, Environmental, Sustainability
BCR	Benefit-Cost Ratio
BMPs	Best Management Practices
BO	Biological Opinion
CAP	Continuing Authorities Program
CAWS	Chicago Area Waterways System
CCC	Commodity Credit Corporation
CCP	Comprehensive Conservation Plan
CEICA	Cost Effectiveness Incremental Cost Analysis
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second
CG	Construction General
CIA	Computerized Inventory and Analysis
CMMP	Channel Maintenance Management Plan
COE	Corps of Engineers
COPT	Captain of the Port
CPUE	Catch Per Unit Effort
CRA	Continuing Resolution Authority
CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program

CSP	Conservation Security Program
CUA	Cooperative Use Agreement
CWA	Clean Water Act
CY	Cubic Yards
DALS	Department of Agriculture and Land Stewardship
DED	Department of Economic Development
DEM	Digital Elevation Model
DET	District Ecological Team
DEWS	Drought Early Warning System
DMMP	Dredged Material Management Plan
DNR	Department of Natural Resources
DO	Dissolved Oxygen
DOA	Department of Agriculture
DOC	Department of Conservation
DOER	Dredging Operations and Environmental Research
DOT	Department of Transportation
DPR	Definite Project Report
DQC	District Quality Control/Quality Assurance
DSS	Decision Support System
EA	Environmental Assessment
ECC	Economics Coordinating Committee
EEC	Essential Ecosystem Characteristic
EIS	Environmental Impact Statement
EMAP	Environmental Monitoring and Assessment Program
EMAP-GRE	Environmental Monitoring and Assessment Program-Great Rivers Ecosystem
EMP	Environmental Management Program [Note: Former name of Upper Mississippi River Restoration Program.]
EMP-CC	Environmental Management Program Coordinating Committee
EO	Executive Order
EPA	Environmental Protection Agency
EPM	Environmental Pool Management
EPR	External Peer Review
EQIP	Environmental Quality Incentives Program
ER	Engineering Regulation
ERDC	Engineering Research & Development Center
ESA	Endangered Species Act
EWMN	Early Warning Monitoring Network
EWP	Emergency Watershed Protection Program
FACA	Federal Advisory Committee Act
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FDR	Flood Damage Reduction
FFS	Flow Frequency Study
FMG	Forest Management Geodatabase
FONSI	Finding of No Significant Impact
FRM	Flood Risk Management

FRST	Floodplain Restoration System Team
FSA	Farm Services Agency
FTE	Full Time Equivalent
FWCA	Fish & Wildlife Coordination Act
FWIC	Fish and Wildlife Interagency Committee
FWS	Fish and Wildlife Service
FWWG	Fish and Wildlife Work Group
FY	Fiscal Year
GAO	Government Accountability Office
GEIS	Generic Environmental Impact Statement
GI	General Investigations
GIS	Geographic Information System
GLC	Governors Liaison Committee
GLC	Great Lakes Commission
GLMRIS	Great Lakes and Mississippi River Interbasin Study
GPS	Global Positioning System
GREAT	Great River Environmental Action Team
GRP	Geographic Response Plan
H&H	Hydrology and Hydraulics
HAB	Harmful Algal Bloom
HEC-EFM	Hydrologic Engineering Center Ecosystems Function Model
HEC-RAS	Hydrologic Engineering Center River Analysis System
HEL	Highly Erodible Land
HEP	Habitat Evaluation Procedure
HNA	Habitat Needs Assessment
HPSF	HREP Planning and Sequencing Framework
HQUSACE	Headquarters, USACE
H.R.	House of Representatives
HREP	Habitat Rehabilitation and Enhancement Project
HSI	Habitat Suitability Index
HU	Habitat Unit
HUC	Hydrologic Unit Code
IBA	Important Bird Area
IBI	Index of Biological (Biotic) Integrity
IC	Incident Commander
ICS	Incident Command System
ICWP	Interstate Council on Water Policy
IDIQ	Indefinite Delivery/Indefinite Quantity
IEPR	Independent External Peer Review
IGE	Independent Government Estimate
IIA	Implementation Issues Assessment
IIFO	Illinois-Iowa Field Office (formerly RIFO - Rock Island Field Office)
ILP	Integrated License Process
IMTS	Inland Marine Transportation System
IPR	In-Progress Review
IRCC	Illinois River Coordinating Council

IRPT	Inland Rivers, Ports & Terminals
IRTC	Implementation Report to Congress
IRWG	Illinois River Work Group
ISA	Inland Sensitivity Atlas
IWR	Institute for Water Resources
IWRM	Integrated Water Resources Management
IWS	Integrated Water Science
IWTF	Inland Waterways Trust Fund
IWUB	Inland Waterways Users Board
IWW	Illinois Waterway
L&D	Lock(s) and Dam
LC/LU	Land Cover/Land Use
LDB	Left Descending Bank
LERRD	Lands, Easements, Rights-of-Way, Relocation of Utilities or Other Existing Structures, and Disposal Areas
LiDAR	Light Detection and Ranging
LMR	Lower Mississippi River
LMRCC	Lower Mississippi River Conservation Committee
LOI	Letter of Intent
LTRM	Long Term Resource Monitoring
M-35	Marine Highway 35
MAFC	Mid-America Freight Coalition
MARAD	U.S. Maritime Administration
MARC 2000	Midwest Area River Coalition 2000
MCAT	Mussel Community Assessment Tool
MICRA	Mississippi Interstate Cooperative Resource Association
MDM	Major subordinate command Decision Milestone
MIPR	Military Interdepartmental Purchase Request
MMR	Middle Mississippi River
MMRP	Middle Mississippi River Partnership
MNRG	Midwest Natural Resources Group
MOA	Memorandum of Agreement
MoRAST	Missouri River Association of States and Tribes
MOU	Memorandum of Understanding
MRAPS	Missouri River Authorized Purposes Study
MRBI	Mississippi River Basin (Healthy Watersheds) Initiative
MRC	Mississippi River Commission
MRCC	Mississippi River Connections Collaborative
MRCTI	Mississippi River Cities and Towns Initiative
MRRC	Mississippi River Research Consortium
MR&T	Mississippi River and Tributaries (project)
MSP	Minimum Sustainable Program
MVD	Mississippi Valley Division
MVP	St. Paul District
MVR	Rock Island District
MVS	St. Louis District

NAS	National Academies of Science
NAWQA	National Water Quality Assessment
NCP	National Contingency Plan
NIDIS	National Integrated Drought Information System (NOAA)
NEBA	Net Environmental Benefit Analysis
NECC	Navigation Environmental Coordination Committee
NED	National Economic Development
NEPA	National Environmental Policy Act
NESP	Navigation and Ecosystem Sustainability Program
NETS	Navigation Economic Technologies Program
NGO	Non-Governmental Organization
NGRREC	National Great Rivers Research and Education Center
NGWOS	Next Generation Water Observing System
NICC	Navigation Interests Coordinating Committee
NPDES	National Pollution Discharge Elimination System
NPS	Non-Point Source
NPS	National Park Service
NRC	National Research Council
NRCS	Natural Resources Conservation Service
NRDAR	Natural Resources Damage Assessment and Restoration
NRT	National Response Team
NSIP	National Streamflow Information Program
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O&M	Operation and Maintenance
OHWM	Ordinary High Water Mark
OMB	Office of Management and Budget
OMRR&R	Operation, Maintenance, Repair, Rehabilitation, and Replacement
OPA	Oil Pollution Act of 1990
ORSANCO	Ohio River Valley Water Sanitation Commission
OSC	On-Scene Coordinator
OSE	Other Social Effects
OSIT	On Site Inspection Team
P3	Public-Private Partnerships
PA	Programmatic Agreement
PAS	Planning Assistance to States
P&G	Principles and Guidelines
P&R	Principles and Requirements
P&S	Plans and Specifications
P&S	Principles and Standards
PCA	Pollution Control Agency
PCA	Project Cooperation Agreement
PCX	Planning Center of Expertise
PDT	Project Delivery Team
PED	Preconstruction Engineering and Design
PgMP	Program Management Plan

PILT	Payments In Lieu of Taxes
PIR	Project Implementation Report
PL	Public Law
PMP	Project Management Plan
PORT	Public Outreach Team
PPA	Project Partnership Agreement
PPT	Program Planning Team
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RCP	Regional Contingency Plan
RCPP	Regional Conservation Partnership Program
RDB	Right Descending Bank
RED	Regional Economic Development
RIFO	Rock Island Field Office (now IIFO - Illinois-Iowa Field Office)
RM	River Mile
RP	Responsible Party
RPEDN	Regional Planning and Environment Division North
RPT	Reach Planning Team
RRAT	River Resources Action Team
RRCT	River Resources Coordinating Team
RRF	River Resources Forum
RRT	Regional Response Team
RST	Regional Support Team
RTC	Report to Congress
S.	Senate
SAV	Submersed Aquatic Vegetation
SDWA	Safe Drinking Water Act
SEMA	State Emergency Management Agency
SET	System Ecological Team
SMART	Specific, Measurable, Attainable, Risk Informed, Timely
SONS	Spill of National Significance
SOW	Scope of Work
SRF	State Revolving Fund
SWCD	Soil and Water Conservation District
T&E	Threatened and Endangered
TEUs	twenty-foot equivalent units
TIGER	Transportation Investment Generating Economic Recovery
TLP	Traditional License Process
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
TSP	Tentatively selected plan
TSS	Total Suspended Solids
TVA	Tennessee Valley Authority
TWG	Technical Work Group
UMESC	Upper Midwest Environmental Sciences Center

UMIMRA	Upper Mississippi, Illinois, and Missouri Rivers Association
UMR	Upper Mississippi River
UMRBA	Upper Mississippi River Basin Association
UMRBC	Upper Mississippi River Basin Commission
UMRCC	Upper Mississippi River Conservation Committee
UMRCP	Upper Mississippi River Comprehensive Plan
UMR-IWW	Upper Mississippi River-Illinois Waterway
UMRNWFR	Upper Mississippi River National Wildlife and Fish Refuge
UMRR	Upper Mississippi River Restoration Program [Note: Formerly known as Environmental Management Program.]
UMRR CC	Upper Mississippi River Restoration Program Coordinating Committee
UMRS	Upper Mississippi River System
UMWA	Upper Mississippi Waterway Association
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VTC	Video Teleconference
WCI	Waterways Council, Inc.
WES	Waterways Experiment Station (replaced by ERDC)
WHAG	Wildlife Habitat Appraisal Guide
WHIP	Wildlife Habitat Incentives Program
WIIN	Water Infrastructure Improvements for the Nation Act
WLM	Water Level Management
WLMTF	Water Level Management Task Force
WQ	Water Quality
WQEC	Water Quality Executive Committee
WQTF	Water Quality Task Force
WQS	Water Quality Standard
WRDA	Water Resources Development Act
WRP	Wetlands Reserve Program
WRRDA	Water Resources Reform and Development Act