## BUSINESS MEETING

### 1) Agenda topic Call Meeting to Order | Presenter John Beard

John Beard called meeting to order at 5:15 pm on 6/14/18

### 2) Agenda topic Approval of Minutes 2/15/18 meeting | Presenter John Beard

<table>
<thead>
<tr>
<th>Action items</th>
<th>Motion</th>
<th>Second</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve Minutes from 2/15/18 meeting</td>
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The minutes from the 2/15/18 were approved unanimously. Motioned by Jan and seconded by Dan.

### 3) Agenda topic Approval of vision statement, goals, objectives, and strategies for the Upper Iowa Resiliency Plan | Presenter Ross Evelsizer

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<thead>
<tr>
<th>Action items</th>
<th>Motion</th>
<th>Second</th>
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<tbody>
<tr>
<td>Approval of UIR Plan statements.</td>
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Ross Evelsizer presented the vision statement, goals, objectives, and strategies for the Upper Iowa Resiliency Plan. The plan was approved unanimously after a lengthy discussion. Motioned by Jan and seconded by Andy.

### 4) Agenda topic Approval of adding the UIR WMA as a partner to the Upper Iowa River Watershed Resilience Team flood survey | Presenter Jon Jensen/Rachel Brummel

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<thead>
<tr>
<th>Action items</th>
<th>Motion</th>
<th>Second</th>
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</thead>
<tbody>
<tr>
<td>Approval of being partner.</td>
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</table>

Rachel Brummel asked for the approval of adding the UIRWMA as a partner to the Upper Iowa River Watershed Resilience Team flood survey. The request was approved unanimously. Motioned by Dan and seconded by Jack.

### 5) Agenda topic Set Next Meeting Time/Date and Adjourn Business Meeting | Presenter John Beard

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<thead>
<tr>
<th>Action items</th>
<th>Motion</th>
<th>Second</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting Date: ?</td>
<td>Location: Decorah City Council Chambers</td>
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The next meeting time and location were determined to be in the Decorah City Council chambers on Thursday, August 9th at 5 p.m.

The business meeting was adjourned unanimously.
UIRWMA | Agenda

Presentations:

Update from Iowa Flood Center:
- Presentation by IFC-Flood Resilience Team – **Ashlee Johannes**

University of Iowa Center for Evaluation and Assessment:
- Survey from U of I Center for Evaluation and Assessment

Update from Northeast Iowa RC&D:
- Upper Iowa River Watershed Plan Development Update

Upper Iowa River WMA Coordinator Update:
- **Matt Frana** - UIR Project Coordinator Update

Natural Resources Conservation Service
- **Todd Duncan** – Soil Health  
  Todd was unable to present so will likely speak at the next meeting
<table>
<thead>
<tr>
<th>Activity</th>
<th>Strategy</th>
<th>Description</th>
<th>Target Audience</th>
<th>Key Messengers</th>
<th>Potential Partners</th>
<th>Methods/Vehicles to Maximize</th>
<th>Outcomes</th>
<th>Evaluation Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and Outreach Branding</td>
<td>1,2,3,4</td>
<td>This activity will develop a consistent UIRWMA &quot;brand&quot; so that all the education and informational materials have the same look, including printed materials, the WMA's website, mass media, informational and educational outreach materials developed by and for the UIRWMA. This will include layout and design of interpretive kiosks, watershed signs, billboards, brochures, posters and any other educational material developed by or for the UIRWMA.</td>
<td>Watershed residents, students, leaders, partners, and visitors</td>
<td>WMA Board with WMA Coordinator and RC&amp;D</td>
<td>Producer organizations, UIR Alliance, Local and Regional Nonprofits</td>
<td>Input meetings with WMA board or committee, selection of specific characteristics such as colors, fonts, style and other, draft board review and final selection of branding characteristics, draft component design standards for specific types of education and outreach</td>
<td>A verified, consistent and cohesive education and outreach effort that is highly recognizable as being associated with the UIRWMA. Increased public awareness of, understanding of, and support for watershed resiliency and future implementation of BMPs on private and public properties</td>
<td>Number of unique component design standards that are utilized and overall number of times the design standards are applied</td>
</tr>
<tr>
<td>Demonstration Tours</td>
<td>2</td>
<td>This activity includes development and implementation of guided tours of UIRW implemented projects and/or practices especially the practices implemented through the Iowa Watershed Approach Project. It also includes tours of urban conservation practices in UIRW communities, tours of the NE Iowa RC&amp;D’s Urban Stormwater Demonstration Site, and other urban and rural sites residents, leaders, and visitors can go to see first hand examples of the urban and rural practices being promoted by the UIRW WMA Board. It may include bus tours and will include a guide who explains the practices to the participants.</td>
<td>Community and county leaders, City officials and city staff, Community-level partners, including staff, members and boards of Master Gardeners, Downtown Betterment, Chamber of Commerce, Park and Recreation, school boards and administrations, businesses and any other community members that might implement urban stormwater practices.</td>
<td>NCIS, SWCDs, Winneshiek County, RCD, leaders from cities with existing stormwater BMPs</td>
<td>County Engineers, ISU Extension, ISU, NFWF, Albert Energy, Local Schools, Iowa Flood Center, EPA, Local Businesses, Chamber of Commerce, Downtown Betterment, Master Gardeners, 4-H, Eagle Scouts, Local Churches and other partners interested in investing in Watershed Resiliency</td>
<td>Event planning, scheduling, site summaries, invitations to educational events/tours, publicity, secure partners, donations for meals, speakers and transportation as needed, coordination with property owners, post event activities on social media</td>
<td>Increased dialog, familiarity, understanding of, and comfort with watershed resiliency, and urban and rural BMPs</td>
<td>Number of tours, partners, entities (such as cities, counties and organizations) attending/represented.</td>
</tr>
<tr>
<td>Interpretive Kiosks</td>
<td>1</td>
<td>This project will develop, fabricate and install informational and educational kiosks in strategic urban and rural locations where projects have been implemented. The kiosk will explain the practices and/or the concepts associated with watershed resiliency and other priority topics such as soil health, cover crops, permeable pavers, stream restoration etc.</td>
<td>General Public</td>
<td>Property owners who have implemented rural and urban practices, RCD &amp;</td>
<td>Private Landowners, Cities, Businesses, SWCDs, RCD, Community Betterment Groups, NCIS, DALS</td>
<td>Kiosk development, fabrication, placement and care. Public and private kiosk ownership and care. Stories in local media. Mini-events at BMPs with kiosks</td>
<td>Increased public awareness of, understanding of and support for watershed resiliency and implementation of specific BMPs on private and public properties</td>
<td>Number of BMPs implemented by private and public partners and watershed community members</td>
</tr>
<tr>
<td>Field Days</td>
<td>2</td>
<td>This activity will implement field days that are educational events on local farms. Producers will voluntarily participate. The farms that are selected will have already implemented practices that the UIRWMA is promoting. Topics could range from cover crops, no-till and other soil conservation practices implemented on working land, to structural practices such as ponds and on-road structures.</td>
<td>Producers, Landowners</td>
<td>Producers, SWCDs, NCIS, DALS, Producer Groups, RCD, EU Extension, Driftless Chapter Trust Unlimited, national TU, MAF</td>
<td>Producers, SWCDs, NCIS, DALS, Producer Groups, RCD, EU Extension, Driftless Chapter Trust, National TU, MAF, Groups, County Engineers.</td>
<td>Coordination of event and speakers, invitations, press releases and promotion in local media and through partners, secure donations for meals, develop handouts, videos and post event activities on social media</td>
<td>Increased dialog, familiarity, understanding of, and comfort with watershed resiliency, agricultural BMPs and structures</td>
<td>Number of Producers and producers who attend events. Enrollment in related farm programs and/or number of Producers requesting follow-up assistance from farm agency staff.</td>
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<tr>
<td>Living Room Meetings</td>
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<tr>
<td>This activity is intended to bring interested watershed residents together to hear about the UIRWMA's efforts and plan over a meal. A host would give an informational talk during a meal (breakfast, lunch or dinner). Topics may include urban stormwater management, the importance of protecting vulnerable populations, on-road structures, rural BMPs, local water resources, potential local policy, WMA project updates and other education &amp; programming.</td>
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<tr>
<td>General Public, Community Leaders, Decision-Makers, Ag Lenders, Chamber of Commerce, SWCDs and other WMA members and partners</td>
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<tr>
<td>Chamber of Commerce, Community Betterment Groups, RC&amp;D, Ag Lender Groups, Local Banks, CCBs, Producer Groups, UIR Alliance, Driftless TU, ICC</td>
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<tr>
<td>Develop, coordinate, promote and present a series of topics, press releases, direct invitations to target audience, identify, secure and coordinate sponsors, space, meal, and speakers</td>
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<tr>
<td>Increased familiarity and comfort with the WMA, urban and rural BMPs, watershed resiliency, and the return-on-investment for implementation of practices.</td>
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<tr>
<td>Number of events, number of partner, sponsor, and attendance</td>
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<thead>
<tr>
<th>“Lunch” &amp; Learn</th>
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<tbody>
<tr>
<td>This activity is organized events for K-12 children and youth in informal education settings. It could include hands-on projects, like building rain barrels, or outdoor recreation activities like canoeing clean-ups, playing with a stream table during a public library youth program time, learning about trout and how to fish through a Park and Recreation program, or creative water activities at a fair or festival.</td>
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<tr>
<td>Children &amp; Youth</td>
</tr>
<tr>
<td>SWCDs, CCBs, School Clubs, 4H and Scout Groups, Park and Recreation, Daycare Providers, Libraries, Fair, Festival and Event Organizations, RC&amp;D</td>
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<tr>
<td>Teachers, School Administrators, Education Professionals, SGI Extension K-12 program staff, CCBs, Librarians, Youth Organizations, Camps, UIR Alliance, RC&amp;D, Faith-based Youth Groups, Park and Recreation</td>
</tr>
<tr>
<td>Identify existing programs, festivals, events and activities that draw youth or would like to draw youth. Develop and provide program activity kits that empower partners and foster fun learning about watershed resiliency, water quality, best management practices and other related topics. Promote use of activity kits.</td>
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<tr>
<td>Foster a culture of stewardship and environmental leadership among youth who will grow into community members and leaders. Secondary effect of parents learning through conversation with kids, take-home materials and projects in the community.</td>
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<tr>
<td>Number of events that refer to and/or use program activity kits to form implementation of youth water conservation programming, participation in events.</td>
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<thead>
<tr>
<th>Youth Water Conservation Programming</th>
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<tbody>
<tr>
<td>This activity is intended to introduce conservation issues through creative methods including music, dance, theater and visual art events that relate back to watersheds, stewardship of water, and stormwater management.</td>
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<tr>
<td>General Public, Children &amp; Youth</td>
</tr>
<tr>
<td>Event Organizers, Communities, Schools, COTL Artists, Singers, Songwriters, Composers, Dancers, Actors, Visual Artists, etc.</td>
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<tr>
<td>Communities, Schools, Event Planners, Arts, Theater and Music Organizations and Businesses, K-12 School Art &amp; Music Programs, College Art &amp; Music Programs, Cultural Organizations, Local Businesses, RC&amp;D, Driftless Art Collective, Northeast Iowa Artist Studio Tour, Event Organizers, Fair Boards</td>
</tr>
<tr>
<td>Create a resource for wetland stewards talking about how water and art can enhance events, festivals and fairs and shares activities and programs that can be used by interested parties and partners. Encourage planners to incorporate stormwater and watershed education into existing events, festivals and fairs.</td>
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<tr>
<td>Increased engagement related to water, increased public awareness of, understanding of and support for water resources.</td>
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<td>Number of forum users, number of activities and programs shared, number of activities and programs implemented, participation in activities and programs.</td>
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<thead>
<tr>
<th>Water &amp; Arts Series/Activities</th>
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<tr>
<td>This activity recognizes and coordinates local activities with world efforts to draw attention to the UIRW. It includes coordinating and promoting a week of events &amp; media around watershed concepts during World Water Week and Earth Day Week. It could include local media blitz, youth class/activities, river cleanup outings, mini film festival, BMP tours, field day, fishing tournament, canoeing/kayaking races, pool party, nature hikes, art contest, block party, etc.</td>
</tr>
<tr>
<td>General Public, Children &amp; Youth, Tourists/Visitors</td>
</tr>
<tr>
<td>Community Leaders, Private Nonprofit Environmental Organizations, City Park and Recreation Departments, CCBs, SWCDs, RC&amp;D</td>
</tr>
<tr>
<td>Local Water-Related Business Owners such as Outfitters, Guides, etc., Chamber Offices, Tourism Offices, County Sanitarians, CCBs, Parks &amp; Recreation, Hotel/Bed &amp; Breakfasts, SWCDs, UIR Alliance, RC&amp;D</td>
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<tr>
<td>Outreach to potential partners, coordination and promotion of multiple events within the UIR Watershed before and during the watershed week, follow-up social media and press releases</td>
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<tr>
<td>Increased awareness of UIR Watershed, water quality, flood prevention, resiliency concepts and BMPs. Increased support for implementation of urban and rural BMPs, supporting local policy, and public and private water management. Increased watershed awareness, responsibility and stewardship.</td>
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<tr>
<td>Number of events held during the target week, participation in each activity/event, number of related media events and web posts, likes, shares, traffic</td>
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<tr>
<td>Watershed Signage</td>
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<td>Watershed units in STEAM K-12 Classrooms</td>
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<td>River Guardian Program</td>
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<td>School Stormwater Field Trips</td>
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<tr>
<td>Watershed &amp; water conservation units in agriculture education, FFA and 4H</td>
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<tr>
<td>School Farm Conservation Field Trips</td>
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<tr>
<td>Activity</td>
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<tr>
<td><strong>Fit Environment</strong></td>
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<td><strong>ECYL</strong></td>
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<td><strong>UIR Watershed website and social media</strong></td>
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<td><strong>Promotional Materials</strong></td>
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</table>
| **DIY: Community BMP Workshops** | General Public, Urban Homeowners | WMA Cities and City Storm Water Management Boards | SWCDs, Producer Groups, ISU Extension, Local and Regional Nonprofits including UIR Alliance and RC&D; Schools, Local Businesses, Luther College, local Churches and Museums, Local Landscapers and Garden Shops | Development of Workshop content and schedule, promotion and coordination with city and city storm water management boards. Increase the visibility of low-cost, easy-to-implement BMPs and general awareness of water conservation and management. Increase familiarity with urban BMPs. | Number of participants in workshops, number of practices implemented.
| **Producer Peer Leadership** | 2 | This project will recognize and work with producers and other watershed residents who have implemented urban and rural storm water runoff practices. The participating producers will be photographed so the WMA Board and partners have photos of local producers and practices to incorporate into UIRW WMA promotional and educational materials that support implementation of the WMA Plan. The participating producers will also be interviewed so they can be quoted in publications as well. General Public and Producers, SWCDs, RC&D, Producer Groups, RC&D, Producer Groups, SWCDs, UIR Alliance | Identify specific use of photographs and quotes of specific outreach efforts and then identify appropriate producers and practices to meet the goals. Secure photographs, video, and other visual media and incorporate into print and social media efforts. Increased participation and implementation in flood reduction and water quality improvement practices. Increase pride in participation and peer encouragement. | Number of participating producers and number of practices photographed, number of different media developed and number distributed |
| **Newsletter** | 2,3,4 | This activity will include regular development and distribution of a paper and/or e-newsletters that will include updates to watershed residents about UIRW WMA activities, programs, incentives, successes, how to participate, etc. It may include producer/resident and practice photographs and/or testimonies. General Public and Producers, UIRW WMA Board and Coordinator, SWCDs, Cities, Countries, RC&D, Producers, Residents | Develop and distribute newsletter. Identify target audience and develop USPS and/or e-mailing lists. Increased participation and implementation in flood reduction and water quality improvement practices. Increase pride in participation and peer encouragement. Increased awareness of UIRW WMA activities. Overall improved communications between WMA Board and Coordinator and watershed residents. | Number of newsletters distributed |
| **Conservation Leadership Awards** | 2,3,4 | This activity will recognize UIRW leadership by establishing an UIRW WMA Producer Leader of the Year award, an UIRW WMA Urban Leader of the Year award, and an UIRW WMA Youth Leader of the Year award. These awards may be presented in an independent ceremony or in partnership with UIRW SWCDs or others who already distribute awards annually. General Public, Producers who are implementing conservation practices that help improve watershed resiliency, City Residents who are implementing urban conservation practices or leading urban initiatives, Youth who are implementing conservation practices or leading urban/rural initiatives, SWCDs, Cities, WMA Partners | Develop nomination criteria, promote the program, develop a selection committee, identify sponsors, present award. Increased participation and implementation in flood reduction and water quality improvement practices. Increase pride in participation and peer encouragement. | Number of nominations, press coverage |
| **WMAs of Iowa** | 2,3 | This activity includes participation in and input to the WMAs of Iowa Board, statewide meetings and other events. Partnering WMAs and state leaders, WMA Board Members and Coordinator | Attend statewide meetings, participate on the state board Increased statewide understanding of WMA issues, challenges and needs | Number of meetings attended |
Dear Resident or Business Owner in the Upper Iowa River Watershed,

Communities in the Upper Iowa River Watershed have experienced several serious flooding events in recent years. Flooding can have many kinds of impacts – from being displaced from your home to being forced to drive a different route to work. Our team – which is a partnership between the Iowa Flood Center, the Upper Iowa Watershed Management Authority, and Luther College – is working to understand these impacts by conducting a survey of residents and business owners in the Upper Iowa Watershed.

Hearing of your experiences during the 2016 flooding events – regardless of whether you were directly impacted by flooding – is of great interest to us as we think about how to make our communities more resilient to flooding. Just being a resident or business owner in the Upper Iowa Watershed qualifies you to be included in this survey! We are only taking a sample of residents – your address has been selected randomly – so we appreciate your response.

To help us understand differing flooding experiences, we are enclosing a questionnaire that will take you 10-15 minutes to complete. The questions range from basic questions about your property to questions about ways you may have been directly or indirectly impacted by flooding. Please know that all information you provide is anonymous and confidential. Of course, you are not required to answer any questions that you don't feel comfortable answering.

By filling out and returning this questionnaire, you consent to participate in the study and agree that the purpose of this research has been satisfactorily explained to you. We are happy to answer any questions you may have (contact information below) and will be making our survey results available to the public.

You can mail your completed survey back in the pre-paid envelope that we have provided.

Thank you,

The Upper Iowa River Watershed Resilience Team

If you have questions, you may contact Rachel Brummel, by phone at 563-387-1778 or by email brumra02@luther.edu.

Any complaints or problems concerning this research project may, and should, be reported to The Dean’s Office, Luther College, 563-387-1005 if they arise.
SURVEY OF RESIDENTS:
UNDERSTANDING FLOOD IMPACTS
IN THE UPPER IOWA WATERSHED

WHAT IS A WATERSHED?
A WATERSHED IS THE AREA OF LAND WHERE ALL OF THE WATER THAT FALLS WITHIN AND DRAINS OFF OF IT ENDS UP AT A COMMON OUTLET. EVERYONE WHO LIVES IN THE DARKENED AREA ABOVE LIVES IN THE UPPER IOWA WATERSHED.

Map Source: Upper Iowa Watershed Approach

CONDUCTED BY LUTHER COLLEGE, IN PARTNERSHIP WITH UPPER IOWA WATERSHED MANAGEMENT AUTHORITY AND THE IOWA FLOOD CENTER
Part 1: Understanding your Home, Property, or Business

1. This survey is intended for residents or business owners in the Upper Iowa Watershed. Do you currently live in or own a business in the Upper Iowa River Watershed at the address to which this survey was sent?
   □ Yes
   □ No (if “No” → explain in the “Additional Comments” box and return survey in envelope)

2. How long have you lived at the address to which this survey was mailed? ________ years

3. Which of the following describes your home/property? [check all that apply]
   □ In town
   □ Rural home
   □ Farmland
   □ Woodland
   □ Business
   □ Grassland/Prairie/Pasture
   □ Other________________________

4. Do you rent or own your current home?
   □ Rent (if you rent →skip to question “6”)
   □ Own

5. If you own your home, what is the approximate value of your home and property, including land and any outbuildings?
   □ Less than $50,000
   □ $50,000-$99,999
   □ $100,000-$299,999
   □ $300,000-$499,999
   □ $500,000-$749,000
   □ $750,000-$999,999
   □ $1 million or more

6. How much land is associated with your home/property?
   → If you rent, this will be how much land that is available for your use along with your dwelling or business
   → If you own, this means how much land is included in the value of the property you referred to in question 5.
   □ Less than 0.5 acre
   □ 0.5 – 9.9 acres
   □ 10-49.9 acres
   □ 50-99.9 acres
   □ 100-249 acres
   □ 250-499 acres
   □ 500 acres or more

7. Approximately how large is your home or business?
   □ Less than 1000 ft²
   □ 1000-1,499 ft²
   □ 2,000-2,499 ft²
   □ 2,500-2,999 ft²
   □ 3,500-3,999 ft²
   □ 4,000-4,499 ft²

8. If this address is a residence:
   How many people currently live in your household?
   Number of Adults (18 or older) ________
   Number of Children (younger than 18) ________

Additional Comments: Please feel free to share anything else that you think will help us better understand your home and property in the Upper Iowa Watershed:
9. In the 2016 floods, did you or anyone in your household experience any of the following?

<table>
<thead>
<tr>
<th>FLOOD-IMPACTED ACTIVITY</th>
<th>How or to what degree did this affect you and your household?</th>
<th>How much you estimate this change cost you and others in your household?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Driving alternate routes or driving more than usual due to closed or impacted roads or any other flood-related reason</td>
<td>Approximately how many miles more than usual do you think you and others in your household drove? □ __________ miles</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Not working or not being able to work</td>
<td>Approximately how many hours of work did you and others in your household miss? □ __________ hours</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Unable to attend school (K12, college/university or continuing ed of any kind)</td>
<td>Approximately how many days of school were missed? □ __________ days</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Loss of business</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Loss of rental income</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Changes in eating habits, food shopping habits or food availability</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Loss or change in utility services: power/electricity, phone coverage, water, garbage collection, etc.</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<td>□ Changes in child care or child care arrangements</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
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<tr>
<td>□ Impacts on health or wellness (injury, sickness, emotional or mental health impacts)</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
</tr>
<tr>
<td>□ Other</td>
<td>Comments:</td>
<td>□ $0 □ Less than $10 □ $10-$99 □ $100-$199 □ $200-$499 □ $500-$999 □ $1000-$2,499 □ More than $2,500</td>
</tr>
</tbody>
</table>

Part 3: Direct impacts of 2016 Flooding on your HOME, BUSINESS, PROPERTY and HOUSEHOLD or FARM
10. Was your building or property flooded during the 2016 flood events?

☐ Yes → (if “Yes” continue to question “11”)
☐ No → (if “No” skip to “Part 4: Becoming more Resilient to Floods”)

11. During the 2016 floods, what was the primary source of flooding in your home/property: [check only one]

☐ River/creek/lake overflow (flood waters) ☐ Rain ☐ Sewer backup
☐ Rising groundwater ☐ Broken water pipes ☐ Other_______________________

12. Please briefly describe what happened during the 2016 floods in your home/business or on your property:

13. Estimate the damages to your HOME and PROPERTY. Please consider all damages related to your home and associated property, such as landscaping features, driveways, and any outbuildings such as garages/sheds/barns.

☐ $0 ☐ <$5,000 ☐ $5,000- $10,000 ☐ $10,000- $15,000 ☐ $15,000- $25,000 ☐ >$25,000

14. Estimate the damages to your BELONGINGS. Please consider all items in and around your home, such as clothing, furniture, and electronics, as well as cars, recreational vehicles, and other machinery.

☐ $0 ☐ <$5,000 ☐ $5,000- $10,000 ☐ $10,000- $15,000 ☐ $15,000- $25,000 ☐ >$25,000

15. Estimate the damages to your AGRICULTURAL LAND or CROPS. Please consider impacts such as damaged crops and lost livestock, loss of topsoil, and damaged landscape features such as terraces.

☐ $0 ☐ <$5,000 ☐ $5,000- $10,000 ☐ $10,000- $15,000 ☐ $15,000- $25,000 ☐ >$25,000

16. Did you or anyone in your household lose any of the following in the flood (indicate “yes” by checking the box):

☐ Pictures ☐ Irreplaceable objects such as memorabilia and family heirlooms
☐ Pets ☐ Other irreplaceable items:__________________________________

17. What were the LARGEST SOURCES of FUNDING for repairs/replacement to your home, property, belongings, or farm? Indicate your top three by placing a “1, 2 or 3” next to the three top sources of funding.

_____ Bank account/cash/check/debit _____Non-profit/Church/Charity _____Friends or Co-workers
_____ Insurance Settlement _____Crowd-funding (e.g. GoFundMe) _____Government Assistance
_____ Bank Loan _____Family _____Put on Credit Card

18. How much TIME DID PEOPLE VOLUNTEER in cleaning up or repairing your property?

About how many hours do you estimate that you and your family worked? _______ hours
About how many hours do you estimate that non-family members worked? _______ hours

Additional Comments on direct impacts of flooding:
EVACUATION and DISPLACEMENT:

19. Were you displaced from your home or business during the 2016 flooding events?
   □ No (if “No”, go to Question 23)          □ Yes (If “Yes” go to Question 20)

20. For those who were DISPLACED: What caused or prompted you to leave? [check all that apply]:
   □ I received an evacuation notice          □ Water was threatening my property          □ Other________________________
   □ I was worried about being stuck or stranded □ There was water in my home or business   □ Other________________________

21. For those who DID EVACUATE: When you evacuated your home, where did you stay and how long?

<table>
<thead>
<tr>
<th>Location</th>
<th>#days/weeks/mos.</th>
<th>Location</th>
<th>#days/weeks/mos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ A designated shelter (church, etc.)</td>
<td></td>
<td>□ with family in the community</td>
<td></td>
</tr>
<tr>
<td>□ Hotel</td>
<td></td>
<td>□ with family outside the community</td>
<td></td>
</tr>
<tr>
<td>□ with a friend</td>
<td></td>
<td>□ Other</td>
<td></td>
</tr>
<tr>
<td>□ with a coworker</td>
<td></td>
<td>□ Other</td>
<td></td>
</tr>
</tbody>
</table>

22. How long was it before you returned to your home permanently?  ___________ days/weeks/months (circle one)

23. For those who DID NOT EVACUATE:

   If you stayed in your home during the worst flood threat or actual flooding, why did you stay? [check all that apply]:
   □ I did not feel threatened          □ I was worried about my pets          □ I wanted to protect my property
   □ Minimal water was in my dwelling  □ I have special health needs          □ Others in my household have special needs
   □ It was not safe to leave           □ I did not know where to go          □ Other________________________

Part 4: Becoming More Resilient to Floods
The following questions help us understand ways that you may have responded to flooding, as well as thoughts about what actions might better allow your household and our communities to bounce back after flooding.

24. Did you or anyone in your household make improvements to your home or property to better prepare for or prevent future flood impacts?

<table>
<thead>
<tr>
<th>TYPE of CHANGE</th>
<th>Estimated Cost to You for Making this Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth moving/landscaping</td>
<td>□ $0  □ $1-$999 □ $1,000-$4,999 □ $5,000-$9,999 □ $10,000-$19,999 □ $20,000-$34,999 □ &gt; $35,000</td>
</tr>
<tr>
<td>Tiling or drainage management</td>
<td>□ $0  □ $1-$999 □ $1,000-$4,999 □ $5,000-$9,999 □ $10,000-$19,999 □ $20,000-$34,999 □ &gt; $35,000</td>
</tr>
<tr>
<td>Structural changes to your home</td>
<td>□ $0  □ $1-$999 □ $1,000-$4,999 □ $5,000-$9,999 □ $10,000-$19,999 □ $20,000-$34,999 □ &gt; $35,000</td>
</tr>
<tr>
<td>Structural changes to other buildings</td>
<td>□ $0  □ $1-$999 □ $1,000-$4,999 □ $5,000-$9,999 □ $10,000-$19,999 □ $20,000-$34,999 □ &gt; $35,000</td>
</tr>
<tr>
<td>Enrolling in conservation programs (e.g. EWP, CRP)</td>
<td>□ $0  □ $1-$999 □ $1,000-$4,999 □ $5,000-$9,999 □ $10,000-$19,999 □ $20,000-$34,999 □ &gt; $35,000</td>
</tr>
<tr>
<td>Other:______________________</td>
<td>□ $0  □ $1-$999 □ $1,000-$4,999 □ $5,000-$9,999 □ $10,000-$19,999 □ $20,000-$34,999 □ &gt; $35,000</td>
</tr>
</tbody>
</table>

25. Did you or anyone in your household make other changes to better prepare for or prevent future flooding? [check all that apply]:
   □ Buy flood insurance          □ Buy groundwater insurance          □ Other________________________
   □ Start a phone tree with neighbors □ Make a household flood response plan □ Other________________________

Additional Comments on Resilience/Ways you Adjusted after Flooding:
Part 5: Understanding your Household

This information will help us understand how different types of households or families are affected by flooding. Again, this information is completely anonymous and confidential.

26. Describe the primary decision maker(s) in your household regarding issues like flooding and flood preparedness:

<table>
<thead>
<tr>
<th>Age/Gender</th>
<th>Highest Level of Education</th>
<th>Employment Status</th>
<th>Years lived in the Upper Iowa River Watershed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 18-24</td>
<td>□ Less than high school graduate</td>
<td>□ 0% (Unemployed)</td>
<td>□ 18-24 □ 55-64</td>
</tr>
<tr>
<td>□ 25-34</td>
<td>□ High school graduate or GED</td>
<td>□ 0% (Retired)</td>
<td>□ 55-64 □ 65-74</td>
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<tr>
<td>□ 35-44</td>
<td>□ 1+ year of college, no degree</td>
<td>□ Part-time (5-20 hrs/week)</td>
<td>□ 65-74 □ 75-84</td>
</tr>
<tr>
<td>□ 45-54</td>
<td>□ Associates/other 2 year degree</td>
<td>□ Part-time (21-39 hrs/week)</td>
<td>□ 75-84 □ 85+</td>
</tr>
<tr>
<td>□ Female</td>
<td>□ College graduate, 4 year degree</td>
<td>□ Full-time (40+ hrs/wk)</td>
<td>Did this person contribute to filling out this survey?</td>
</tr>
<tr>
<td>□ Male</td>
<td>□ Graduate degree completed</td>
<td>□ No □ Yes</td>
<td>□ 0% (Unemployed)</td>
</tr>
</tbody>
</table>

27. What was your annual gross household income from all sources before taxes in 2017?

| $15,000 to $24,999 | $25,000 to $34,999 | $35,000 to $49,999 | $50,000 to $74,999 | $75,000 to $99,999 | $100,000 to $149,999 | $150,000+ |

Please leave any additional comments here:

If you would like for us to mail you a summary of this research or be involved in future flood-related research, leave your contact information below:
A vision for a more resilient Iowa

The Iowa Watershed Approach

Ashlee Johannes

Iowa Watershed Approach Flood Resilience Program Coordinator
ashlee-johannes@uiowa.edu
The IWA Flood Resilience Program seeks to:

• Measure, visualize, and communicate flood resilience resources
• Enhance flood resilience content in formal watershed plans
• Improve social resources for flood resilience

Current available products for select towns:

• Interactive flood damage estimations

Current products under development:

• Flood Resilience Action Plans
• Interactive Social Vulnerability & Flood Risk Platform
• Pre-Disaster Mitigation Grant Preparation Assistance
• Town-Scale Resilience Case Studies
Iowa Watershed Approach Information System
Interactive Flood Damage Estimations – Independence

INDEPENDENCE
River: Wapsipinicon River
USGS Gauge: 05421000 (reference)
Flood Level: 12 ft
Date Created: Jun 2014
Terms of Use: provisional - not for regulatory use

View Maps by
- River Stage
- Annual Chance

Flood Map Controller
Stage: 9 ft
Discharge: 6020 cfs

LEGEND
- > 75%
- 50-75%
- 25-50%
- < 25%

Flood Damage Estimate:
Affected Buildings: 3
Structure Damage: $92,546
Content Damage: $621,065
Interactive Flood Damage Estimations – Independence

**INDEPENDENCE**

- **River:** Wapsipinicon River
- **USGS Gauge:** 05421000 (reference)
- **Flood Level:** 12 ft
- **Date Created:** Jun 2014
- **Terms of Use:** provisional - not for regulatory use

**View Maps by**
- River Stage
- Annual Chance

**Flood Map Controller**
- **Stage:** 19 ft
- **Discharge:** 24000 cfs

**Flood Damage Estimate:**
- **Affected Buildings:** 72
- **Structure Damage:** $961,247
- **Content Damage:** $3,079,664
Interactive Flood Damage Estimations – Independence

Impact: 619

Damage estimate: $8.9M buildings
$18.9M contents
Developing a Flood Resilience Action Plan to facilitate connection of watershed plan and flood hazard mitigation planning.
Flood Resilience Action Plan

Middle Cedar River Flood Resilience Action Plan
IOWA WATERSHED APPROACH

TABLE OF CONTENTS
THE FLOOD RESILIENCE APPROACH
WATERSHED COMMUNITIES & ENVIRONMENT
FLOOD RESILIENCE ACTION RECOMMENDATIONS
A MULTI-BENEFIT APPROACH TO A WATERSHED FLOOD RESILIENCE ACTION PLAN
CREDITS
APPENDIX
“Lower-income people are among the least able to recover, yet they are often central to the economy and culture of a community.”

- THE INSTITUTE FOR SOCIAL AND ENVIRONMENTAL TRANSITION – INTERNATIONAL
Social vulnerability indicators help us prioritize actions.

- % Black
- % Language barrier
- % Renters
- % Unemployed
- % Poverty
- % Children
- % Elderly
- % Hispanic
- % Low Education
- % Female head of household
- % Disabled
- % No vehicle access
Social Vulnerability at the Intersections of Flood Risk - Decorah
Social Vulnerability at the Intersections of Flood Risk - Decorah
Social Vulnerability at the Intersections of Flood Risk - Decorah
Social Vulnerability at the Intersections of Flood Risk - Decorah

Census Tract: 9503

Watershed: Upper Iowa
County: Winneshiek County
Population: 3514

Top Vulnerability Indicators
Renter: 34.5%
Children: 71.3%
Hispanic or Latino: 2.8%
**PDM goal**: To reduce population and structural risk to future hazard events

PDM awards **planning and project grants** and provides opportunities for public awareness and education about reducing flood impacts

PDM grants are funded annually by Congressional appropriations and are awarded on a nationally **competitive** basis

https://www.fema.gov/pre-disaster-mitigation-grant-program

The IWA Flood Resilience Team wants to provide social vulnerability narratives for PDM grant applications
Current Engagement in Upper Iowa
- Partnership with Luther College to carry out local programming
- County EMAs
- Freeport residents

Engagement in Other Watersheds
- Community organizations Active in Disaster (COADs) – e.g., Benton Co Recovery Coalition, LAP-AID, Johnson Co EOC
- Partnership with Hawkeye Area Community Action Program (HACAP) to enhance the 211 system for floods – almost 3,000 calls during September 2016 floods seeking essential resources
Flood resilience case studies will be developed for each watershed.
A vision for a more resilient Iowa

The Iowa Watershed Approach

Iowa Flood Center
The University of Iowa
100 C. Maxwell Stanley Hydraulics Laboratory
Iowa City, IA 52242

319-335-5233
http://www.iowawatershedapproach.org/

@IWAReduceFloods
A vision for a more resilient Iowa

The Iowa Watershed Approach
Upper Iowa River Watershed Planning

Watershed Background
- Historical Conditions
- Current Conditions
- Natural resources
- Demographics
- Geology

Stakeholder Engagement
- Community Teams
- Landowner Meetings
- Public Meetings
- Survey
- Emergency Management

Connecting the Pieces
- Hydrologic Assessment
- Implementation Efforts
- Hazard Mitigation
- Resilience Team

GIS Analysis
- ACPF & BMP
- Road & Bridge Infrastructure
- Water Quality Data
- Cover Crop Analysis

WMA
- Goals & Vision
- Proposed Strategies
- Timeline
- Implementation Funding

Upper Iowa River Resiliency Plan
UIR GIS Analysis

- Agricultural Conservation Planning Framework (ACPF)
  - Iowa Flood Center & RC&D
- BMP Analysis
  - Iowa DNR & RC&D
- Road & Bridge Infrastructure
  - RC&D & County Engineers
UIR GIS Analysis

- Water Quality Analysis
  - [https://data.upperiowariver.org/](https://data.upperiowariver.org/)
Cover Crop Analysis

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<th>Value</th>
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<td>GenLU</td>
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<td>BCCCBC</td>
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<tr>
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<td>C4B2</td>
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<td>CCCount</td>
<td>2:6</td>
</tr>
<tr>
<td>MixCount</td>
<td>0:6</td>
</tr>
</tbody>
</table>
Why are cover crops important?

- Cover Crops + No-till increases organic matter in the soil by 0.1%/yr
- 0.1% soil organic matter increases water capacity by 2,000 gallons of water per acre
- 1 inch rainfall = 27,000 gallons of water per acre
Why are cover crops important?

- Average of 31% N reduction
- Average of 29% P reduction
Upper Iowa River Watershed Planning

Watershed Background
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Upper Iowa River Resiliency Plan
UPPER IOWA RIVER WATERSHED PROJECT

Matt Frana – UIR Project Coordinator
One year down….2017-2018 timeline review

- **Short-term (Summer 2017)**
  
  **Finalize Sub-watersheds/landowner contacts/ hash out contracting process…**

  - **JUNE**
    - Meet with partners and interested organizations to get a better understanding of the watershed project and practices that will be utilized.
    - Develop Criteria to pick sub-watersheds
    - Begin narrowing down watersheds
    - Work with RC&D to get post cards/survey sent out

  - **JULY**
    - Winn Co Fair (July 10-15)
    - Landowner Information Meetings (July 20th)
      - Inform landowners of program/practices/process
      - Gauge landowner interest in sub-watersheds
    - Start making landowner contacts/field visits to better evaluate potential for practices

  - **AUGUST**
    - **Finalize sub-watersheds (Aug WMA meeting)**
      - Use info from IFC data, surveys, public meeting, landowner and professional input
      - Determine application/ranking/contracting process - WMA Laundry List (Aug/Sept)
One year down….2017-2018 timeline review

• **Mid-term** (Aug-Summer 2018)
  - Get in contact with interested landowners & begin developing list of good project locations.
  - General Public Information Meeting (Sept/Oct)
  - Begin designs (Fall/Winter 2017)
  - Start Projects (Spring/Summer 2018)

• **Long-term** (Summer 2018-2021)
  - Continue Projects
  - Be looking for grant opportunities to assist with current funds, extend project and/or start new project area.
Potential projects...

- Landowner contacts ~ 50-60
- Site visits with potential projects ~ 25
- Potential project surveys ~ 17
- Road structures - 4
Challenges 2017-18

■ Delays with hiring conservation technician.
  - *Had to extend application deadline to get quality applicants.*

■ Patience on project process.
  - *New process for completing projects, figuring out as we go.*

■ A lot of landowner interest in projects…but quality projects a harder to come by...sifting through and figuring out where to start.
  - *Cost*
  - *Karst Topography*
  - *Fill Material*
Highlights from last 6 months...

- Hired Conservation Technician
  - Marc Oyloe...worth the wait

- Started investigating/surveying project sites from compiled list of interested landowners.
Water and Sediment Control Basin Sites
Road Structure
Spring 2018 newsletter

- Sent out to landowners in the priority watersheds.
- 700+ Landowners
- Wanted to give landowners in the watershed general background info on the project and its purpose.
Future

- Start looking at project sites not obstructed by cropland
- Really focus on getting a project completed to have a better mental timeline of project process.
  - Optimistically Fall 2018
  - Realistically Spring 2019
Questions?

Matt Frana

*Upper Iowa Watershed Project Coordinator*

Winneshiek County Soil & Water Conservation District

2296 Oil Well Rd – Decorah, IA 52101

Phone: (563) 382-4352 x3

matt.frana@ia.nacdnet.net