

Upper Iowa River Watershed WMA Board Public Outreach Plan

Goals

The primary goal of the *Upper Iowa River Watershed WMA Outreach Plan* is to help the UIR WMA Board realize its vision for the UIRW and help the UIR WMA Board achieve its mission through education and outreach. This outreach plan also provides additional detail for Objective 4 in the UIR WMA Resiliency Plan, which is “*Education and Outreach: Provide support for, and/or collaborate with, partners who are implementing education and outreach projects, programs and initiatives that support the Vision, Goals, and Objectives of the UIR WMA, and implement projects, programs and initiatives that expand education and outreach to the target audiences*”. The strategies and activities listed under Objective 4 in the UIR WMA Resiliency Plan are further detailed in this Outreach Plan, as are the target audiences, partners, outcomes, evaluation metrics and other information that can be used by the UIR WMA Board and their partners as they move forward.

Background and Considerations

Development of this Public Outreach Plan was informed by discussion with the UIR WMA Board members, UIR WMA Coordinator and private and public partners. Watershed surveys, meeting surveys, public poles, and research into other Public Outreach Plans were also considered. Northeast Iowa RC&D staff gathered input through a survey of 1,300 Upper Iowa River Watershed residents. A survey conducted by the University of Northern Iowa (UNI) provided comparative information about attitudes in Iowa in general. Past Public Outreach Plans developed by Iowa Learning Farms, Soil and Water Conservation Districts, the RC&D and other experts were reviewed. UIR WMA partners and local experts provided information about ongoing efforts that could be modified or enhanced through partnership with and assistance from the UIR WMA. The inclusion of outreach and education strategies and activities in this outreach plan carefully considered the following.

- The UIR WMA Board currently has limited funding and technical capacity.
- Partnering organizations have ongoing and proposed efforts that support the UIR WMA’s goals, vision and objectives. Support and promotion of their efforts will be more effective than duplication of their efforts.
- Opportunities for partnership with local, state, regional, federal, nonprofits, agencies and organizations are abundant and can maximize the UIR WMA Board’s limited funding and resources.
- Implementation of new and innovative outreach and education techniques intended to breakdown existing social, political and cultural barriers may need to be created, fostered, promoted and otherwise supported.
- The target audience is broader than the watershed residents and visitors. It includes partners and leaders from outside the watershed who could influence public opinion, policy and future funding that would impact implementation of the UIR WMA Resiliency Plan.

According to a 2015 survey conducted by UNI, few Iowans can identify or correctly define “watershed.”^{vi} In contrast, 100% of farmers and landowners who filled out a survey at an Upper

Iowa River Watershed WMA Planning meeting held at Seed Savers Exchange in 2018 for Canoe Creek Subwatershed landowners correctly identify their watershed. This greater understanding of watersheds and watershed concepts is in part tied to the extensive public outreach that has occurred in the UIRW since 1999 when dozens of local, state and federal private and public partners began collaborating to improve the water quality in the UIRW. Before that time, many of the organizations and agencies had worked independently in smaller geographic areas defined by political boundaries. After 1999, over four dozen private and public partners from throughout the watershed very actively partnered and promoted UIR watershed-wide efforts. As a result, local, state and federal programs in the Upper Iowa River Watershed have been some of the most successful in Iowa in terms of state and federal cost share distribution and number of state and federal conservation practices implemented. USDA offices and SWCD Boards report waiting lists for program dollars to implement many practices. The past education and outreach efforts and landowner willingness to participate bode well for the successful voluntary implementation of resilience strategies through and with the UIR WMA. The past public and private efforts have also taught local leaders that providing technical and financial assistance, as well as coordination to help multiple entities succeed in their own efforts is a powerful way to help everyone to succeed without duplicating effort. To that end, the UIR WMA Board proposed to meet its goal by having the UIR WMA Watershed Coordinator provide support for, and collaborate with, partners who are implementing education and outreach projects, programs and initiatives that support the Vision, Goals, and Objectives of the UIR WMA, and by having the UIR WMA Watershed Coordinator implement projects, programs and initiatives that expand education and outreach to target audiences. The UIR WMA Resiliency Plan Objective 4, as previously noted, conveys this intent.

Strategies and Activities

Specific *Strategies* that drive the development and implementation of activities include the following.

1. Increase public awareness of watersheds and the power of working through the watershed approach to measurably reduce flooding and improve water quality.
2. Encourage farmers and landowners to implement agricultural practices that conserve soil and improve water infiltration.
3. Promote greater understanding of best practices for urban stormwater management, and develop champions for watershed protection among community leaders.
4. Engage students and youth, the next generation of community leaders, in watershed education and improvement projects.

Activities that will help the UIR WMA Board accomplish their strategies include the following.

- Education and Outreach Branding
- Demonstration Tours
- Interpretive Kiosks
- Field Days
- Living Room Meetings
- “Lunch” & Learn
- Youth Water Conservation Programming
- Water & Arts Series/Activities
- UIR Watershed Awareness Weeks: Coordinated Activities during World

- Water Week in August and during Earth Day Week in April
- Watershed Signage
- Watershed Units in STEAM K-12 Classroom
- River Guardian Program
- School Stormwater Field Trips
- Watershed & Water Conservation Units in Ag Education; FFA and 4H
- School Farm Conservation Field Trips
- Fit Environment
- ECYL
- UIR Watershed Website & Social Media
- Promotional Materials
- DIY: Community BMP Workshops
- Producer Peer Leadership
- Newsletter
- Conservation Leadership Awards
- WMAs of Iowa Participation
- Weather-Ready Nation “*StormReady*” Program
- Watershed Resident Surveys

Outreach and Education Delivery Mechanisms

Managing active outreach and education campaigns that reach diverse audiences requires dedicated staffing. A dedicated WMA Watershed Coordinator can connect partners, develop campaigns, implement programming, coordinate activities, and evaluate progress. Therefore, the primary delivery mechanism for delivery and coordination of outreach and education on behalf of the UIR WMA will be the UIR WMA Coordinator, who will, as funding allows, implement projects, programs and initiatives that expand education and outreach to target audiences and also support the ongoing and expanded efforts of partners.

Many private and public partners in the Upper Iowa River Watershed are already developing and implementing dynamic watershed outreach, education and activities. This outreach plan does not seek to replace the work of those entities; rather, its goal is to partner with them, to expand their reach, suggest strategies and attract funding that will strengthen their efforts. It also strives to identify additional tools, strategies and messages they might employ, and empower innovative new partnerships among watershed stakeholders. Many WMA partners have earned the trust of local farmers, community leaders, vulnerable community members and youth. In some cases, these partners will simply need new tools and information that can be provided by the UIR WMA Coordinator. In other instances, they will need technical support and/or financial assistance.

Some partners will be local, state and/or federal agencies who manage established programs and have worked together or in support of each other in the past; others will be new to partnership. Some may not have worked across political or social boundaries in the past or be unable to work across them in the future but those entities may be able to implement a coordinated effort at the same time as their peers in other communities or counties. Providing leadership for that coordination and other assistance to partners will maximize outreach and funding and reduce duplication of effort.

Potential partners may include, but are not limited to, the following.

- Allamakee, Winneshiek and Howard County SWCDs
- Allamakee, Winneshiek and Howard Counties and County Departments including County Engineers, County Emergency Managers, and County Roadside Managers
- Decorah City Council, Employees, Departments, Boards and Commissions, especially decision making and those with roles in mitigating, responding to, and cleaning up from flooding such as Parks & Recreation offices, Streets Departments, Municipal Utilities, Fire Departments, and Police Departments
- Lime Springs City Council, Employees, Departments, Boards and Commissions
- Upper Iowa Drainage District
- Iowa Flood Center/IIHR
- Local USDA NRCS and FSA Offices
- Division of Soil Conservation and Iowa Department of Ag and Land Stewardship
- Northeast Iowa RC&D Inc.
- Northeast Iowa Community Action
- Luther College and Luther College Environmental College for Young Leaders
- University of Iowa's Iowa Initiative for Sustainable Communities (IISC)
- University of Iowa's School of Urban and Regional Planning
- Northeast Iowa Community College and NICC Exploring STEAM Summer Camp
- ISU Extension, County, County, Regional and State
- Allamakee, Winneshiek and Howard County Farm Bureau Boards
- Producer Groups including but not limited to Iowa Corn Growers, Iowa Soybean Association, Practical Farmers of Iowa
- Allamakee, Winneshiek and Howard County Pheasants Forever Chapters
- Driftless, Bear Creek and other Chapters of Trout Unlimited
- Community Betterment and Chambers of Commerce groups
- Allamakee, Winneshiek and Howard County Tourism and Economic Development Organizations
- Area Teachers and School Staff
- Youth organizations related to agriculture and rural life, such as FFA and 4H
- Upper Iowa Audubon and Upper Mississippi Audubon
- DNR Bureaus including Fisheries, Wildlife, Water Quality, and Forestry
- Iowa Coldwater Conservancy
- National Trout Unlimited, Ducks Unlimited, Wild Turkey Federation, Whitetails Unlimited and other national private nonprofits
- Local arts organizations
- Local libraries and cultural institutions
- Local business owners
- Local churches
- Local media, such as local newspapers, community radio stations, and non-traditional media such as free magazines and newspapers, and community websites.

Key Audiences

The UIR WMA Board recognizes that implementation of the UIR WMA's Watershed Resiliency Plan will rely on voluntary participation by private and public partners and watershed residents. Therefore, implementation must include education and outreach that engages, empowers and motivates partners and residents and considers specific priority audiences. The following four priority audiences have been identified and will be targeted through the strategies and activities detailed in this plan but other audiences may be identified as implementation of the plan progresses. 1) producers and rural landowners, 2) community leaders and residents 3) children and youth 4) the general public. Information about each of these priority audiences is described in more detail below.

Producers and Rural Landowners

Producers and other rural Landowners manage the majority of the land area in the Upper Iowa River Watershed. Their farming operations and the voluntary implementation of water and soil conservation practices on their land have, and will continue to have, an immense impact on the hydrology of the entire watershed. Producers and landowners on the farthest edges of the watershed, uphill and upstream, have some of the best opportunities to help reduce downstream flooding with lower cost solutions. Unfortunately, although their actions can dramatically help reduce flooding, surveys and personal input from meetings and interviews reveal that there is a disconnect between these upland landowners and the flooding on the Upper Iowa River. Many don't believe their actions or their operations have any impact, good or bad, on the flooding in and around the Upper Iowa River, which seems far away from their operation.

Public meetings held during the planning process revealed other notable differences between producer and landowner attitudes toward, and awareness of, watershed challenges, based on the location of the farmers' property in the watershed and/or their location upstream or downstream on the Upper Iowa River. The public meeting in rural Allamakee County, near the mouth of the Upper Iowa River, was very well attended for a less population dense area of the watershed. Those Allamakee County landowners experienced regular flood-related crop and building damage. Farther upstream in Howard and Winneshiek Counties, many landowners attending public meetings had property directly in the UIR Corridor. Many of their concerns centered more on water quality than water quantity. ***These inputs from watershed residents indicate that to effectively increase participation in conservation practices across the entire watershed, the UIR WMA Board and Coordinator will need to utilize distinct strategies and messages that are developed for producers based on their location within the watershed.*** For example, a focus group of landowners in the Canoe Creek, a subwatershed (HUC 12) of the UIRW, indicated a need for financial assistance coupled with information and advice.

The 2017 URIW Landowner Survey conducted by Northeast Iowa RC&D provided specific, quantifiable and statistically valid information about UIRW landowner attitudes and beliefs, including producer landowners. Some of the answers can be used to develop and maximize outreach to producers and producer groups, including what types of assistance producers and other landowners want to receive and who they want to receive it from, and what barriers the

producers felt impeded implementation of conservation practices. A few of the relevant responses are summarized below.

- 79% of producers and other landowner respondents were interested in receiving conservation planning assistance with the potential for funding for adopting conservation practices.
- 30% of producers and other landowners said that “not knowing enough about the practices” was a barrier to adopting conservation practices.
- 61%, said cost got in the way of increasing conservation.
- Producers indicate a high degree of trust in local farm agencies and organizations.
- 94% of producer landowners say they’re comfortable working with a farm agency, extension agency, producer association, or farm membership organization.
- Farmers were most comfortable working with NRCS, FSA, their County SWCDs, and ISU Extension.

Community Leaders and Residents

Although there are several incorporated and unincorporated communities and villages in the UIRW, there are only, at the time of this plan development, two cities that are official members of the UIR WMA, including Lime Springs and the City of Decorah. These and other urban areas play an essential role in managing stormwater runoff from impervious urban surfaces, nutrients and bacteria from sanitary sewers, and nutrients from lawns, parks and other public and private spaces. They set community policy, planning and zoning regulations and ordinances, are responsible for city sewer and storm water infrastructure. Citizens and communities individually and collectively, through mandate or through voluntary measures, implement BMPs.

Cities have the ability to raise and utilize stormwater utility fees, apply for grants to help implement projects and control stormwater runoff from large areas of land. Stormwater management is most effective when it is fully integrated into city visioning and planning and when city leaders and residents have enough understanding of stormwater practices to be willing and able to build them into various initiatives and policies.

The City of Decorah, with a population of approximately 8,000 residents, is the largest community in the watershed and an active member of the UIR WMA Board. Decorah is located on and around the UIR in the heart of the UIR Watershed. Luther College controls a substantial amount of land in Decorah along the UIR. Decorah is just upstream of and adjacent to the unincorporated village of Freeport, where vulnerable populations have recently experienced severe flooding. Over several decades, Decorah has partnered with the Army Corp of Engineer and worked independently to install structures the redirect stream flow away from the center of the community, control and direct stormwater runoff through urban stormwater management, and temporarily restrain water and protected the community using levees. Over the past decade, the UIR Watershed has experienced multiple rainfall events that have resulted in flood stage or near flood stage river levels that have pushed the capacity of the levees and neighborhoods in and around the community have sustained flooding multiple times, raising awareness and support for flood prevention.

The City of Decorah adopted the *Decorah Stormwater Management Plan* in 2015. The Plan was developed through a formal partnership between the Iowa Initiative for Sustainable Communities (IISC), the University of Iowa's School of Urban and Regional Planning and the City of Decorah. It is comprised of two sections, Part 1- Problem Identification and Part 2- the Management Plan and at planners noted that at the time it was developed it, "*reflected the investigative process for analyzing Decorah's current flooding areas, stormwater infrastructure, spatial characteristics such as soil, topography and water quality based on primary and secondary data as well as community and City Staff input.*" It also identified locations and BMPs to improve water quality and quantity throughout Decorah. The City of Decorah began implementing a Stormwater Utility Fee in 2017. Since many of the projects identified in the Plan have already been implemented or are no longer feasible, the City is currently working to develop strategies for ongoing analysis, planning and implementation of projects and ongoing outreach and education.

Limesprings, with a population of approximately 500, does not have a stormwater management plan at the time of this plan development. It is located just south of the main channel of the UIR, high in the watershed, where river flooding is less frequent. The UIR is considered an integral part of the community. There is an aging dam on the UIR in Limes Springs and the impounded area and associated campground and recreational area are important components of the community's recreation, tourism draw and economy. There are UIR tributaries and several small freshwater emergent wetlands near the community that complicate stormwater runoff issues. Lime Springs Comprehensive Plan notes that "*Lime Springs does have an underground stormwater drainage system and surface runoff follows paved streets until it reaches the creek. However, a majority of the streets in the city are at property level with no curb or gutter, making proper drainage an issue in some areas.*" Therefore, the opportunity for development of a *Limesprings Stormwater Management Plan* exists and would be beneficial to the community and its residents.

The *2017 UIR Watershed Landowner Survey* conducted by Northeast Iowa RC&D provided specific, quantifiable and statistically valid information about the attitudes and beliefs of UIRW landowners, including community members. The input from urban landowners provides insight into their experience with and knowledge of flooding issues in the watershed and generally how flooding has impacted them. It can be used to inform activities. A few of the relevant responses are summarized below.

- 87% of urban landowner respondents know someone who has been impacted by flooding
- 36% of urban landowner respondents have had their home or land impacted by flooding in the past five years
- The most common impacts flooding has had on urban landowner respondents is 1) having to deal with a closed road or bridge 2) missing work
- 72% of urban landowner respondents disagreed that enough is being done to improve water quality

Children & Youth

Educating and empowering the next generation of watershed leaders and residents is another essential task. The students of today will be the farmers, community leaders, business owners, and homeowners of 2040. They will control land and water resources, make policy and vote. Many teachers and schools in the UIR Watershed already include some watershed education about water quality or local surface water in their curriculum but very few discuss or teach about watershed resiliency and/or flood prevention. Math and physics classes could calculate the velocity and force of streams and rivers, the quantity of stormwater runoff that specific practices can hold, or the cost of cleaning up after a flood versus the cost of flood prevention. Biology classes could examine the environmental benefits and water holding capacity of native vegetation or compare a stable stream to a ‘flashy’ flood prone stream ecosystem. English classes could develop outreach and education materials that result in greater support for implementation of flood prevention practices and policies. However, these and other shifts in learning are more likely to happen if the UIR WMA Board and their partners providing information and tools to educators that empower and encourage them. Although the schools and teachers have limited resources and conflicting pressures, many have expressed interest in exploring optional curriculum, having partners visit their classrooms, and/or developing new field trips to demonstration and learning sites.

Some partners are in the process of developing new children and youth initiatives in the UIR Watershed and nearby communities. Their efforts will increase opportunities for hands-on watershed and stormwater learning in cooperation with schools or even outside the school setting. There are several partnering organizations that specifically target children and youth for outreach and education efforts either during the school year or in the summer months. In the past, the majority of these efforts have been related to water quality and/or water recreation. With technical and financial assistance many of the partnering organizations will be more likely to be able to incorporate programming and learning units related to more complex issues like hydrologic principles, resiliency, conservation practices, flood prevention, recognizing and protecting vulnerable community members, and policy development and impact.

Outreach and education to youth can also incorporate strategies that encourage individual and group accomplishment and action. Some partner organizations have or are working on developing reward systems that make learning and action fun. These efforts can shift the way children and youth perceive learning and action and can be supported through financial and technical assistance.

The General Public

Surveys show that public awareness and understanding of watersheds and conservation are higher in the UIR Watershed than in many other watersheds but even given that, the awareness and level of understanding that the public has of watershed and community resiliency, flood prevention, conservation and other issues is a necessary precondition to empowering residents to change personal behavior, support private and public financial investment and encourage and support changes in public policy.

Providing technical support for the general public and subsets of the general public to increase and expand education and outreach about water management, water quality, resiliency, flood prevention and other issues in both urban and rural areas within the UIR Watershed has the potential to break-down rural-urban conflict and build sustainable partnerships that positively impact the watershed system. Part of the education and outreach can be specifically tied to helping community members from different places in the watershed, different socio-economic groups, and/or different power structures better understand how each of them and their decisions impacts other watershed residents. This technique has been very successful in other watersheds in Iowa.

Watershed outreach efforts can be targeted to individual sub-audiences and groups, but it will be more powerful if it is implemented across political, social, economic and environmental boundaries, creating a “we’re all in this together” mentality. Such an approach makes urban rural partnerships successful, gets everyone moving in the right direction and can result in systems change. Communities and counties may invest in city practices as well as new partnerships with private rural landowners who can decrease stream and river flow through the community by implementing upstream practices. Their united efforts and combined investment could improve profitability for the farmer, protect vulnerable downstream populations that find it difficult to recover from flooding, create wildlife habitat, reduce the cost of flooding for city and county tax payers, reduce road closures and commute delays, and protect other public and private infrastructures.

The 2017 URIW Landowner Survey conducted by Northeast Iowa RC&D provided insight into the attitudes of landowners across the UIRW. It found that many of the watershed residents have been impacted by or known someone impacted by flooding and that many had been impacted by road closures related to flooding. Utilizing the survey data to create community understanding of the impacts of flooding could create greater comradery among the people that have the greatest potential to reduce flooding. Therefore, this education and outreach plan recommends strategies for reaching the diverse audiences within the Upper Iowa River Watershed, fostering in them greater understanding of the issues, and empowering them to effect change. A few of the relevant responses from the survey are summarized below.

- 91% of urban landowner respondents agreed that flooding is a problem in the UIRW

Matrix Attached

A Matrix of activities with descriptions of each and the activity’s relationship to the Plan’s objectives and target audiences is attached. Although other key messengers and partners may be involved or identified in the future, the Matrix also details the key messengers that are known at this time. Methods, outcomes and evaluation metrics are briefly mentioned to provide additional information for the WMA partners to use as they work independently or with the WMA seeking technical or financial assistance through grants for project, initiatives or programs.

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