

# Watershed LEADER SURVEY



## Leadership for Midwestern Watersheds

### EXECUTIVE SUMMARY

FEBRUARY 2021

## Identifying Opportunities to Build Capacity of Watershed Professionals in the Midwest

**A**cross the Upper Mississippi River Basin there are more than one hundred projects working at the small watershed scale to reduce agriculture's impact on water quality. The professionals who

lead these projects come from different backgrounds, work under various employers, and are often isolated from their peers. To guide the design of future trainings and networking programs for watershed leaders, Sand County Foundation asked these individuals about the skills and resources they most need to achieve their goals.

### What we asked:

We designed a 43-question survey to learn the following about watershed professionals:

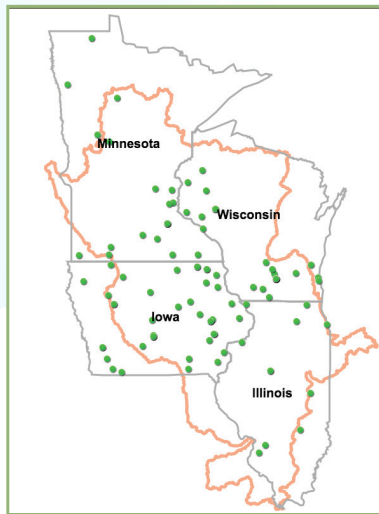
- Experience and background
- Confidence in job activities
- Preferred project strategies
- Preferred means for learning and peer networking

### What we learned:

Some common themes from survey results are that watershed professionals:

- Welcome more involvement from the agriculture industry in their projects
- Will invest time and effort in training and networking, preferably in-person

- Prioritize communication skills among project staff
- Possess and wish to further develop their leadership skills



*Locations of 103 survey respondents across the Upper Mississippi River basin*

- Have differing needs and interests according to age and experience

**Detailed results are provided at:**  
[www.sandcountyfoundation.org/lmw](http://www.sandcountyfoundation.org/lmw)

### Why it matters:

Research, technology, policy, and funding are all necessary to move the needle in reducing water quality impacts from agriculture. But meeting goals of state nutrient reduction strategies will not happen without investing in the people who facilitate on-the-ground projects, one small watershed at a time. By drawing from the experience of existing watershed professionals, **the findings of this survey can guide future investments in training and material support for watershed-based projects across the Midwest.**

### Leadership for Midwestern Watersheds:

**ABOUT** Sand County Foundation and partners bring together leaders of agricultural watershed projects to learn from and build connections with their peers at our annual Leadership for Midwestern Watersheds events. Several prior "LMW" attendees responded to this survey.



*Attendees of the November 2019 Leadership for Midwestern Watersheds event in Cedar Rapids, IA*



*A Wisconsin farmer explains his practices at field day of Cedar Creek Farmers, a Producer-Led Watershed Group. Peer-to-peer education is a primary strategy used in watershed projects.*

*(image courtesy of Washington County Land & Water Conservation)*

## Who participated in the survey?

With state agency and university partners we identified 241 lead contacts of projects in agricultural watersheds of Illinois, Iowa, Minnesota, and Wisconsin. The Evaluation Unit at the University of Wisconsin Extension's Natural Resources Institute administered the survey online via Qualtrics between May and June 2000.

We received 103 complete responses (a 43% response rate), with Iowa representing the largest portion.

Individual state response rates were 61% for Iowa and Illinois, 40%

for Wisconsin, and 27% for Minnesota.

Data were analyzed statistically to the extent practical based on response rates.

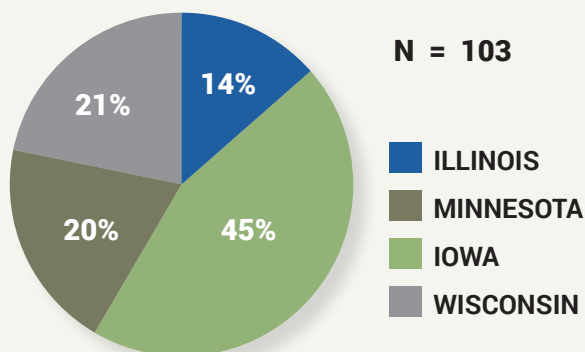


## Survey respondent details:

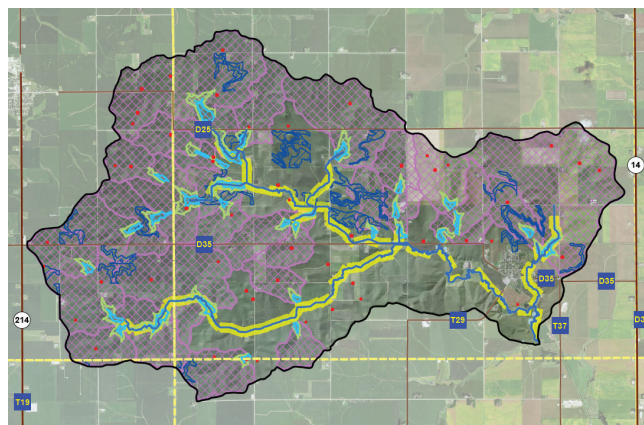
- Respondents are almost equally men and women; 92% have a 4-year diploma and 42% have advanced degrees; and 71% are over 35 years of age.
- One half work at the scale of a single county or a few HUC-12 watersheds; the other half cover multiple counties or HUC-8 or larger watersheds.
- Nearly all are full-time paid employees; one half are employed by a conservation district or county department, and most others are employed by non-profit organizations or state government.
- 42% have been in their current field of work for more than ten years; 21% have been for less than two years.

## TOTAL SURVEY RESPONSES

**N = 103**



- Nearly half have worked on a farm or grew up on a farm; 21% are or have been a primary decision maker on a farm; 8% are or have been a certified crop consultant.
- 85% of respondents chose water quality as their primary motivation for their work.



*This map of potential locations for conservation practices, part of a watershed plan in Iowa, is one example of the information that watershed professionals develop and communicate in their projects.*

*(image courtesy of Iowa Soybean Association)*

## Key Findings

**Survey question:** *If you could hire a new employee for your project, what is the first skill you'd look for?*

The word cloud below summarizes 96 responses to this open-ended question. Detailed responses show a common desire for support in communicating, especially with famers and landowners.

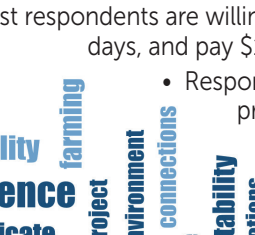
## Confidence in job activities

- Respondents with a farming background are more confident than others in engaging ag retailers and consultants\* and absentee non-operator landowners\*.
  - Respondents with at least 20 years of experience, and those with a background in agronomy or engineering, are more confident in engaging middle/late adopter farmers\*.
  - Confidence in prioritizing the most effective conservation practices\* and identifying high risk areas in a watershed is generally higher among those with more years of experience in their role.
  - Among leadership activities, respondents are most confident in facilitating meetings, moderately confident in engaging decision makers and addressing conflict, and least confident in influencing policy. Respondents over 55 years of age are less confident than others in recruiting partners\* and influencing state-level policy\*.
  - Respondents report much higher confidence in tracking environmental metrics than social or economic metrics.
  - Far more respondents reported confidence in identifying public funding sources than private sources.
- 

## Skill development

- When asked to rank five general categories of skills they wish to develop, respondents chose *Leadership* most frequently as the highest priority.
- *Outreach and education* was the most frequent 2nd and 3rd ranked skill to develop. Many seek to engage new audiences and to communicate persuasively.
- Desired *Information tools and technologies* skills include social media, GIS, and watershed modeling. Those with more than ten years of experience expressed greater interest in this category.
- *Monitoring and evaluation* received the fewest first-priority rankings, though many expressed a desire to better evaluate outcomes.
- *Fundraising* ranked lowest overall, though results vary by state. Writing funding proposals is not a job responsibility for 35% of respondents.

## Training and networking preferences

- 
- A word cloud of terms related to watershed education and training. The most prominent word is 'education'. Other significant words include 'experience', 'communication', 'learning', 'farming', 'project', 'environment', 'connections', 'adaptability', 'operations', 'attitude', 'communication', 'understanding', 'practices', 'outreach', 'producers', 'stakeholders', 'agronomy', 'ethic', 'excellent', 'interpretation', 'personality', and 'mentorship'.
- Respondents clearly prefer to learn and network in-person, though some favor online formats.
  - Most respondents are willing to travel 200 miles, commit two days, and pay \$100 for training.
  - Respondents rely on other watershed professionals (82%), local partners (77%) and University Extension (56%) to develop their professional competency.
  - A majority might pursue professional certification as a watershed coordinator if such a program existed, but some question whether certification would improve skills, compensation and job security. Respondents under 35 showed the highest interest\*.
  - About equal numbers of professionals expressed interest in being mentors (34%) as mentees (37%). Those with less job experience are more interested in having a mentor\*.

## Project strategies

- Respondents favor influential farmers and one-on-one communication as high-potential outreach strategies. Most ranked social media and local media as having lower potential.
- Respondents ranked farmer-led groups, agribusiness / commodity groups, and crop consultants as partners they want to see *more engaged* in meeting water quality objectives.

## Job satisfaction

- Stable funding, job security, benefits, and seeing results of their work are strong factors to encourage respondents to stay in their current positions.
- Respondents under 35 years of age and those with less than two years in their current role\* are least satisfied with their benefits.

\* These cross-tabulation results are statistically significant at a P-value of .05 or lower

Detailed results of all survey questions including open-ended answers, cross tabulations, and results by state are available in the complete survey report at [www.sandcountyfoundation.org/lmw](http://www.sandcountyfoundation.org/lmw)



**Survey question: *How confident are you in engaging with specific stakeholders?***

These results show how watershed professionals' on-the-job experience relates to their confidence working with farmers who are not "early adopters" of conservation practices.

### MID/LATE ADOPTER FARMERS (p=.004)

A stacked bar chart titled 'MID/LATE ADOPTER FARMERS (p=.004)' showing confidence levels for four groups of farmers based on their years of experience. The groups are: '2 or fewer years (21)', '3-10 years (37)', '11-20 years (19)', and '21+ years (20)'. The confidence levels are categorized into three groups: 'VERY CONFIDENT' (green), 'MODERATELY CONFIDENT' (dark grey), and 'NOT CONFIDENT' (light grey). The data is as follows:

| Years of Experience   | Very Confident | Moderately Confident | Not Confident |
|-----------------------|----------------|----------------------|---------------|
| 2 or fewer years (21) | 19%            | 71%                  | 10%           |
| 3-10 years (37)       | 14%            | 86%                  | 0%            |
| 11-20 years (19)      | 37%            | 47%                  | 16%           |
| 21+ years (20)        | 60%            | 30%                  | 10%           |



*Attendees of the November 2017 Leadership for Midwestern Watersheds event in Moline, IL*

## Acknowledgements

This survey was developed, administered and analyzed by Evelyn Hammond and Anders Shropshire of the Evaluation Unit, Natural Resources Institute of the University of Wisconsin-Madison Division of Extension, with support from Samuel Pratsch, Director of Evaluation.

We appreciate the services of the Evaluation Unit and the thoughtful input of the following state agency and extension partners who served as advisors to the project:

- **Jamie Benning**, Iowa State University - Extension and Outreach
- **Andrew Craig**, Wisconsin Department of Natural Resources
- **Craig Ficenec**, Sand County Foundation
- **Ann Marcelle Lewandowski**, University of Minnesota Water Resources Center
- **Rebecca Power**, University of Wisconsin - Extension
- **Rachel Rushmann**, Wisconsin Dept of Agriculture, Trade and Consumer Protection
- **Trevor Sample**, Illinois Environmental Protection Agency, Bureau of Water
- **Jenny Seifert**, University of Wisconsin - Extension
- **Jeff Tisl**, Iowa Department of Agricultural and Land Stewardship
- **Brad Wozney**, Minnesota Board of Water and Soil Resources
- **Adam Wilke**, University of Minnesota Water Resources Center

Whether you lead a specific watershed project, provide services used by such projects, or work in the agricultural economy of the Midwest, we welcome you to participate in Leadership for Midwestern Watersheds.

### LEARN MORE AT:

Sand County Foundation  
[www.sandcountyfoundation.org/lmw](http://www.sandcountyfoundation.org/lmw)

### CONTACT:

Craig Ficenec, 608.729.1388  
[cficenec@sandcountyfoundation.org](mailto:cficenec@sandcountyfoundation.org)

*(image courtesy of UW-Madison Water Sustainability and Climate Project)*



**Sand County Foundation** inspires and enables a growing number of private landowners to ethically manage natural resources in their care, so future generations have clean and abundant water, healthy soil to support agriculture and forestry, plentiful habitat for wildlife and opportunities for outdoor recreation.

131 W. Wilson Street, Ste. 610, Madison, WI 53703 | Phone: 608.663.4605 | [www.sandcountyfoundation.org](http://www.sandcountyfoundation.org)