

Middle Iowa Watershed Management Authority
Request for Proposals
Comprehensive Water Quality Management Planning Services



Procurement Timeline

RFP Publish Date	February 1, 2024
RFP Pre-Bid Meeting	February 22, 2024
Proposal Due Date	March 14, 2024
Council Approval	April 11, 2024
Project Initiation	May 1, 2024

REQUEST FOR PROPOSALS

Middle Iowa Comprehensive Water Quality Management Planning Services

The Middle Iowa Watershed Management Authority (MIWMA) requests proposals from qualified contractors for watershed planning services to develop a Comprehensive Water Quality Management Plan for the Middle Iowa Watershed.

The Middle Iowa Watershed Management Authority (WMA) has been awarded a \$125,000 watershed planning grant from the Iowa Department of Natural Resources (Iowa DNR) through the Comprehensive Water Quality Management Planning Grant solicitation. There is an additional \$96,000 in cash match, for a total of \$221,000. The funding will be used to develop a comprehensive water quality management plan for the Middle Iowa Watershed, which will address stakeholder concerns with water quality, flooding, and degraded habitat quality. The Middle Iowa watershed is an 8-digit Hydrologic Unit Code watershed (07080208) in central Iowa encompassing ten counties and thirty-four cities and spanning 1,657 square miles. In 2023, concerned stakeholders came together to begin the process of forming a Watershed Management Authority, pursuant to Iowa Code Chapter 466B.22. The Middle Iowa Watershed Management Authority (WMA) was officially formed as a separate legal entity in June 2023, and since then has begun laying the groundwork for watershed plan development.

Pre-Bid Meeting

Contractors interested in submitting proposals are required to attend a Pre-Bid meeting scheduled for **February 22, 2024, from 1:30 pm - 4:30 pm**. Proposals will only be accepted from contractor(s) that attend the Pre-Bid meeting (in-person or via Microsoft Teams call). The meeting will be held at the following location:

City of North Liberty
433 South Front Street
North Liberty, Iowa 52357

Virtual Option

Join a Microsoft Teams call from your computer, mobile app or room device:

[Join Here](#)

Meeting ID: 223 657 346 464

Passcode: n3eeWy

Or call in (audio only)

[+1 773-352-2004](#)

Phone Conference ID: 791 970 34#

RFP Q&A

Questions that arise after the Pre-Bid meeting should be submitted in writing to Mike Wolfe, Middle Iowa WMA Board Chair, at the following email address: mwolfe@northlibertyiowa.org, **no later than 4:30 pm on March 1, 2024**. All questions and answers will be distributed to contractors who attend the Pre-Bid meeting.

RFP Submittal

Responses to this RFP should be single spaced, font size of at least 11, margins no less than 0.75 inch, and are limited to ten double-sided pages between covers, not including blank dividers. Number all pages consecutively. Proposals exceeding these limits will not be accepted. Inclusion of promotional literature of a general nature is not solicited, but if submitted, will count toward the overall length restriction.

Electronic copies should be submitted as a PDF with the subject line, "Middle Iowa Water Quality Management Plan Development Proposal." Submissions should be sent to Mike Wolfe, Middle Iowa WMA Board Chair, at the following email address: mwolfe@northlibertyiowa.org, **no later than 4:30 pm on March 14, 2024**. All contractors will be notified in writing regarding results of the selection process.

A summary of the procurement process for this project is as follows:

- | | |
|----------------------------|---|
| - February 1, 2024 | RFP published |
| - February 22, 2024 | RFP pre-bid meeting |
| - March 1, 2024 | Questions submitted in writing |
| - March 6, 2024 | Submitted questions answered |
| - March 14, 2024 | Proposal Due Date |
| - March 18-22, 2024 | Proposals ranked by selection committee |
| - March 25 - April 5, 2024 | Interviews of select consultants |
| - April 11, 2024 | Council approval and notice to proceed |
| - May 1, 2024 | Project Initiation |

*All dates are subject to change.

Evaluation

Each proposal will be reviewed by an evaluation team, composed of MIWMA representatives. Each proposal will be scored relative to all other proposals on the basis of the evaluation criteria listed below. Consultants may be contacted during this process to clarify items in their proposals.

Experience:	40%
Methodology:	35%
Capacity:	15%
Cost and Leveraged Resources:	10%

RFP Required Items

The Middle Iowa Watershed Management Authority reserves the right to reject any and all proposals or to waive any irregularities in any proposal if judged to be in the best interest of the MIWMA and the planning process. This RFP does not oblige MIWMA to offer a contract to any firm, nor pay any cost incurred in the preparation of proposals submitted in response to this request. All information and material submitted in this request will become property of the MIWMA Board of Directors.

The checklist of items required for proposal submission:

1. Company Contact Information
2. Statement of Qualifications
3. Proposed Methodology to Complete Scope of Work
4. Plan Development Milestones and Timeline
5. Proposed Cost of Services and Leveraged Resources

The following outlines expectations for the development of a watershed management plan for the Middle Iowa River Watershed, providing additional details related to proposal checklist items 2-5 above. Proposals should follow the outline presented here and respond to each of the items listed in Sections I - IV.

I. Statement of Qualifications

1. Demonstration of past watershed management planning services including a description of previous projects and experience. Links to completed watershed management plans should be provided.
2. Description of organizational capacity (and sub-consulting staff) to complete all necessary planning services. Partnerships among consultants are highly encouraged.
3. Qualifications and experience of staff anticipated to be assigned work for this project, including total hours and percent of time committed to the project.
4. References, including contact information from previous clients of related work within the past five years.
5. Evidence of ability to work within tight time constraints and the earliest date available to assume these duties.

II. Proposed Methodology and Scope of Work

The Middle Iowa WMA Comprehensive Water Quality Management Planning Grant Application (attachment B) laid out the following planning process below, which the consultant must be prepared and qualified to lead.

1. Establishment of Committees: Form a Technical Advisory Committee, to include key agencies, institutions, emergency management personnel, conservation staff, and WMA board members, as well as a Communications and Marketing, and Outreach and Engagement committee, to include WMA members and stakeholders.
2. Data and Watershed Resource Inventory: Compile and review existing information and studies, to include hydrology, water quality, and source water data, BMP practices (e.g. cover crop reports), and GIS-based compilation of relevant environmental data to describe the overall watershed characteristics.
3. Issues Assessment: Utilize existing information and data in combination with WMA member and stakeholder input to identify surface and source water quality and flooding issues and sources.
4. Priority Watersheds Detailed Assessments and ACPF Modelling: Utilize the data and information analysis to identify four to eight high-priority HUC-12 watersheds. Detailed assessment and HCPF modeling will be completed by IDNR and IDALS. A standalone watershed management plan will be developed for each watershed and incorporated into the overall water quality management plan.
5. Case Studies: Select two community-based case studies with identified water quality, source water, water supply, flooding, or natural areas and habitat issues at the community level for detailed project implementation. WMA member and stakeholder input will inform case study selection, and a project implementation plan will be developed so that identified case studies are prepared to apply for future funding for addressing the identified issues.
6. Source Water Plan: Complete one IDNR-led phase 2 source water plan.
7. Riparian and Stream Buffer Management Plan: Develop a riparian and stream buffer management plan for incorporation into the water quality management plan.
8. Stakeholder Engagement: provide engagement opportunities for stakeholders and the public, to include water quality planning open house, agricultural field days, source water protection workshop, urban best practices and soil health workshop, listening sessions for watershed priorities and goal setting, draft water quality management plan open house, and a post-planning workshop (see attachment B).
9. Development of Implementation Strategies: where possible, implementation strategies should align with achieving DNR water quality standards or the Iowa Nutrient Reduction Strategy goals.
10. Alignment with Nonpoint Source Management and Connection to Smart Planning Principles: the water quality management plan must align with the Nonpoint Source Management and Connection to Smart Planning Principles as outlined in the Middle Iowa Comprehensive Water Quality Management Plan grant application, attachment B.
11. Development of an MIWMA website with interactive watershed story map.

The consultant may suggest adjustments or alternative approaches to the watershed plan outline, as long as a clear justification is provided.

The tasks and deliverables **specifically for the consultant**, to support the planning methodology above, are outlined below:

1. Serve as a central point of contact for partners contributing to the water quality management plan. Lead, manage, assemble, organize, and compile data and information inventories, and technical watershed assessments from partners as they are developed. Lead development of narrative and identifying key recommendations from each assessment.
2. Lead the formation of the various committees to be formed as part of the water quality management planning process. This involves reaching out to those agencies that should have representation on the various committees.
3. Develop and finalize watershed management plan goals, objectives, actions, and priorities with input from WMA Board Members and stakeholders.
4. Develop and lead the process for prioritization of HUC-12 subwatersheds for water quality constituents.
5. Develop and lead the process for identifying two community-based case studies. Develop and finalize the detailed implementation plans for incorporation into the final water quality management plan.
6. Develop and finalize the riparian area and stream buffer management plan, with focus on enhancement and identifying opportunities for connectivity, to be incorporated into the final water quality management plan. Development of this plan should be in cooperation with, or include input from, County Conservation Boards and IDNR Wildlife, Fisheries, and Foresters staff.
7. Work with the WMA Board and Stakeholders to identify priority HUC-12 watersheds for detailed assessment. Utilize and incorporate the assessments and HCPF modeling results, completed by IDNR and IDALS, into the final water quality management plan.
8. Provide opportunities for feedback from the public and the MIWMA on individual draft water quality management plan chapters and incorporate that feedback into the final water quality management plan.
9. Work with the Middle Iowa WMA, Iowa HSEMD, and county emergency managers to develop a strategy for integrating hazard mitigation plans into the Middle Iowa Water Quality Management plan.
10. Develop the water quality management plan final review process, formal adoption strategy, and subsequent implementation plan for the MIWMA Board to consider.
11. Plan, manage, and facilitate multiple outreach and public engagement events to include:
 - a. a water quality plan kick-off open house
 - b. two urban best practices and soil health workshops
 - c. three listening sessions for watershed priorities and goal setting
 - d. one draft water quality management plan open house
 - e. one post-planning workshop
12. Work in cooperation with SWCD representatives to plan and host three agricultural field days.
13. Work in cooperation with Iowa DNR staff to plan and host one source water protection workshop.

14. Plan and manage one public open house to deliver the draft watershed management plan with WMA Board members and relevant stakeholders and incorporate feedback into the final WMP.
15. Prepare and deliver the final water quality management plan document, an executive summary booklet, and summary PowerPoint presentation. The final water quality management plan and executive summary should be professionally designed, with hard copies supplied to each of the WMA Board members.
16. Present the final water quality management plan document to the WMA members at a quarterly meeting as well as host and present at a Water Quality Management Plan Open House.
17. Attend quarterly MIWMA Board meetings and provide progress updates to the MIWMA.
18. Provide status and expenditure reports to City of North Liberty and the MIWMA as follows:
 - a. Written quarterly status updates.
 - b. Information on expenditure as necessary.
19. Design and implement a comprehensive interactive website describing the Middle Iowa Watershed and the findings/research compiled throughout the water quality management planning process (example: upperiowariver.org).
20. Develop outreach materials to solicit support and buy-in as well as raise community and public awareness about the Middle Iowa WMA
21. Develop financial contribution formulas for stable, long-term funding for consideration by the MIWMA Board.

The original grant application proposal that was submitted to the Iowa DNR is included as attachment B. **A detailed work plan and timeline, including the lead entity designated for each task, can be found in appendix B (Appendix B: Work Plan and Timeline) of the attached grant application.**

III. Plan Development Milestones and Timeline

The development of this watershed management plan is expected to take 18 months. Anticipated plan development milestones are as follows:

- Draft watershed plan is expected to be completed on or before October 1, 2025
- Final watershed plan is expected to be completed on or before December 31, 2025.

The original grant application proposal that was submitted to the Iowa DNR is included as attachment B. **A detailed work plan and timeline can be found in appendix B (Appendix B: Work Plan and Timeline) of the attached grant application.**

IV. Proposed Cost of Services and Leveraged Resources

Proposals to Middle Iowa WMA Board should include the proposed cost to accomplish all scope of work for activities outlined above not to exceed \$221,000.

Attachment A
Water Quality Management Plan Required Elements

1. **Executive Summary**
2. **Watershed Characteristics**
3. **Middle Iowa Watershed Assessment Baseline Conditions**
 - a. Pollutant Source & Load Assessment: The consultant should identify the methodology that will be used for estimating pollutant loads and targeted load reductions for the following constituents:
 - i. Nitrogen
 - ii. Phosphorus
 - iii. Sediment
 - iv. Bacteria
 - b. Subwatershed Prioritization: Consultant should develop maps showing prioritization of Middle Iowa 12-digit Hydrologic Unit Code subwatersheds based on nitrogen, phosphorus, bacteria, and sediment load estimates. The consultant should also produce one comprehensive map showing HUC-12 prioritization that integrates all resource concerns.
 - c. Best Management Practice (BMP) suitability analysis, completed by IDNR and IDALS, using the Agricultural Conservation Planning Framework (ACPF) developed by USDA-Agricultural Research Service for four to eight HUC-12 watersheds.
 - d. Hazard Mitigation Plan Integration: The planning consultant will work with the Middle Iowa WMA, Iowa HSEMD, and county emergency managers and develop a strategy for integrating hazard mitigation plans into the Middle Iowa Water Quality Management plan.
 - e. Riparian Area and Stream Buffer Management Plan Integration: The planning consultant will work in consultation with County Conservation Boards, and DNR Wildlife, Fisheries, and Forestry staff to develop and integrate this plan into the Middle Iowa Water Quality Management Plan.
 - f. Community-Based Case Studies: The planning consultant will work in consultation with WMA Board members and stakeholders to select two communities with identifiable issues for development of an implementation plan, and integrate this plan into the Middle Iowa Water Quality Management Plan.
4. **Goals & Objectives:** Should be quantifiable and based on existing water quality conditions with a target for improvement. Consultant should draw on the watershed assessments to develop recommendations and action steps, involving the MIWMA and watershed stakeholders in the goal setting process.
5. **Implementation Strategies - Action Plan:** This should include the BMP Scenario Analysis to identify the necessary practices (type, quantity, acres treated, and cost) to achieve targeted watershed improvements.
 - a. Priority HUC-12 watersheds: a detailed analysis and BMP recommendations for watershed improvements should be provided.

- b. Community-Based Case Studies: an action plan with implementation strategies should be developed.
 - c. The consultant will develop detailed plans for the identified priority HUC-12 watersheds and community-based studies, and incorporate them into the overall plan.
- 6. **Stakeholder Engagement and Education Plan:** This should include a detailed plan for engaging stakeholders from different audiences.
- 7. **Implementation Plan & Schedule**
 - a. Prioritization
 - b. Cost
 - c. Roles & responsibilities
 - d. Milestones for reaching HUC-8 watershed goals
- 8. **Evaluation/Monitoring**
 - a. Framework for annual watershed plan evaluation and review of accomplishments
- 9. **Funding Opportunities/Needs**
 - a. Summarize funding opportunities for long-term water quality management plan support and implementation.
 - b. Develop contribution formulas for stable, long-term funding.

Attachment B – Original Proposal to Iowa DNR



Middle Iowa Watershed Management Authority Comprehensive Water Quality Management Planning Grant Application

Submitted to:

Steven Konrady, Issuing Officer
Iowa Department of Natural Resources
Wallace State Office Building
502 E. 9th St.
Des Moines, Iowa 50319-0034

Submitted by:

Middle Iowa Watershed Management Authority
Attention: Kasey Hutchinson
Environmental Regulations Coordinator
Johnson County Planning, Development, and Sustainability
913 S Dubuque St UNIT 204, Iowa City, IA 52240

November 30, 2023

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Executive Summary

The Middle Iowa Watershed Management Authority (MIWMA) is applying to the Iowa Department of Natural Resources (IDNR) for \$125,000 in funding assistance through the Comprehensive Water Quality Management Planning Grant solicitation. The MIWMA submits this proposal on behalf of and in cooperation with its member organizations of Iowa County, Johnson County, Marshall County, Poweshiek County, City of Belle Plaine, City of Chelsea, City of North Liberty, City of Solon, City of Walford, the Iowa County Soil and Water Conservation District, the Marshall County Soil and Water Conservation District, and the Tama County Soil and Water Conservation District.

The Middle Iowa is a HUC-8 watershed in eastern Iowa that extends from the Coralville Dam in northern Johnson County, to its furthest upstream reaches just north of Marshalltown in Marshall County, comprising 34 cities, ten counties, ten Soil and Water Conservation Districts (SWCD) and covering approximately 1657 square miles. Concerned stakeholders came together to begin conversations about collaborative watershed improvement efforts in early 2022. The Middle Iowa WMA was then officially formed in June of 2023, pursuant to Iowa Code Chapter 466B.22, and has begun laying the groundwork for watershed plan development since then. The MIWMA leadership board has representation from across the geographic area of the watershed, both rural and urban, and as such is in strong position to facilitate communication and partnerships, building community for urban-rural collaboration across the member entities. Many of our partnerships include governmental bodies that may be new to the table regarding watershed improvement initiatives. It is anticipated that these brand-new partnerships will provide a great springboard for innovation and collaboration.

Johnson County has provided \$91,000, and the City of Belle Plaine up to \$5,000, in local cash match for the MIWMA, illustrating the intention, commitment, and motivation of member entities and local stakeholders. Other communities and agencies will provide additional contributions through in-kind funding. The City of North Liberty will serve as fiscal agent, and the project will be completed within an approximately 18-month timeline.

If funded this plan, as well as the planning process, will be used to build the Middle Iowa watershed community to foster educational frameworks, increase network capacity and opportunities for partner organizations and stakeholders, and to provide information, mechanisms, and strategies to help improve the communities in our watershed and to create a more resilient future for our urban and rural communities alike. This will be achieved through the following overarching planning objectives:

- Bring all of the watershed partners, including urban and rural, to the table to focus on the stated resource concerns:
 - Water quality – improve water quality and soil health in the watershed.
 - Flood mitigation – reduce the impacts of flooding in the watershed.
 - Drought mitigation – reduce the impacts of drought events in the watershed.
 - Source Water Protection – protect drinking water sources through action plans.
 - Building community – grow the MIWMA network, create new collaborative relationships, and increase cooperation in the watershed.
 - Education – increase public awareness, education, and involvement in the watershed.

- Habitat and Natural Areas Protection – protect and improve natural areas, to provide recreational and ecosystem services benefits.
- Engage stakeholders and the general public throughout the planning process and raise awareness about the Middle Iowa Watershed by creating educational opportunities, to motivate participation in, and support of watershed improvements.
- Complete a watershed assessment by utilizing the watershed data that currently exists, along with desktop analyses, to identify watershed issues and concerns and to establish baseline conditions. A Technical Advisory Committee will assist with compiling and assessing data.
- Identify watershed issues as case studies at the community level, and develop an implementation plan ready to apply for funding as it becomes available.
- Identify high priority subwatersheds for more detailed watershed planning, with output that can help inform efforts across the landscape.
- Establish plan goals informed by the watershed assessment, with input from stakeholders.
- Develop implementation strategies, that are both urban and rural-focused.
- Incorporate focus on mutual benefits of watershed improvements and ecosystem services, with efforts on enhancing riparian areas and stream buffers and identifying opportunities for connectivity.

The watershed is dominated by agricultural production (78%), with the remaining area characterized by urban (7%), forested (6%), wetlands (5%) and other natural areas (4%); much focus will be devoted to engagement with rural stakeholders and connecting to agricultural networks. The majority of communities within the watershed have populations of less than 3000. The City of Marshalltown represents the largest community fully located within the watershed with a population of 27,433.

Water quality is a significant issue in the watershed, with sediment and nitrates of particular concern. In addition, this watershed is no stranger to both drought and floods. The Middle Iowa River Watershed will benefit greatly from WMA formation and consequent funding resources and opportunities. This effort will initiate action on critical objectives for Middle Iowa to make significant watershed improvements across the Iowa River Watershed. Among the member communities, there are both shared and separate issues, both rural and urban in nature, and experienced and new watershed improvement participants. This planning process is an opportunity to align efforts, leverage resources and expertise, and excel improvements for the good of the watershed at large.

Scope of Work and Technical Requirements

The Middle Iowa WMA, with North Liberty serving as the fiscal agent, is applying to the Iowa Department of Natural Resources for \$125,000 in funding for developing a Comprehensive Water Quality Management Plan on behalf of the MIWMA. The signed Certification Letter is included as Attachment 1.

The requested funds will be utilized to contract with a planning consultant to facilitate a community-based watershed planning process that includes goal setting and development of implementation strategies; conducting desktop analyses; compiling, reviewing, and summarizing various datasets for assessment; prioritizing HUC-12 scale watersheds and identifying four for detailed modelling and planning; identifying three community-based projects as case studies with plan development; composing the stand-alone HUC-12 and case study plans; composing the final watershed management plan. Funding will also be allocated to Agricultural Conservation Planning Framework (ACPF) modeling

of four priority HUC-12 watersheds. A competitive bid process will be utilized for any contracts entered into with project funds.

The total project cost is \$245,615. The Middle Iowa WMA will provide \$120,615 in local match funds. Of this match, \$24,615 will be in-kind contributions and \$96,000 will be cash, contributed from the Middle Iowa WMA member entities. In addition to plan development, the match funds will be utilized to develop and host a website, create a logo, and host events. Additional details on the planning budget can be found in the budget narrative section of Appendix A: Financial Assistance Request / Budget Narrative, and Attachment 3: Budget Template.

Watershed Management Authority

The Middle Iowa WMA was officially established in summer of 2023 (filing number M516114), through an agreement under Iowa code 28E and 466B, filed with the Secretary of the State of Iowa. The WMA has a total of ten eligible counties, 34 cities, and ten Soil and Water Conservation Districts located within the boundaries of the watershed. Currently, the WMA has a total of twelve official members, with additional members anticipated in the near term. A list of all eligible members is included in Appendix D.

While the official MIWMA paperwork was filed in June of 2023, the group, including the current official members, anticipated members, and other stakeholders who are ineligible for membership have been meeting on a regular basis since May of 2022. The first meeting as an official WMA was held in August of 2023. The WMA has been working in cooperation with the Iowa Department of Natural Resources as well as the East Central Council of Governments in organizing the formation of the WMA.

The member organizations are distributed across the watershed, and represent both rural and urban, with populations mostly representative of small communities (less than 3000 population) with a few larger communities. Conversations continue with other eligible members, such as the cities of Grinnell and Marshalltown, and membership is anticipated to continue to grow. A network of diverse organizations provides greater opportunity for innovation.

During the very initial conversations of watershed management authority formation, Johnson County allocated American Rescue Act Funds to watershed improvement efforts. With the formation of the Middle Iowa WMA, the majority of those funds were specifically allocated to Middle Iowa efforts, including watershed management planning. This contribution will provide the necessary and valuable match for planning purposes. In addition, WMA members have allocated both in-kind and cash match. Discussion on approaches for long-term WMA financial assistance will begin in 2024.

Watershed Description and Issues of Concern

Watershed Overview

The Middle Iowa Watershed is a HUC-8 (HUC-8 code #07080208) watershed that extends from the Coralville Reservoir in northern Johnson County, where it is impounded by the Coralville dam, to its upper reaches in Marshall County where it transitions to the Upper Iowa Watershed north of Marshalltown. The Middle Iowa Watershed spans approximately 1,657 square miles/1,060,480 acres across portions of Benton, Grundy, Iowa, Jasper, Johnson, Linn, Marshall, Poweshiek, Story, and Tama counties, and is comprised of 49 HUC-12 watersheds. A map of the watershed is provided as Appendix C.

According to the 2021 NLCD, a large majority of the watershed is used for agricultural purposes, with 67% in row crop production, followed by 12% in hay/pasture, 9% in woodland/natural, 7% urban and 6% water/wetland. While there are large communities with boundaries that intersect the watershed, such as Cedar Rapids and North Liberty, the largest community fully contained within the watershed is Marshalltown. The watershed is primarily comprised of communities with populations under 3,000. The population of the Middle Iowa Watershed based on the 2020 Census by block is estimated to be 100,423.

Recreation

The watershed is home to multiple natural areas, state preserves, state parks, and County lands and parks that not only provide habitat and natural areas, but also provide great opportunities for fishing, hiking, hunting, camping, picnicking, foraging, bird watching, boating, and kayaking. Notable recreational areas of the watershed include, but are not limited to, the Hawkeye Wildlife Management Area (Johnson), Coralville Lake (Johnson), FW Kent Park (Johnson), Gateway Park (Iowa), Union Grove Lake (Tama), Union Grove State Park (Tama), Lake Macbride State Park (Johnson), Sugar Bottom Recreation Area (Johnson), Mericle Woods State Preserve (Tama), Marietta Sand Prairie Preserve (Marshall), Hannen Lake (Benton), and Otter Creek Lake (Tama).

Water Quality

The communities in the watershed, both large and small, face significant water quality issues typical of Iowa watersheds, such as excessive nutrients and sediment. The Middle Iowa River has many listed pollutant-caused and biological impaired water segments. The States 2022 Section 303(d) Impaired Waters Map includes the following segments for bacteria: Coralville Reservoir, main stem of the Iowa River, Price Creek, Willow Creek, Walnut Creek, Little Bear Creek, Deer Creek, Union Grove Lake, Raven Creek, The following segments for organic enrichment: for Hannen Lake; the following segments for algal growth: Lake Macbride, Hannen Lake, Otter Creek Lake; the following segments for biological impairments: for Walnut Creek, Bear Creek; and the following segments with a fish consumption advisory due to mercury: main stem Iowa River.

Flooding, Drought, and Source Water Protection

Communities within the watershed are very well familiar with both flood and drought, and both conditions are expected to become more frequent and extreme. Three counties within the watershed have declared emergency declarations related to flooding just within the last five years. The watershed is also no stranger to drought. The City of Belle Plaine, a MIWMA member organization, is acutely feeling the effects of the worst drought on record in Eastern Iowa (classified as D4, exceptional), implementing water restrictions as its source water wells produce only 20% of their normal capacity.

A watershed approach is necessary to help remedy and alleviate these issues affecting both water quality and flooding and develop greater resiliency to these up and down extremes going into the future. First of all, consideration at the watershed scale is the only way to get the full picture on the sources of the water quality and flooding issues. Working across jurisdictions allows for resources and expertise to be shared and leveraged, providing opportunity to focus efforts with the biggest payback in terms of addressing priority issues, instead of keeping them concentrated within a defined jurisdictional boundary. Such cooperative efforts can also be leveraged to garner additional visibility and funding and also tap into necessary networks so that the approach is multi-pronged, focused on both urban and agricultural issues.

Watershed Efforts

- North Liberty - The City of North Liberty has an upcoming project that will focus on restoring wetlands within their city limits and located within the watershed. North Liberty continues to be active in the Clear Creek Watershed Coalition WMA and has been a long-time advocate and supporter of watershed improvements.
- Belle Plaine - The City of Belle Plaine is in the midst of a water crisis following several years of drought coupled with rerouting of a waterway that provided crucial recharge to their shallow well aquifer. The ongoing drought created conditions where the City was forced to utilize an emergency back-up well from a deeper aquifer which has decent quantity but poor-quality drinking water. To begin correcting the various issues the City has sought assistance from State agencies. The city has been awarded a \$250k grant from the IDNR for wetland restoration and integrated wellfield creation projects. Soil characterizations of the shallow aquifer are currently underway.
- Belle Plaine also recently submitted a grant application for the Water Quality Initiative Urban Water Quality Projects through the Iowa Department of Agriculture and Land Stewardship, with focus on wetland restoration and ways to integrate the potential WQI grant award into the comprehensive wetland restoration project.
- Johnson County - Johnson County provides cost-share dollars for residents in the unincorporated areas as well as smaller communities to implement soil quality restoration as part of a Soil Health Program, to increase infiltration and reduce runoff and the use of chemicals for lawn management. The program receives an annual fund of \$30,000. Additionally, Johnson County is a committed member to watershed improvements, continuing to be actively involved and support three other WMAs located within the County.
- Otter Creek Lake (Tama County) – DNR Lake Restoration Program led an effort to renovate the lake and further protect the water quality by installing multiple structures to limit sedimentation and phosphorus delivery to the lake.
- Hannen Lake Watershed Project: 2019 watershed plan, led by IDNR and Benton County Conservation Board.
- Price Creek Watershed Project: 2005-2019 IDNR 319 and IDALS REAP funded, led by Iowa and Benton County SWCD's
- Lake Macbride Watershed Project: 2002-2009 IDNR 319 and IDALS REAP funded, led by Johnson SWCD.
- Walnut Creek Watershed Project: 2006-2012 IDNR 319 and IDALS REAP funded, led by Poweshiek SWCD
- Little Bear Creek Watershed Project: 2012-2020 WIRB and NRCS funded, led by Poweshiek SWCD
- Wetland Easements along Iowa River Corridor – 1993-present USDA NRCS.

Partnerships

This watershed is fortunate to have many active organizations that continue to lead efforts in watershed improvements, such as the Amana Society, the Meskwaki Nation-led Iowa River Watershed Coalition, and the Friends of Coralville Lake. These groups have made great strides in watershed education, improvements, and illustrate the commitment to water quality health that is shared across this

watershed. The MIWMA will work in concert with these organizations and build and expand the network of partner organizations.

Middle Iowa WMA – The MIWMA will serve as the watershed planning grant applicant and will play the lead role in overseeing the watershed planning process. The MIWMA will work directly with the retained consultant(s) to engage and work with stakeholders and the public in the process, assisting with meeting and workshop development, coordinating education events, and providing input in various steps of the process. The MIWMA will be responsible for consultant procurement and project reporting.

Soil & Water Conservation Districts (SWCD) – The MIWMA is represented by three SWCDs, who will be critical for connecting with and recruiting farmer conservation leaders to host field days or to connect additional producers to the planning effort.

City of North Liberty – The City of North Liberty will serve as the fiscal agent for the grant. North Liberty has a long history of involvement in watershed improvement efforts and WMAs specifically, as well as with grant management. They provide an ally in watershed improvement efforts as well as a reliable partner in financial management.

Friends of Coralville Lake – The Friends of Coralville Lake (FoCL) is a non-profit group that, working in cooperation with the United States Army Corps of Engineers, has been leading efforts since 2016 to enhance and protect the quality of the lake, to maintain its recreational value. Their work has focused on trail restoration, river cleanups, prairie management and restoration, and amenity upkeep. The FoCL recognizes that any improvements in the watershed is an improvement for the lake. FoCL completed a Coralville Lake Action Plan in 2022, focused on dealing with sedimentation and nutrient issues in the lake. FoCL is a committed member to the overall health of the Middle Iowa watershed.

The Amana Society – The Amana Society is a legacy corporation established in 1932, managing land, industry, and several community services within the Amana Colonies. The Amana Society is both a committed stakeholder to the MIWMA as well as sustainability and water quality. The Amana Society Service Company's Water Division provides drinking water to their customers from six wells and have a vested interest specifically in protecting their source water wells from nitrate contamination. The Amana Society has participated in the MIWMA conversations from the beginning and continues to be an active participant in the organization.

Iowa DNR - Iowa DNR's central Iowa basin coordinator will provide technical support to the effort by serving on the Technical Advisory Committee. The basin coordinator will also help connect the MIWMA with DNR resources for Phase 2 source water protection plan development. DNR will provide technical support for one Phase 2 source water plan for a community within the Middle Iowa River WMA boundaries. Iowa DNR's GIS staff may provide GIS support for the RASCAL maps that will be part of the focused HUC-12 assessments.

Iowa Department of Agriculture and Land Stewardship (IDALS)- Technical support is available from the IDALS Regional Coordinators (RC). Currently this WMA area splits two RC regions (NE/SE). RC's can provide support to the Technical Advisory Committee and liaison between SWCDs and partner agencies for conservation program planning information. Some GIS support is also available and may assist with the ACPF development of the Focused HUC-12 Assessments.

United State Geological Survey (USGS) – The USGS will serve on the technical team committee, to answer questions and to assist in data compilation analysis for water quality and hydrology. The USGS has completed prior work, and published a USGS technical paper, analyzing nutrient loads based off of water quality data from multiple sources, in the Middle Iowa River watershed.

Local Academic Institutions – There are several academic institutions within the watershed that the MIWMA plans to establish working relationships with. These include Grinnell College, Marshalltown Community College, and Kirkwood Community College. The anticipated role of these academic institutions would be to serve on the Technical Advisory Committees.

University of Iowa – Iowa Institute of Hydraulic Research (IIHR)

IIHR has committed to partnering with the MIWMA to provide existing data, preliminary desktop assessments as necessary, review of planning consultant bids, and review of watershed management plan drafts.

Watershed Plan Development Process

MIWMA member input and involvement will be critical for the planning process. As such, several different committees will be formed, that will consist of both WMA and partner organizations and stakeholders, to provide the input to meet the needs of plan development. The following section describes these committees as well as outlines the development process for the Comprehensive Water Quality Management Plan to fulfill the requirements of the RFP. An associated work plan and timeline are included as appendix A.

Establishment of Committees

Technical Advisory Committee

A technical advisory committee will be formed to manage consultant procurement, review plan drafts, advise or assist with data review and analysis, and identification of priority subwatersheds and case study projects. This committee will also assist in the various assessment phases of the planning process that include Hydrology and Flood Mitigation and Urban and Rural Water Quality. The technical committees will interface with any contracted modelling team, and review output and data. These committees will consist of WMA member organization representatives as well as representatives from key agencies including IDNR, IDALS, USGS, IIHR, and HSEM. Additionally, other potential partners, such as local academic institutions (Grinnell College, Marshalltown Community College, Kirkwood Community College), may serve on these committees.

Communications and Marketing Advisory Committee

The way in which information and data is communicated and packaged in a plan is critical to its successful use. A Communications and Marketing Advisory Committee will be formed to provide review and input during the planning process on how the data and information is packaged and presented. Relevant information should be at the fingertips of those who can put it to use, including informing grant applications.

Outreach and Engagement Advisory Committee

Many outreach and engagement activities are proposed to kickoff the planning process, during the planning process, and even after the plan is complete, to elicit participation and feedback, and to connect to and provide guidance to those who will be using the final product. An Outreach and

Engagement Advisory Committee will be formed to review and provide input to the proposed communications and public outreach plan, and to assist with and help promote the events.

Watershed Characterization

Physical Environment Inventory

An important first step in the planning process will be to complete the Physical Environment Inventory. There is a significant amount of research data, reports, and GIS data available to help inventory and describe the physical environment of the watershed. This includes information and datasets that describe:

- Geology
- Land use
- Soils
- Topography
- Climate,
- Natural and protected areas
- Publicly owned land
- Communities
- Vulnerable populations
- Impaired water bodies of the watershed.
- Water Trails

Water Quality and Hydrology Baseline Conditions

Existing data, inventories, and reports will be compiled and assessed to establish baseline conditions for the watershed for water quality and hydrology. This includes desktop GIS analyses utilizing publicly accessible data sources, as well as data, inventory, and reports that contain water quality and hydrology information. These information sources will include:

- Multi-Jurisdictional Hazard Mitigation Plans
- City / County Comprehensive Plans
- Existing water quality data sets and reports (USGS)
- Existing hydrologic reports (USGS)
- Water Quality Monitoring Networks
 - USGS
 - IDNR – AQUIA Database
 - EPA STORET
 - The Nature Conservancy
 - US Army Corps of Engineers
- Stream Gaging Networks
 - United States Geological Survey (USGS): Five USGS gaging stations on the main stem of the Middle Iowa River, five gages located on tributaries.
 - UI IHR – Iowa Water Quality Information System (IWQIS) – Three stream sensors (Price Creek, Bennett Creek, Raven Creek).

Watershed Assessments

The assessment portion of the comprehensive watershed management plan will be divided into three sections to allow MIWMA members and partners to focus resources and expertise towards specific

resource concerns. Separate Technical Advisory Committees may be established to support the three separate assessments: a Hydrology and Flood Mitigation Assessment, Urban Assessment, and Rural Assessment. This section outlines the planned watershed assessment, which will be used to inform the goal setting process and develop the comprehensive watershed management plan.

Hydrology & Flood Mitigation

The hydrology and flood mitigation assessment will focus on historical flood data and research studies and publications, for use in the goal setting process of the plan. A Technical Advisory Committee will meet on a quarterly basis during the 18-month planning timeframe and will focus on the compilation and analysis of existing data.

Water Quality (Urban and Rural)

As with the other Hydrology & Flood Mitigation Assessment, a Technical Advisory Committee will meet on a quarterly basis during the 18-month planning timeframe and will focus on the compilation and analysis of existing data. The committee will assist in compiling, analyzing, and reviewing water quality data and information for the watershed. This will be used by the committee to inform subsequent watershed goals and implementation strategies.

Watershed Analysis and Interpretation

The Technical Advisory Committee will analyze the results of the Hydrology and Water Quality assessments for trends and an overall picture of water quality issues, stream health, and hydrology. The full watershed analysis will be used in the goal setting process and included in the final plan. Pulling together the assessment information will help identify specific in-stream concerns as well as locations for implementation of best management practices throughout the watershed. Similarly, the urban and rural social assessments will contain some questions in common to allow for comparisons. The results will be analyzed by the consultant with assistance from the Technical Advisory Committee to provide a watershed wide assessment, which will play a critical role in determining priorities in the implementation strategies.

Focused HUC-12 Assessments

The information from these assessments will be used to identify four HUC-12 priority watersheds for further detailed soil loss and tillage assessments, and the Agricultural Conservation Planning Framework (ACPF) modelling. The results of these detailed assessments will be used to develop standalone watershed management plans for these selected priority HUC-12 watersheds.

Focused Community-Based Case Studies

Analysis of these assessments, as well as stakeholder input, will also be used to select two case studies at the HUC-12 watershed scale, for which implementation strategies will be developed for a well identified and described issue. A detailed project plan will be developed to place these case studies in a position to apply for funding as it becomes available.

Riparian Area and Stream Buffer Assessment

Desktop data will be compiled, and GIS software used to identify riparian areas and stream corridors as well as opportunities for enhancement and connectivity, to increase habitat and decrease soil erosion. This information will be used to develop a riparian area and stream buffer management plan including identifying where gaps can be closed. This plan will also include strategies for increasing buffer areas

and connectivity, such as outreach and education, connecting with other partner networks to promote practices, and policy adoption at the local government level.

Public Outreach and Stakeholder Engagement

The MIWMA will follow a communications and public outreach plan that is developed as part of this planning process to inform the public and build interest and involvement. The consultant retained for leading the watershed management planning process will engage directly with SWCD partners, agricultural commodity groups and retailers, communities, and emergency management agencies.

An email contact list including MIWMA members, partners, and stakeholders will be maintained to provide updates throughout the planning process. The MIWMA also intends to develop a website and social media presence to distribute information. The MIWMA members and partners will play a critical role in communicating with their contacts as well. The outreach plan will leverage the various partnerships and stakeholders as outlets for information and contact within their respective community groups.

The communications and public outreach plan will also include opportunities for public input that will include field days, listening sessions, and workshops. The MIWMA will work with agricultural commodity groups and retailers as well as local banks to leverage support of these events. Partner organizations such as the SWCDs will be leveraged to elicit participation. Input opportunities will include listening sessions specifically dedicated to stakeholder input during the goal planning process, as well as agricultural field days and urban workshops, that will be coupled with education outreach focused on best practices and soil health. A source water protection workshop will be hosted to identify communities interested in completing a Phase 2 Source Water Plan.

Finally, a post-planning workshop will be planned intended for cities, counties, SWCD's and other stakeholder groups. The workshop will be used to discuss components of the plan, how to put the plan to use, as well as how to use it for funding requests.

Table 1: Public Outreach and Engagement Events

Event Type	Number of Events
Planning Kick-Off Open House	1
Agricultural Field Days	3
Source Water Protection Workshop	1
Urban Best Practices and Soil Health Workshop	2
Listening Sessions for Watershed Priorities and Goal Setting	3
Draft Watershed Management Plan Open House	1
Post-Planning Workshop	1

Goals, Outputs, and Measures of Success

The goal of the plan as well as the planning process, is to build the Middle Iowa watershed community to foster educational frameworks, increase network capacity and opportunities for partner organizations and stakeholders, and to provide information, mechanisms, and strategies to help improve their

communities and our watershed, to build a more resilient future for our urban and rural communities alike. This will be achieved through the following overarching planning objectives:

- Bring all of the watershed partners, including urban and rural, to the table to focus on the stated resource concerns:
 - Water quality – improve water quality and soil health in the watershed.
 - Flood mitigation – reduce the impacts of flooding in the watershed.
 - Drought mitigation – reduce the impacts of drought events in the watershed.
 - Source Water Protection
 - Building community – grow the MIWMA network, create new collaborate relationships, and increase cooperation in the watershed.
 - Education – increase public awareness, education, and involvement in the watershed.
 - Habitat and Natural Areas Protection – protect and improve natural areas, to provide recreational and ecosystem services benefits.
- Engage stakeholders and the general public throughout the planning process and raise awareness about the Middle Iowa Watershed by creating educational opportunities, to motivate participation in and support of watershed improvements.
- Complete a watershed assessment by utilizing the watershed data that currently exists, along with desktop analyses, to identify watershed issues and concerns and to establish baseline conditions. A Technical Advisory Committee will assist with compiling and assessing data.
- Identify watershed issues as case studies at the community level, and develop an implementation plan ready to apply for funding as it becomes available.
- Identify high priority subwatersheds for more detailed watershed planning, with output that can help inform efforts across the landscape.
- Establish plan goals informed by the watershed assessment, with input from stakeholders.
- Develop implementation strategies, that are both urban and rural-focused.
- Incorporate focus on mutual benefits of watershed improvements and ecosystem services, with efforts on enhancing riparian areas and stream buffers and identifying opportunities for connectivity.

Goal Setting Process

One of the main components of the watershed plan will be to identify achievable goals, based on interpretation of the watershed assessment information. The goal setting process will be iterative and will involve the MIWMA Board, the Technical Advisory Committees, and stakeholders. Input and active participation will be garnered through special goal setting listening sessions. The MIWMA will rely on the Technical Advisory Committee to interpret the watershed assessment information and present it at goal setting events used in the planning process.

Results and Outputs

The end result will be a watershed management plan that is accessible, flexible, and adaptable that provides organizations, WMA member organizations, and stakeholders information and guidance for implementing watershed improvements and securing funding when opportunities come available, as

well as detailed project-ready plans for selected subwatersheds and communities. The planning process should also, in general, identify secondary benefits to capitalize on, and capture value added when and where possible.

The following outputs/results are anticipated as a result of this project:

- A complete inventory of watershed physical environment, hydrology, and water quality data.
- A complete watershed characterization.
- Established baseline conditions for water quality and hydrology.
- Identification of water quality and flooding issues and sources.
- Engagement Events:
 - One source water protection workshop to connect communities to resources for developing Phase 2 Source Water Protection Plans.
 - Kick-off open house event for the watershed planning process.
 - Field days and workshops as a mechanism for input coupled with education outreach to include:
 - Three field days at local cooperator farms focused on agricultural best practices and soil health, in coordination with SWCD member organizations.
 - Two workshop events focused on urban best practices and soil health.
 - Three listening sessions specifically dedicated to stakeholder input.
 - Draft Water Quality Management Plan open house.
 - Post-plan workshop intended for cities, counties, stakeholder organizations to learn about the watershed management plan, how to put it to use, and how to leverage it for funding requests.
- Identification of four priority HUC-12 watersheds for detailed assessment to include soil loss and tillage assessments and ACPF modelling, with standalone watershed management plans.
- Two community-based case studies selected with identified issues at the community scale, with plans developed for implementation to address these issues, in ready format for funding.
- One Phase 2 source water plan for a community located within the watershed.
- A watershed management plan that supports efforts on a watershed scale with identified achievable goals, and replicable, transferable strategies (both rural and urban-focused) for implementing watershed improvements.
- Summary pages for each HUC-12 subwatershed to provide support for very localized needs and funding opportunities. The summary pages will compile the information and data that the general watershed stakeholder may not be familiar with or know how to access, that can be used to support various initiatives or funding opportunities at the very local level.
- An MIWMA website with an interactive watershed story map for each HUC-12 watershed, to mimic in interactive visual format the data contained in the standalone summary pages.
- An engaged network of member organizations, partner institutions, stakeholders, and private citizens.
- A riparian area and stream buffer management plan that identifies opportunities for protection and maintenance of riparian buffers on both privately and publicly owned land, utility easements, and greenway corridors, in consultation with County Conservation Boards, DNR Wildlife Biologists, Fisheries and Foresters.
- Outreach materials to solicit support and buy-in, as well as raise community and public awareness about the Middle Iowa WMA.

Projected Environmental Improvements

The projected environmental improvement (outcome) is improved water quality and increased resiliency to drought and flooding in the Middle Iowa and its tributaries, by equipping communities, organization, and stakeholders with strategies of implementation to directly address identified sources of watershed issues. A collaborative effort, made possible by the WMA framework, can allow for improvements to be realized more quickly and more cost-effectively as joint interests are identified, and resources shared. This also provides opportunity for natural areas and habitat protection and enhancement, by identifying this as mechanism of direct support of improved water quality and flood mitigation, as well as the other ecosystem services they provide that contribute to overall watershed health.

Measures of Success

Huge successes and improvements on a HUC-08 watershed scale may not necessarily be reflected in water quality measurements, especially over the short-term. But success can be measured by the efforts of organizations, stakeholders and residents, reflected by on-ground practices, grant awards to member communities, policy development and program initiatives supporting the goals of the plan. Success can also be measured by the degree of support and engagement of those who reside in the watershed. A post-plan survey/audit will be planned for five-year intervals to track these grant awards, policies, initiatives, and practices.

Connection to the Nonpoint Source Management Plan

The MIWMA will align the comprehensive watershed management plan with the State of Iowa's Nonpoint Source Management Plan (NPSMP). The table below describes the links between the NPSMP and the MIWMA planning process.

Table 2: Connection of the MIWMA Comprehensive Water Quality Management Planning Process to the State of Iowa's Nonpoint Source Management Plan

Goal 1: Build Partnerships to Enhance a Collaborative Watershed Approach to Nonpoint Source Water Pollution	
Objective 1.2: Encourage SWCDs to cooperate within watershed boundaries.	
As members of the MIWMA, the Iowa, Marshall, and Tama SWCDs are fully vested in its success. The SWCDs will be involved in the watershed plan development process, assisting with data interpretation and decision making, public input and outreach events, and dissemination of information necessary to make informed decisions.	
	Action Step 3: Maintain a watershed map on display in every SWCD office with state-funded projects.
	The SWCDs will have an active role in every step of the planning process, including data collection and watershed characterization. Maps produced as part of the planning process will be available and disseminated to SWCDs located in the watershed. Maps will also be made available on the MIWMA website.
	Action Step 4: Communicate available science and needed information to SWCDs.

	Resource identification and compilation, assessment and analyses results, modeling results (detailed ACPF), and maps will be made available to the SWCDs, and hosted on the MIWMA website. The SWCDs will also be key in assisting with, and providing input in, these efforts with first-hand access to data and results that result from the planning process.
	Action Step 5: Host legislative/elected official tours, field days.
	The SWCDs will be critical in assisting the MIWMA with the planned field days, to include hosting legislative and elected officials. The MIWMA will help publicize these events within the watershed in order to facilitate knowledge transfer among SWCDs and support local capacity building.
	Action Step 6: Invite local media to watershed events.
	The MIWMA will develop a list of media contacts who can distribute announcements of watershed-related events. In addition, the MIWMA website will be used to post information and announcements, and social media (both specific to the MIWMA and the member organizations who have existing social media platforms) to elicit interest in upcoming events.
	Action Step 8: SWCDs collaborating with WMAs will help maintain local watershed websites.
	The MIWMA will create a website dedicated to the Middle Iowa watershed, and will maintain this website, posting events and updated information, headlines, resources, and data as it becomes available.
Objective 1.3 – Develop local comprehensive visions and action plans for nonpoint source water quality within the HUC-12 watershed.	
	Action Step 1: State and federal agencies should provide watershed education, guidance, technical support to local stakeholders for watershed plan development and updates.
	The MIWMA will work in close collaboration with agencies such as IDNR, IDALS, and USGS to develop a comprehensive watershed management plan that will provide a roadmap for successful action and implementation, to include special focus and information at the HUC-12 watershed scale.
Objective 1.4 – Implement Smart Planning principles, as provided by Code of Iowa at watershed level.	
	Action Step 1: Provide technical assistance and financial incentives for the development and implementation activities of Watershed Management Authorities (WMAs) and other multi-jurisdictional efforts incorporating Smart Planning Principles.
	The MIWMA will apply for financial assistance from IDNR for watershed management planning the will include implementation strategies for watershed improvements that will incorporate the 10 Smart Planning Principles, as outlined in Table 3.
	Action Step 3: Encourage rural/urban collaboration, such as through Watershed Management Authorities (WMAs), to address agricultural and natural resource preservation, with an emphasis on NPS pollution reduction.

	The MIWMA will identify appropriate Best Management Practices (BMPs) and other solutions to address both urban and agricultural sources of NPS using the ACPF tool and detailed analyses. In addition, the planning process will include a social assessment to obtain baseline data on attitudes, knowledge, and willingness to implement BMPs of different types; the data will be used to develop an outreach plan to better reach urban and rural audiences. The MIWMA will encourage participation by rural stakeholders by networking with organizations with strong rural networks, such as agricultural commodity groups and retailers, NRCS, SWCDs, and the Iowa Soybean Association.
Goal 2: Improve Technical Assistance, Outreach, and Education to Facilitate NPS Assessment, Planning and Implementation	
	Objective 2.3: Develop a consistent, understandable message about conservation set for delivery by multiple groups.
	Action Step 2: get environmental groups, agencies, municipalities and agricultural interests to endorse the above statement and action step
	The MIWMA will follow statewide messaging efforts and coordinate outreach opportunities, utilizing materials that are made available through Iowa Learning Farms, Iowa DNR, County Conservations, etc.
	Objective 2.6: Develop and implement conservation to adequately preserve soil productivity and to protect water quality for targeted priority areas.
	The MIWMA will explore opportunities with the Iowa, Marshall, and Tama SWCDs for increasing the number of cost-share recipients who develop comprehensive conservation plans and will emphasize conservation plans in communications with agricultural interests and stakeholders.
Goal 3: Science-based performance measures	
	Objective 3.2: Develop local natural resource goals with targeted solutions to meet watershed needs
	The goals, objectives, and implementation strategies developed by the MIWMA will be based on technical assessments and modeling to identify high-priority locations in the watershed for conservation and flood mitigation measures.

Connection to Smart Planning Principals

The MIWMA is committed to incorporating the 10 Smart Planning Principles into the comprehensive water quality management plan for the Middle Iowa watershed. While not comprehensive, Table 3 below is the first step in structuring the planning process to incorporate the 10 Smart Planning Principles. The following Plan Elements will constitute the integral sections of the plan: Collaboration, Efficiency, Transparency, and Consistency, and Natural Resources and Agricultural Planning.

Table 3: Connection of the MIWMA Comprehensive Water Quality Management Planning Process to the State of Iowa Smart Planning Principles

Goal 1: Collaboration
Strategy 1.1 Encourage public involvement in the

planning process.
The MIWMA will leverage the connections of member organizations and stakeholder groups to encourage and elicit participation and involvement of the public in the planning process. In addition, as part of the planning process a communications and public outreach plan will be developed. This plan will include several opportunities for public involvement, including water quality planning kickoff, field days, workshops, and dedicated listening sessions.
Strategy 1.2 Increase access to resources.
The MIWMA will develop and maintain a website to host easily accessible data and information, as well as work with cooperating partners, such as IDNR and IDALS, to assist in information dissemination. In addition, the MIWMA website will be used to house access to these same materials and resources. Special emphasis will be on online document access and data compilation in a user-friendly format.
Strategy 1.3 Provide outreach and education on smart planning.
The MIWMA will utilize various mechanisms to reach the watershed community, including social media, websites, and newspapers. It will also leverage the resources of member organizations, and networks of contacts to watershed stakeholders. Several engagement events are planned as part of the water quality management planning process to provide opportunities for direct public involvement in the planning process.
Principle 2: Efficiency, Transparency, and Consistency
Strategy 2.1: Provide easy access to and promote use of planning documents, processes and resources.
The MIWMA will strive to operate with full transparency and consistency. The planning process will allow for public involvement in WMA meetings, as well as community-based events targeted to public participation and input. Information on meetings and input opportunities will be posted to the MIWMA website as well as sent on to a maintained email distribution list. Easy access to watershed planning documents, research findings, data, and project results will be made available via the MIWMA website and watershed publications.
Strategy 2.2: Foster consistency in and use of sustainable development practices.
The planning process will incorporate a message of consistency in land use decisions, project recommendations and floodplain regulations across watershed jurisdictions
Strategy 2.3: Report success and areas of improvement.
The MIWMA will report successes via public outreach events, and website, as well as leverage the resources of member organizations.
Principle 8: Natural Resource and Agricultural Protection
Strategy 8.1 Plan for natural resource and agricultural protection.
The MIWMA water quality management planning process will include establishment of baseline watershed environmental assessment in order to set goals and objectives for the protection and restoration of natural resources within the watershed. In addition, educational opportunities related

to current watershed conditions and conservation practices will be hosted with focus on both urban and agricultural areas.
Strategy 8.2 Discourage sprawl and conversion of natural and agricultural land.
The plan will promote land use practices that discourage urban sprawl and encourage protection of natural and agricultural land, with the additional goal of identifying opportunities for riparian connection, enhancing and increasing natural lands.
Strategy 8.3 Foster community connection to natural resources.
The planning process will be leveraged to increase awareness of natural spaces, through community-based events as well as identification of natural spaces and development of strategies for enhancement and protection during the planning process.
Principle 9: Sustainable Design
Strategy 9.1 Plan for sustainable development
Sustainable design goals will be incorporated into both urban and rural watershed projects. The MIWMA will incorporate sustainable design and construction standards that conserve natural resources, efficiently use limited resources, and are fiscally sound for the project partners involved.
Strategy 9.2 Observe Smart Planning Principles in public development projects
The planning process will incorporate sustainable design into any public projects, with full transparency to include public awareness and engagement to encourage buy-in.
Strategy 9.3 Encourage sustainable development practices
The MIWMA will highlight success stories from both urban and rural watershed protection projects that have incorporated existing or innovative Sustainable Design practices, encouraging the use of sustainable design practices by leading by example.

Appendices

Appendix A- Financial Assistance Request / Budget Narrative

Appendix B- Work Plan & Timeline

Appendix C- Middle Iowa Watershed Map

Appendix D- Middle Iowa WMA Member and Eligible Entities

Appendix A: Financial Assistance Request / Budget Narrative

The Middle Iowa WMA, with North Liberty serving as the fiscal agent, is applying to the Iowa Department of Natural Resources for **\$125,000** in funding to develop a Comprehensive Waters Quality Management Plan on behalf of the Middle Iowa Watershed Management Authority (MIWMA). The MIWMA, as described in the application, will leverage existing resources in the Middle Iowa watershed to complete the plan within the **\$221,000** budget and the 18-month timeline. If funded, the MIWMA will procure and retain a consultant who will serve as contract administrator, project coordinator, and provide planning services for the project. The City of North Liberty has been designated the fiscal agent and will provide timely financial administration of this project. A description of the contractual services and matching funds follows:

Summary of Contractual Expenses

The requested **\$125,000** will be supplemented with **\$96,000** in cash match (total of **\$221,000**), and utilized as follows to complete the work plan identified in the proposal:

- MIWMA will contract with a consultant to coordinate the project and to provide **\$186,000** for plan development, using contractual services and to include the detailed modelling, standalone watershed management plans, case studies, summary pages for all HUC-12 subwatersheds, and a riparian area and stream buffer management plan; **\$24,000** for public outreach services to include at least 8 engagement events; **\$11,000** for logo and website development, to include interactive story maps.

Summary of Project Match

A significant amount of match is being committed to the MIWMA planning project in the form of local cash and in-kind professional time. This section describes the **\$120,615** total match listed in the table below.

Cash Match - **\$96,000**

- Johnson County has committed **\$91,000** from the American Rescue Plan Act toward water quality management planning.
- The City of Belle Plaine has committed **\$5,000** in cash match.

The remaining **\$24,615** is in-kind professional time that supports the contractual activities in the planning process.

- The City of North Liberty will provide in-kind match in the form of administrative serves, as fiscal agent.
- MIWMA members will provide in-kind match in the form of administrative and professional staff time for the planning process. This includes at least 6 quarterly meetings.
- The members of the Technical Advisory Committee (both WMA and partner organizations) will contribute in-kind match toward the project for data collection/compilation, analysis, technical assistance, and review. This includes at least 6 quarterly meetings.

- The members of the Communications and Marketing Advisory and Outreach and Engagement Advisory Committees will contribute in-kind match toward the project assisting with dissemination of information, review of materials, and organizing the anticipated 12 outreach events. SWCD representatives will also provide additional in-kind services in connecting and collaborating with ag producers for hosting the field days.

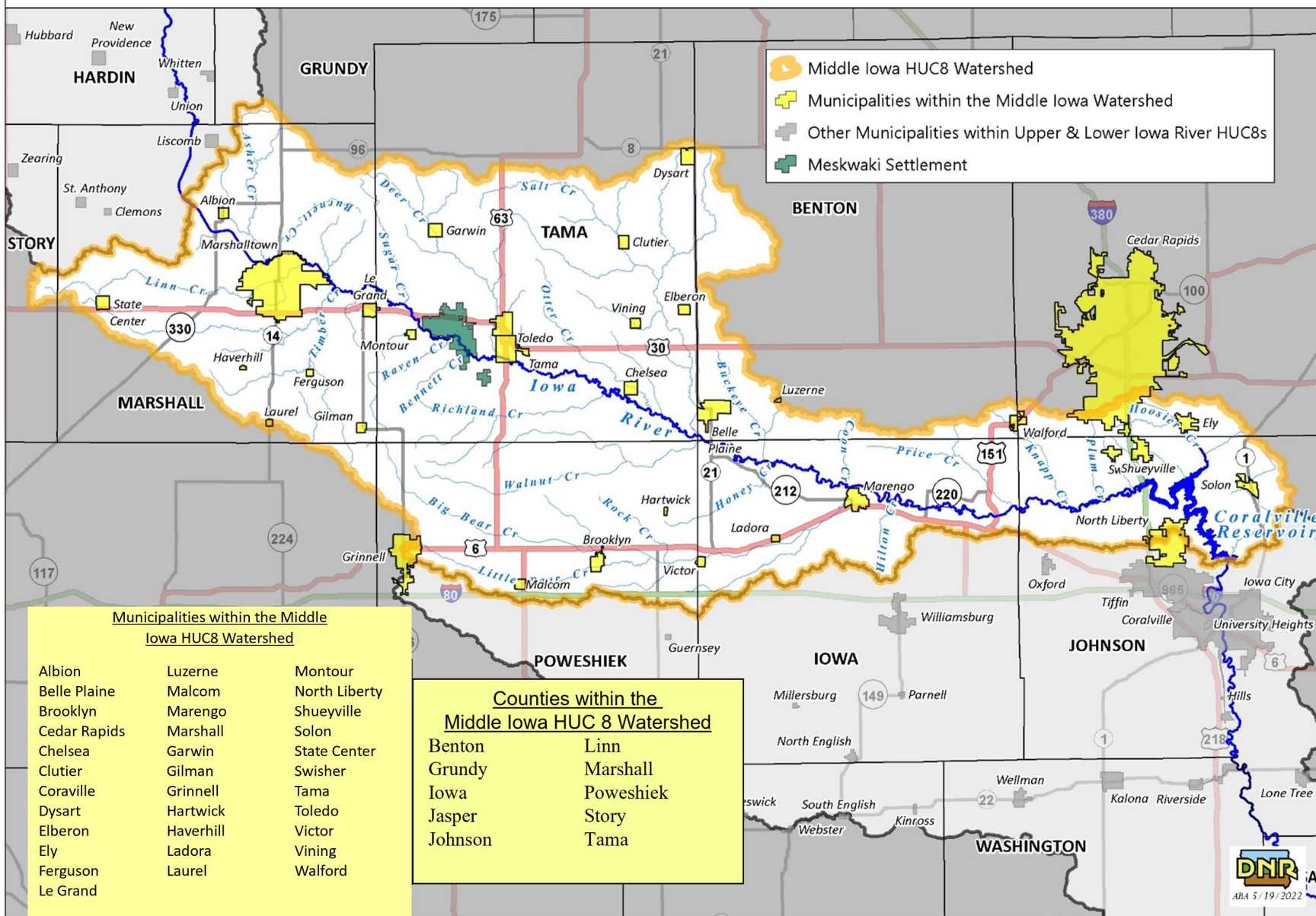
The federal volunteer rate of \$25.43/ hour was used to estimate the total in-kind match, based on assumed number of committee members, meeting frequencies, and engagement event frequency. This results in a total estimated in-kind match of **\$24,615**. Meeting attendance for WMA meetings will be documented.

Appendix B: Work Plan & Timeline

Tasks & Associated Actions		Deliverable (Lead Entity)	Milestone Date (no-later than dates)
1.	Advisory Committees Establishment	1a. Identify Technical Advisory Committee members (TAC)	January 2024
		1.b. List of TAC committee members provided to DNR (Private Consultant (PC))	April 2024
		1c. Meeting agenda, summary, and attendance lists (PC)	Quarterly
		1.d. Identify Communications and Marketing Advisory Committee (CMAC, PC)	October 2024
		1.e. Identify Outreach and Engagement Advisory Committee (OEAC, PC)	April 2024
2.	Consulting Services Procurement	2.a. RFP developed and published (MIWMA)	February 16, 2024
		2.b. TAC reviews proposals and selects consultant	April 1, 2024
		2.c. Contract with consultant developed and executed (WMA)	May 1, 2024
3.	Public Engagement & Outreach	3.a. Kick-off event for watershed planning process (WMA, PC)	June 2024
		3.b. Develop communications and public outreach plan (WMA, PC)	July 2024
		3.c. Field days at local cooperator farms (WMA, SWCD, PC)	April 2025
		3.d. Community-based listening sessions (OEAC, PC)	April 2025
		3.e. Community-based coupled input and education workshops (OEAC, PC)	April 2025
		3.f. Host open house event to present Plan highlights and receive feedback (PC)	September 2025
		3.g. Post-planning workshop for cities, counties, SWCD's and other stakeholder groups to discuss components of the plan, how to put the plan to use, as well as how to use it for funding requests (PC)	February 2026
4.	Branding and Outreach Materials Development	4.a. Establish MIWMA website, email contact lists, and social media communications (PC)	July 2024
		4.b. Finalize WMA logo (PC)	July 2024
5.	Existing Data Collection	5.a. Set up data sharing account such as Dropbox and task TAC with posting existing studies and data (PC)	May 2024
		5.b. GIS-based compilation of watershed data (TAC, PC)	August 2024
		5.c. Compilation of hydrology and water quality data resources and data sets (TAC, PC)	August 2024
		5.d. Compilation of GIS and other data specific to riparian area and stream buffer identification and assessment	August 2024

6.	New Data Collection	6.a Identify cooperator organizations for land cover and RASCAL assessments (TAC, PC)	June 2024
		6.b. Land cover assessment (RUSLE) in 4 HUC-12 watersheds to be identified through planning process (PC, DNR, TAC)	November 2024
7.	Watershed Assessment	7.a. Interpret riparian area and stream buffer data (TAC, PC)	
		7.b. Interpret existing & new watershed data (TAC, PC)	January 2025
		7.c. Subwatershed prioritization, to identify critical HUC-12s for implementation (PC)	January 2025
		7.d. ACPF modeling in 4 HUC-12 watersheds complete (TAC, PC)	January 2025
		7.e. Watershed information ready for goal setting process (PC)	February 2025
8.	Goal setting process	8.a. Organize input sessions to present assessment results and inform the goal setting process for the Plan	March 2025
9.	Implementation Strategies	9.a. Implementation Strategies ready for inclusion in the Plan (TAC, PC)	July 2025
		9.b. Implementation Strategies shared with MIWMA	July 2025
10.	Drafting the Plan	10.a. Physical environment inventory section of the plan drafted (TAC, PC)	September 2024
		10.b. Riparian area and stream buffer management plan complete and reviewed by the MIWMA Board (TAC, PC)	January 2025
		10.b. Draft watershed assessment complete and reviewed by the MIWMA Board (TAC, PC)	March 2025
		10.c. Draft goals complete, reviewed and refined by the MIWMA Board	May 2025
		10.d. Draft implementation strategies complete, reviewed and refined by the MIWMA Board	August 2025
		10.e. Draft Watershed Plan complete (PC)	October 2025
		10.f. Draft Plan released for public comment (PC)	October 2025
		10.g. Attend policy makers meetings to present the Plan & request adoption (PC)	Oct-Nov 2025
		10.h. Final Plan complete (PC)	December 2025
		10.i. Plan posted to MIWMA website (PC)	December 2025
11.	Project Reporting and Invoicing	10.j. Complete the interactive HUC-12 story maps on the MIWMA website (PC)	December 2025
		11.a. Regular status updates to include quarterly reports & claims submitted (PC)	Quarterly
		11.b. Final plan & final report submitted to IDNR; final claim submitted (PC)	October 2025
12.	WMA funding scenario development	12a. Establish sub-committee of WMA Board members (PC)	January 2025
		12b. Conduct a workshop to develop contribution formulas for stable, long-term funding (PC)	March 2025

Appendix C: Middle Iowa Watershed Map



Appendix D- Middle Iowa WMA Member and Eligible Entities

MIDDLE IOWA WATERSHED MANAGEMENT AUTHORITY MEMBERS

Counties	Cities	Soil and Water Conservation Districts
<ul style="list-style-type: none">▪ Iowa▪ Johnson▪ Marshall▪ Poweshiek	<ul style="list-style-type: none">▪ Belle Plaine▪ Chelsea▪ North Liberty▪ Solon▪ Walford	<ul style="list-style-type: none">▪ Iowa▪ Marshall▪ Tama

MIDDLE IOWA WATERSHED MANAGEMENT AUTHORITY ELIGIBLE ENTITIES

Counties	Cities	Soil and Water Conservation Districts
<ul style="list-style-type: none">▪ Benton▪ Grundy▪ Iowa▪ Jasper▪ Johnson▪ Linn▪ Marshall▪ Poweshiek▪ Story▪ Tama	<ul style="list-style-type: none">▪ Albion▪ Belle Plaine▪ Brooklyn▪ Cedar Rapids▪ Chelsea▪ Clutier▪ Coralville▪ Dysart▪ Elberon▪ Ely▪ Ferguson▪ Garwin▪ Gilman▪ Grinnell▪ Hartwick▪ Haverhill▪ Ladora▪ Laurel▪ Le Grand	<ul style="list-style-type: none">▪ Luzerne▪ Malcom▪ Marengo▪ Marshall▪ Montour▪ North Liberty▪ Shueyville▪ Solon▪ State Center▪ Swisher▪ Tama▪ Toledo▪ Victor▪ Vining▪ Walford

**ATTACHMENT 3:
BUDGET TEMPLATE**

A budget must be included with your application. Include a narrative of how the DNR funds will be used, and sources and type of match for the entire project. Use the table below along with your narrative, or include your own budget sheet.

Narrative:

Narrative: Please refer to Appendix A: Financial Assistance Request / Budget Narrative for a detailed description.

Budget Summary:

- **IDNR Request:** \$125,000 (Contractual services for Comprehensive Water Quality Management Plan)
- **Cash Match:** \$96,000 (Contractual serves for Comprehensive Water Quality Management Plan, Outreach Events, and Website)
- **In-Kind Match:** \$24,615 (Technical and other assistance from MIWMA committees (to include partner organizations, including for event planning (Field Days, Workshops, Listening Sessions)

Budget Year(s):	2024-2025		Match Information		
Budget Category	Total Cost/Item	DNR Request	In-Kind Match ¹	Cash Match ²	Total Match ³
Salary & Benefits:					
Indirect Costs:			1373		1373
Travel/Training:					
Supplies:					
Publication, distribution, or other media costs:					
Contractual:		125,000		96,000	96,000
Equipment (single items greater than \$5,000 each):					
Other:			23,243		23,243
Totals:		125,000	24,615	96,000	120,615
Total FTEs (If supporting salary with DNR funds):		Total Project Cost:		245,615	

Notes:

1. In-Kind Match: Value of local contributions to planned campaign by all partners not provided as cash
2. Cash Match: Total must be at least 5% of DNR request
3. Total Match: Total of in-kind and cash must be at least 25% of DNR request

Example: Max request \$125,000; Total Match required = 25% or \$31,250; Minimum Cash Match required 5% of \$125,000 or \$6250; remaining \$25,000 match required can be provided as a combination of in-kind or cash

If using DNR grant funds for salary, please provide FTE estimates for reporting purposes.