



Leadership for Midwestern Watersheds

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WATERSHED LEADER SURVEY

FULL RESULTS

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Extension

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Executive summary available at this link:

www.sandcountyfoundation.org/lmw

Table of Contents

Acknowledgements	3
Methodology	4
Summary of Results: Overall Data	
Background Information about Watershed Professionals.....	5
Needs Assessment.....	15
Outcome Assessment.....	25
Project Strategies.....	27
Training and Networking Preferences.....	33
Demographic Data of Respondents.....	40
Advanced Data Analysis	41
Age.....	42
Years of Work Experience.....	46
Area of Expertise.....	52
Farming Background.....	62
Geographic Extent of Work.....	63
By State.....	64
Summary of Results: State-specific Data	
Iowa.....	65
Illinois.....	76
Minnesota.....	87
Wisconsin.....	98
Appendices	109

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Methodology

Development of Needs Assessment survey

The survey was developed by an evaluation specialist with input and feedback from a project advisory team put together by Sand County Foundation. The advisory committee comprised a team of 11 stakeholders from Iowa, Illinois, Minnesota and Wisconsin. The committee piloted the draft survey. Based on their edits and comments the survey was finalized.

The final survey consisted of **43 questions** and were organized under the following sections:

- **Background information about watershed professionals and projects** (geographic extent of project, professionals' time spent on given activities)
- **Needs assessment** (fundraising, monitoring and evaluation, information tools and technology, outreach and education and leadership)
- **Outcome assessment** (skills professionals wish to develop for professional capacity, skills required for new hires, trainings/meetings attended, attendance at LMW meetings, use of tools/strategies learned from trainings/meetings, use of trainings/meetings to develop connections/contacts with peers)
- **Project strategies** (outreach strategies, metrics, geospatial planning and/or modeling tools, engagement with partners in meeting water quality objectives)
- **Training and networking preferences** (willingness to travel for in-person training/meetings, number of days to commit to in-person training, willingness to pay for in-person training, preferred methods for learning)
- **Background information about watershed professionals**
- **Demographic information**

Survey administration and data collection

The Evaluation Unit administered the survey via Qualtrics between on May 19 and June 26, 2020. Invitations were sent by email to 241 watershed professionals in four states, identified by an advisory team of state agency and extension partners.

Data analysis and final report

Data were analyzed statistically to the extent practicable based on the response rate obtained. The overall data were compiled and analyzed in response to suggestions of the advisory team. This included descriptive frequencies per question, cross tabulations, and data visualization. State level data were also summarized.

Responses to questions were grouped under the following themes:

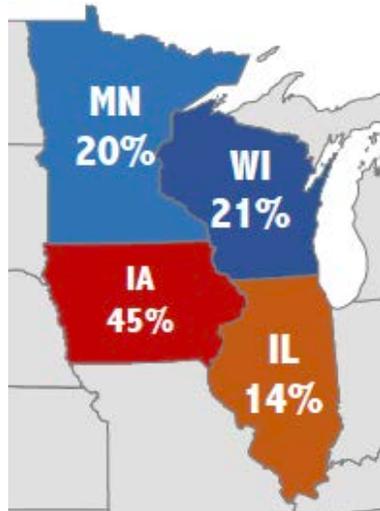
- Background information about watershed professionals
- Needs assessments
- Outcome assessment
- Project strategies
- Demographic information

Background Information about Watershed Professionals

We received 103 responses out of 241 requests sent to agricultural watershed project leaders identified by the advisory team.

In which state is your watershed project(s) located in?

Professionals came from:
 Iowa - (45%),
 Wisconsin - (21%),
 Minnesota - (20%) and
 Illinois - (14%).



State	Number of professionals
Illinois	14
Iowa	46
Minnesota	21
Wisconsin	22
Total	103

What best defines the geographic extent of your work?

Professionals' projects are balanced in geographic reach. About half (47%) work on smaller HUC-8 and HUC-12 sized projects. 44% work on county or multi-county projects.

Other responses reflected that professionals worked on multiple projects with varying scales

“Multiple HUC-8”

“Multiple HUC 10”

“Subwatershed of a HUC-12”

“HUC12's & Multi County”

“I don't know the specifics of our HUC. We are in 3 counties”

“Statewide”

“I've done plans at all of these scales”

Background Information about Watershed Professionals

Please choose the option(s) that best describe(s) your area of expertise (Select all that apply)

The majority of professionals have a background in **Project Management (63%)** and **Environmental Science (63%)**. There was significant overlap between the two as **40%** had both **Project Management** and **Environmental Science** backgrounds, while about **23%** had either a **Project Management** OR **Environmental Science** background.

Few professionals had **Social Science (18%)**, **Engineering (18%)** and **Agronomy (25%)** backgrounds.

Other responses suggested that some professionals had backgrounds in **administration** and **communication**. Other backgrounds included the following:

Natural Sciences

“Wildlife Biology”	“Aquatic Ecologist – Science”
“Animal Science” (x2)	“Drinking water specialist”
“Wildlife habitat Conservation”	“Water Quality and Hydrology”
	“Chemistry and Soil Science”

Agriculture

“My background is dairy production and farm economics.”

“Agricultural Technology”

“Farmer”

Planning and Administration

“Grant administration (both as a funder and recipient of grants)”	“Administration”
	“Planning” (x2)
“Administration/communications/evaluation planning”	“Community development”

Miscellaneous

“I am an architect by education, a planner by trade, and a community organizer at heart - my water work is a volunteer passion combining these”

“I’m a watershed planning consultant so some of these questions don’t apply!”

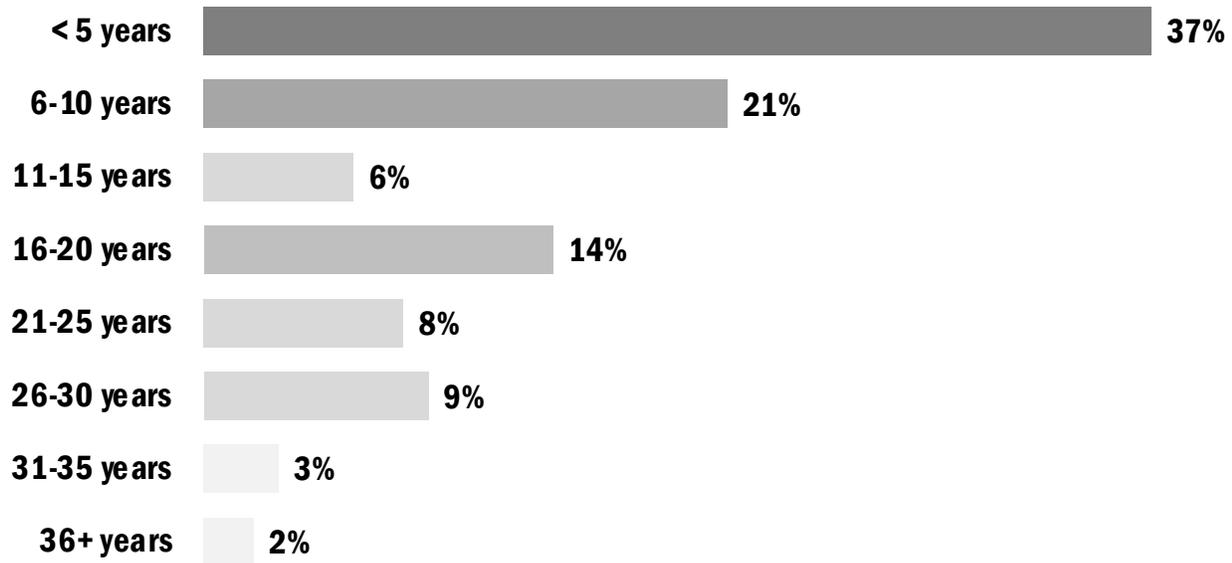
“A little bit of everything”

Communications, Education, and Social Science

“Communication”	“Public outreach and development”
“Communication skills”	
“Economics, calculating cost-benefit, etc.”	“Environmental Education”
	“Education”

Background Information about Watershed Professionals

How long have you been in your current field of work?



Professionals' years of work experience

About 58% of professionals have been in their current field of work for up to 10 years, with 37% having less than 5 years of experience including 20% that had 2 or fewer years of experience. Around 37% of professionals had between 10 and 30 years of experience. Very few (5%) had more than 30 years of experience.

Background Information about Watershed Professionals

What is your employment sector?

Many professionals work in a **conservation district (41%)**. Professionals from **non-profits** made up **22%** of the sample. Those from **state government** were a smaller portion (**14%**). About **14%** of professionals combined were **municipality, university, volunteers, independent contractors, or private sector workers**.

The **other (12%)** responses were professionals who predominantly work in a **conservation district** or with a **county government**. They are as shown below:

“County Government” “Local government” “Watershed District” “County/SWCD Combo” “Farmer”
“County Conservation Department Staff” “SWCD and WMA” “County employee- NRCS Grant funded”
“County” (x2) “LGU”

Are you a member of any of the following?

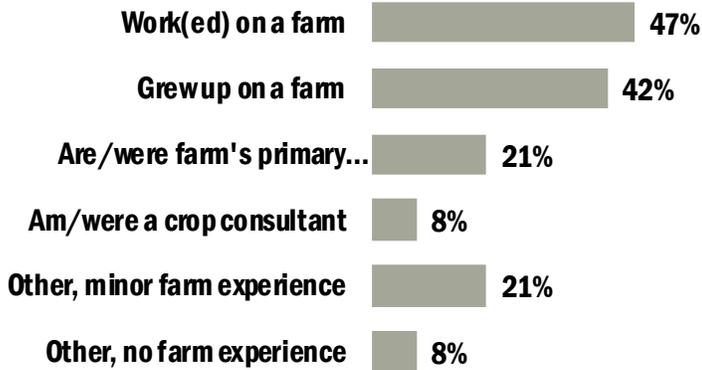
Professionals were **not very involved** with the listed groups overall. However, **28%** of them were members of **The Soil and Water Conservation Society**. Fewer than **8%** were members of other groups.

In the **other** responses, a range of additional group memberships were indicated. These are listed below:

“NALMS” “The Wildlife Society” “MN Association of Conservation District Employees, SWCD Forestry Association, MN Forestry Association, Society of American Foresters”
“Practical Farmers of Iowa” (x2)
“CPESC” (x2) “Farm Bureau” “Soil & Water Conservation District board member”
“Society of Freshwater Science” (x2)

Background Information about Watershed Professionals

What is your farming background?



Nearly half of professionals have worked or do work on a farm, while 42% grew up on a farm. Only 20% have been or are a primary decision maker on a farm. Few (8%) have been or are crop consultants.

Other responses reflected a range of experiences but were condensed into two categories: No farming background (8%) and limited farm exposure (21%).

No farming background (n = 8)

“No farming background” (x2) “Grew up in Urban area”
 “None of the above” (x2)
 “City slicker” “None” (x2)

Did research on a farm (n = 4)

“Masters research on dairy farms”
 “Worked in ag research” “On-farm researcher”
 “On-farm habitat research”

Educational or career experience (n = 5)

“None, other than working with farmers for several years.”
 “Master's Degree in Agriculture Education”
 “I work with farmers on a regular basis”
 “Past farm owner 25 years”
 “I have worked at the Farm Service Agency for 31 years. I am familiar with the various programs.”

Family or youth ties to farm (n = 12)

“Married to farmer, participate in farm decisions but not primarily”
 “My spouse grew up on a farm”
 “I did not grow up on a farm but am now married to a farmer.”
 “Spent time on my grandparents' farm.”
 “family dairies on both sides, but wasn't raised on them”
 “Grew up in farming community; degree related to ag engineering”
 “No formal farming background but raised pigs for 4H.”
 “I grew up in a rural area where my family used to farm. I walked beans in the summer and detassled corn.”
 “Childhood friend lived on a farm; have worked with ag in different ways; interned for a summer at an agricultural weekly newspaper”
 “During my youth, as a hunter I met many landowners to gain access to their land to hunt, and became friends and admired them”
 “I grew up in the Chicago suburbs and moved to rural Jo Daviess County as an adult. For a brief period as a teenager, I thought I wanted to be a farmer.”
 “I grew up in a small town of 500 and helped classmates with chores occasionally”

Background Information about Watershed Professionals

What is your primary motivation to do agricultural watershed conservation work? (Select all that apply)

Primary motivation	Mean rank
Water quality	1.6
Farmer well-being	3.1
Wildlife habitat	3.3
Agricultural production	3.7
Career development	5.0
Income	5.2
Other	6.3

The majority (85%) of professionals selected **water quality** as their first or second choice. Both **farmer well-being** and **wildlife habitat** were chosen as a top two motivations by about 35% of professionals.

Agricultural production was ranked lower, with 22% identifying it as a top two motivator, and 27% putting it in the bottom three.

Career development and **income** were a least three motivating factor for 70% and 80% of the professionals, respectively.

Other responses were categorized into sustainability, health/well-being, water management, and miscellaneous, as shown below:

Sustainability

“Small farm sustainability” (1st)

“Solidify the environment future for my kids” (7th)

“Full-system (social, cultural, economic, etc) sustainability” (1st)

“Ecosystem sustainability” (1st)

“This is a critical part of a larger ethical imperative – we must heal and preserve our land and water for the next generations.” (1st)

Health/Well-being

“Public health. Climate. Food not Fuel. System change.” (1st)

“Community well-being” (3rd)

“County well-being” (4th)

“Unified community well-being” (1st)

Water management

“Water quantity - Flood control and groundwater” (2nd)

“Water Quantity” (1st)

“Flood reduction” (1st)

Miscellaneous

“A sense of purpose”

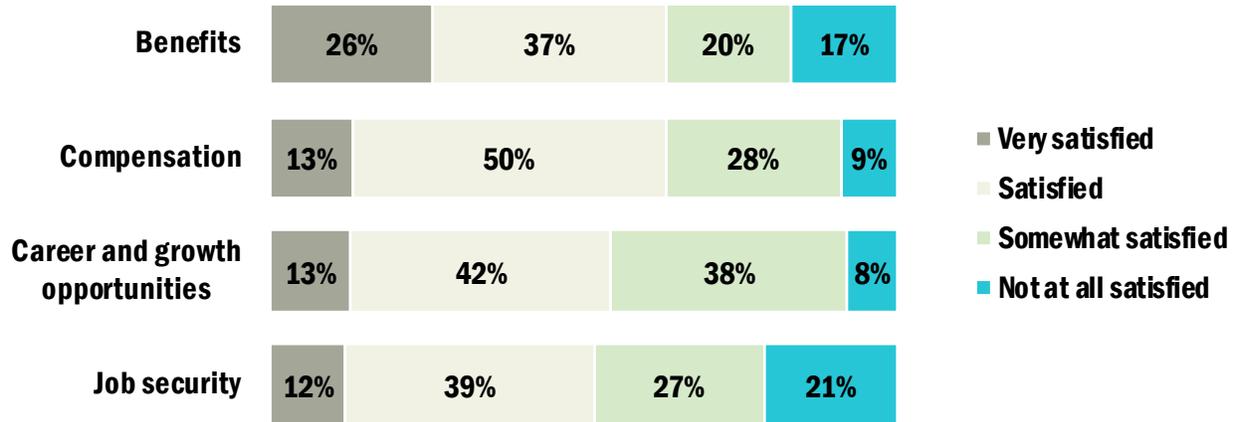
“Job satisfaction”

“It was delegated to me”

“I am that ‘Income’ is referring to the Farmer’s income and not my own so that’s why I placed that at #2.”

Background Information about Watershed Professionals

How would you rate your satisfaction with the following aspects of your work?



For all the items, more than 50% of professionals were satisfied or very satisfied.

Job security and benefits had the highest proportion of not at all satisfied responses at 21% and 17% respectively. About 38% were somewhat satisfied with career and growth opportunities.

Professionals were most satisfied with benefits and compensation with 63% reporting they were satisfied or very satisfied.

Background Information about Watershed Professionals

What percentage of your time at work do you spend on the following?

Portion of respondents spending some amount of time on each activity



Over 90% of professionals spent some time at work on communication and administration. Implementation and planning were performed by 80% of professionals, while fundraising was done by 60%.

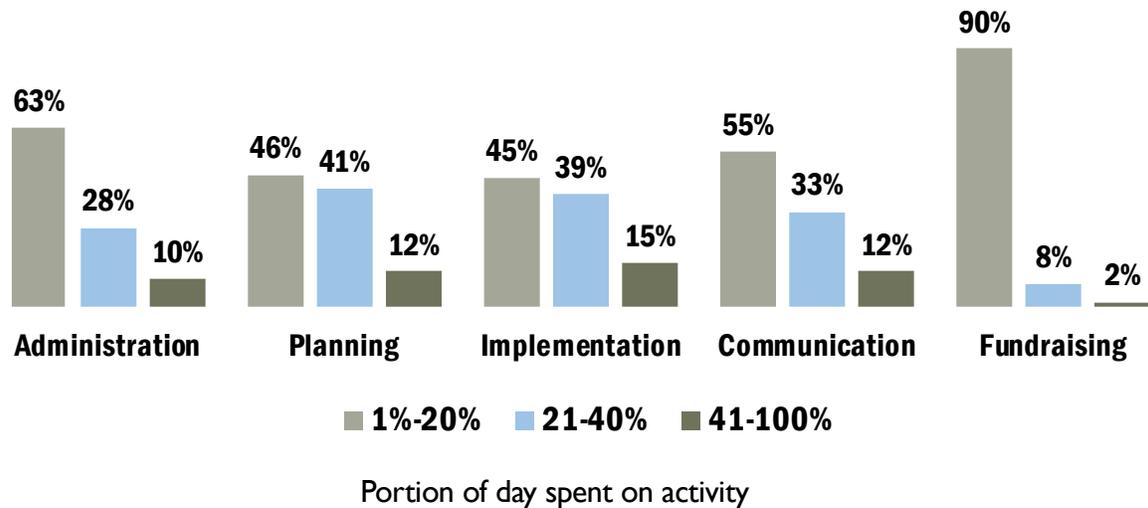
Descriptive statistics of time spent on activities

Activity	Mean % of time	Minimum % of time	Maximum % of time	Modal % of time
Implementation	27%	2%	80%	30%
Planning	27%	1%	100%	25%
Communication	25%	5%	100%	10%
Administration	21%	5%	68%	10%
Fundraising	11%	1%	50%	10%

Implementation and Planning took up the most time for professionals on average, at nearly 27% of the day. Communication was also generally time consuming, averaging at 25% of a day. Fundraising took up the least time on average.

Background Information about Watershed Professionals

What percentage of your time at work do you spend on the following?



Fundraising takes less than 20% of the day for 90% of professionals. It is the least time-consuming activity.

For the other activities, the data was quite similar in that about half professionals reported spending up to 20% of their time on each and at most 12 – 15% spent more than 40% of their time on one of the activities.

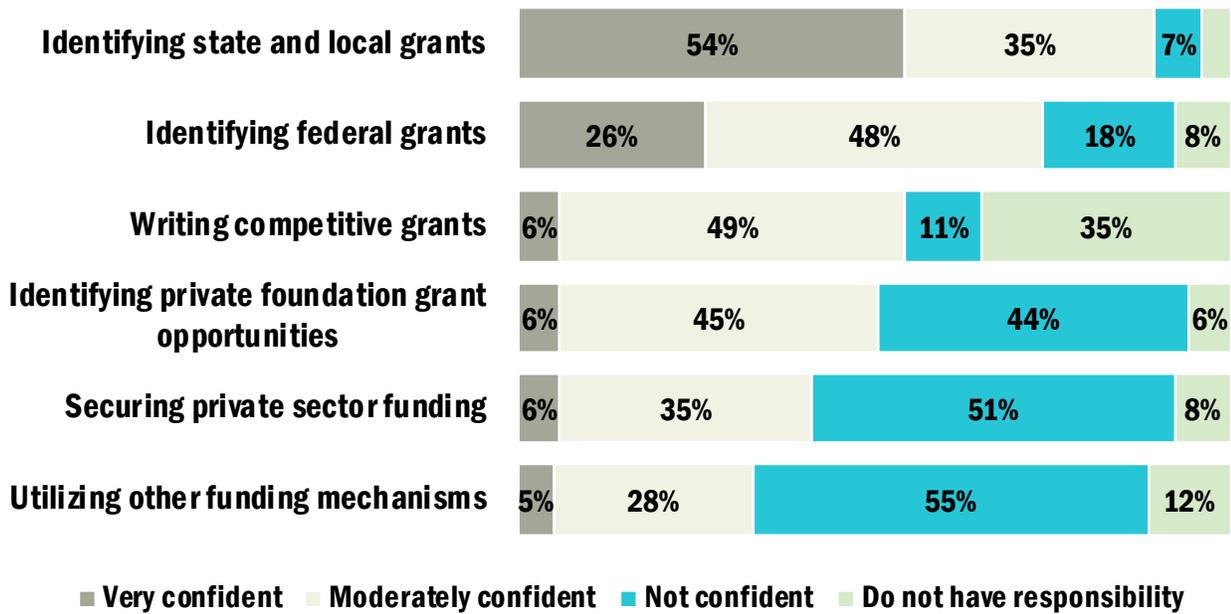
Administration and communication take up slightly less time on average than planning and implementation. This may be because planning and implementation were activities done by a slightly fewer professionals, indicating they are more specialized tasks, while nearly every professional does administration and communication.

Needs Assessment

How confident are you in conducting the following fundraising activities?

Professionals were **confident** in identifying state and local grants (89%) and federal grants (74%). About half as many professionals were very confident in identifying federal grants as state and local grants.

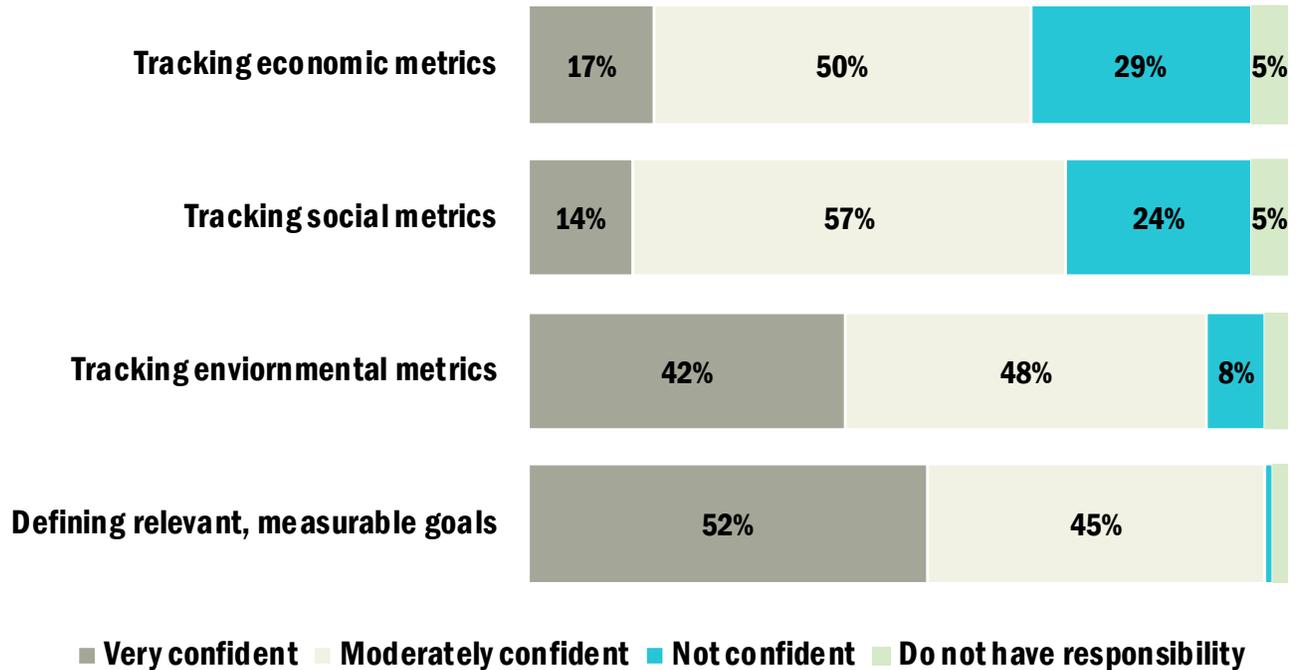
Generally, professionals were **not confident** in identifying private funding. Some were not confident in identifying private foundation grants (44%), securing private sector funding (51%), and utilizing other funding mechanisms (55%).



About half (55%) of professionals were moderately or very confident at writing competitive grants, but a significant proportion of professionals (35%), did not have this responsibility.

Needs Assessment

How confident are you in conducting the following monitoring and evaluation activities?



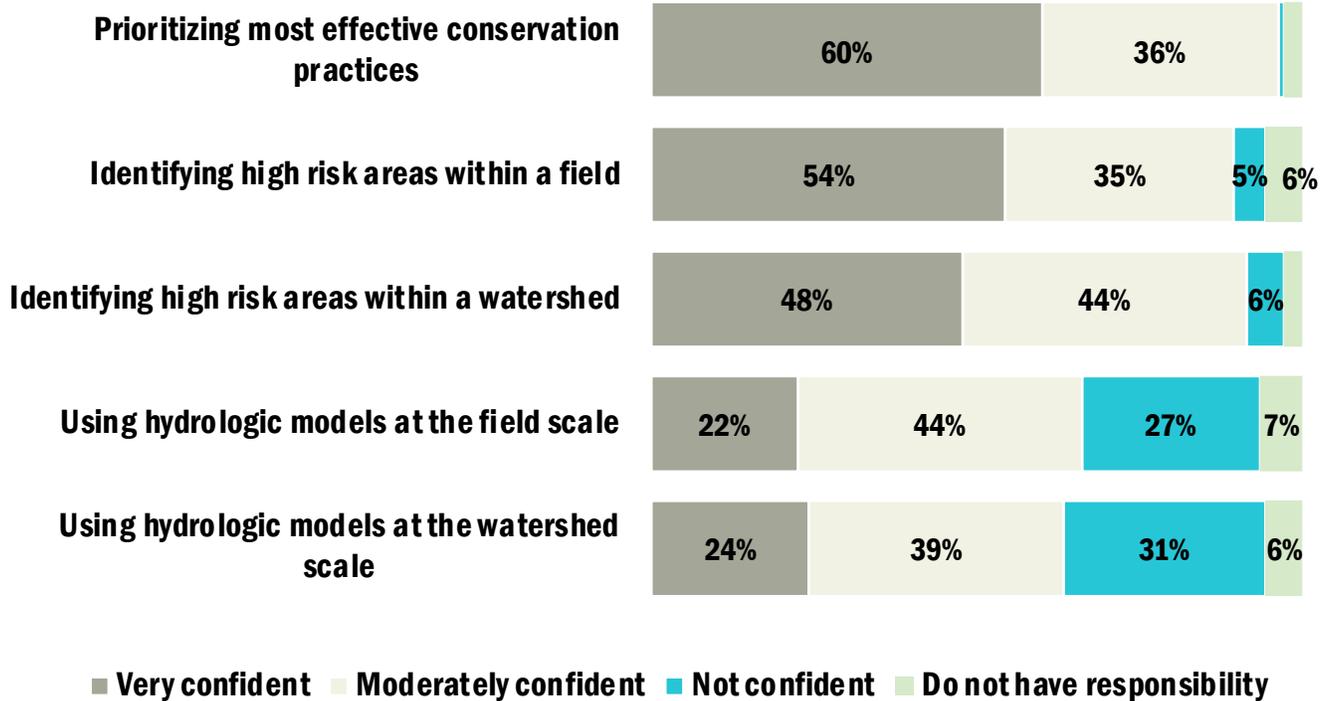
Overall professionals reported being confident in tracking all metrics. They were most confident in tracking environmental metrics with 42% reporting that they were very confident.

Despite general confidence among professionals, some were not confident in tracking social (24%) and economic metrics (29%).

The majority (97%) of professionals were very confident or confident in defining relevant, measurable goals.

Needs Assessment

How confident are you in conducting the following information tools and technologies activities?



Professionals felt most confident in **prioritizing effective conservation practices**, with **96%** reporting they were **very or moderately confident**.

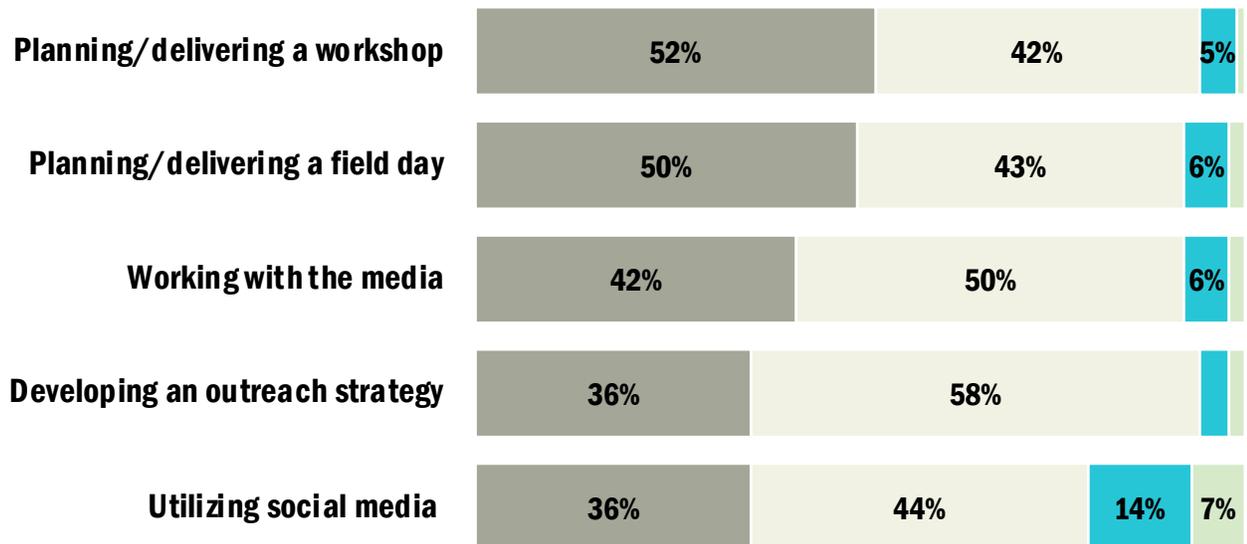
Professionals felt very confident in **identifying high risk areas in a field or watershed**. **Over half** are very confident in doing so for **fields**, while just under half were very confident in doing so for a **watershed**.

Professionals are **least confident in applying or interpreting hydrologic models**. Some lacked confidence doing so at the **field scale (27%)**, and others lacked confidence at the **watershed scale (31%)**.

The difference in professionals' ability to perform at the watershed and field scales was not significant.

Needs Assessment

How confident are you in conducting the following outreach and education activities?



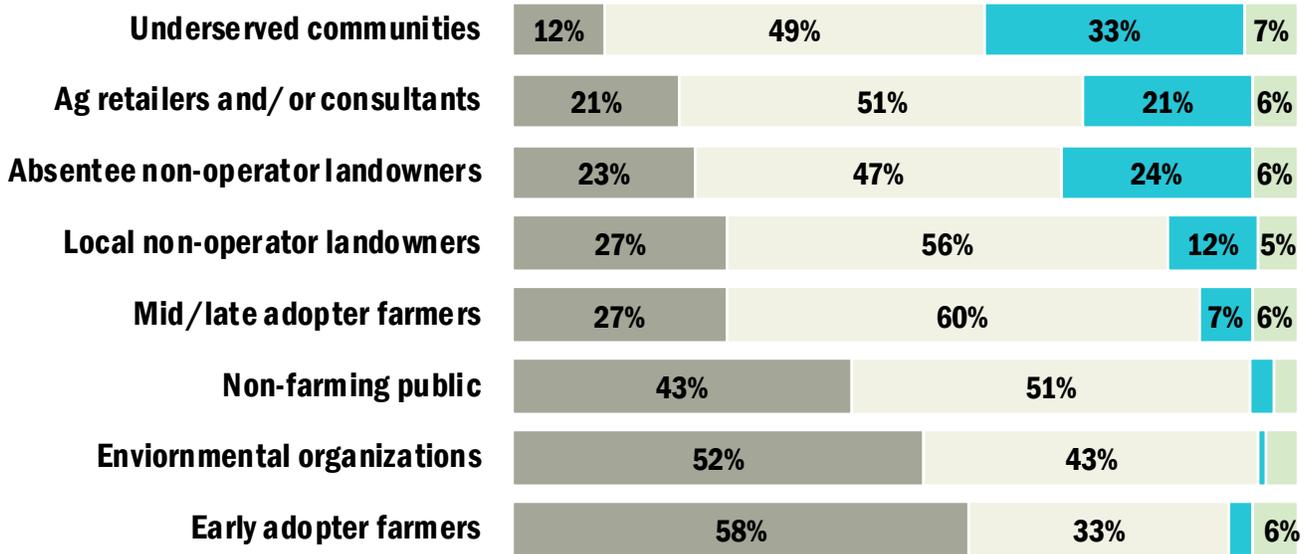
■ Very confident ■ Moderately confident ■ Not confident ■ Do not have responsibility

Most professionals reported they were **very confident** in all the listed activities. Professionals were more likely to be **moderately confident** in **working with the media** and **developing an outreach strategy**.

Some (14%) professionals lacked confidence in **utilizing social media**.

Needs Assessment

How confident are you in engaging with specific stakeholders?



■ Very confident ■ Moderately confident ■ Not confident ■ Do not have responsibility

Most professionals were at least moderately confident engaging with these groups. Professionals had the least confidence in engaging with underserved communities with about a third (33%) reporting not being confident.

They were very confident engaging early adopter farmers (58%), environmental organizations (52%), and the non-farming public (43%). Less than 3% reported not being confident with these groups.

Professionals lacked confidence in engaging local non-operator landowners (12% not confident), ag retailers and/or consultants (21%), and non-operator landowners (24%).

Needs Assessment

Is there a topic specific to your state (such as a state policy or program) for which you want to have greater influence?

Responses to this question were organized into the following categories: an **environmental issue**, a specific **program or initiative**, a **policy or regulation**, **funding**, and **outreach**. One response did not fall into any of these categories.

Sixteen responses mentioned **environmental issues** including groundwater, manure, fertilizers, cover crops, and others.

Sixteen responses mentioned a **particular program** or effort that was ongoing, commonly the **One Watershed One Plan** initiative in Minnesota and **Nutrient Reduction Strategy** in Iowa and Illinois.

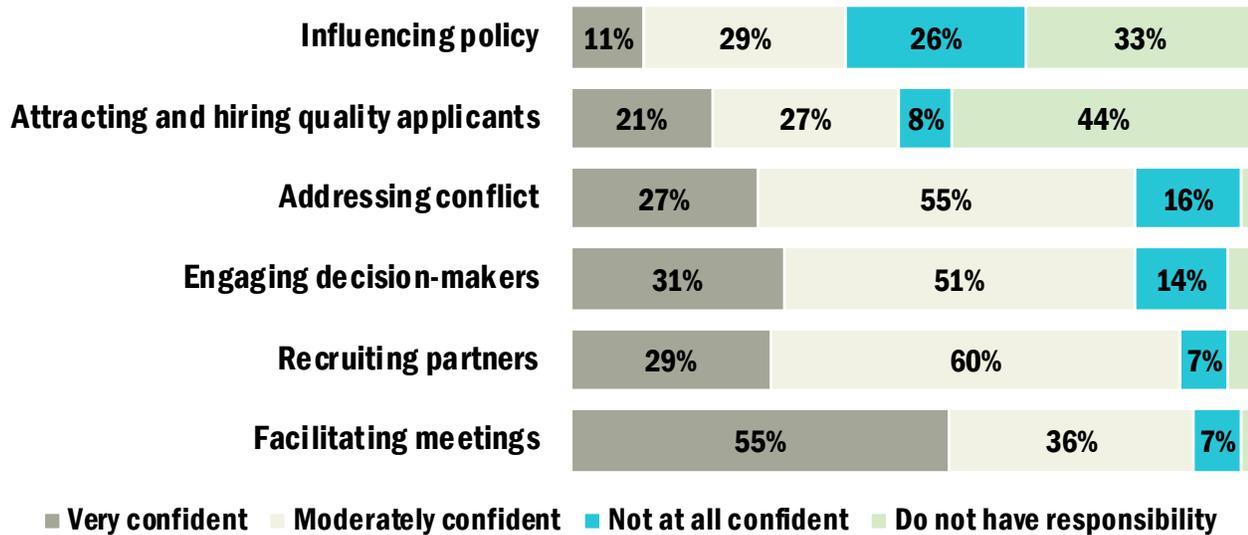
Twenty-nine responses referenced **policies, regulations, or funding issues** focusing on approaches to these issues and the role of public actors.

A few responses mentioned **outreach activities at the policy-making level** to promote engagement on these issues or de-politicizing the funding of these efforts.

See [Appendix B](#) for the list of detailed responses. Some responses fall under multiple categories.

Needs Assessment

How confident are you in conducting the following leadership activities?



Professionals were **least confident** in influencing policy with 26% reporting they were **not confident**. About a third (33%) did not have that responsibility.

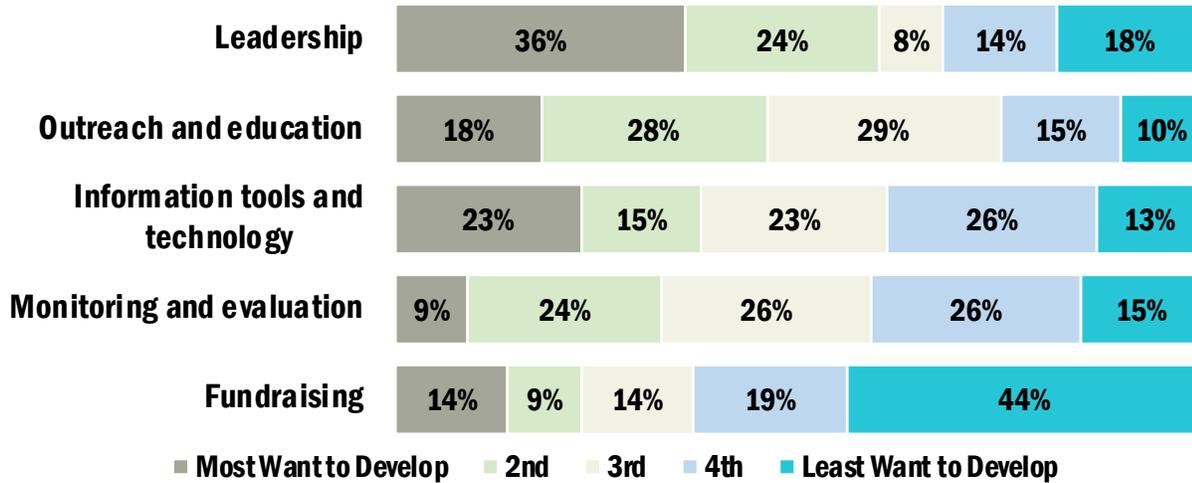
Over 90% of professionals were moderately to very confident in facilitating meetings and recruiting partners.

Many professionals did not have responsibility for attracting and hiring applicants, but of those that did, 85% were very or moderately confident in doing so.

About 15% of professionals were not confident in addressing conflict or engaging decision-makers, although 80% expressed moderate or very confident.

Needs Assessment

Which of the following skills do you wish to develop in your professional capacity?



Skill	Mean rank
Leadership	2.5
Outreach and Education	2.7
Information tools and technology	2.9
Monitoring and Evaluation	3.1
Fundraising	3.7

“... With effective **monitoring and eval**, we will be better prepared to tell our story through **outreach and education**. The story we tell will then lead to more effective **fundraising activities ...**”

Leadership was the skill professionals most wanted to develop, 60% of professionals ranked it as a top two choice, while 32% ranked it as their bottom two.

Outreach and education was most frequently a second or third choice for professionals, and just 25% of them ranked it as their bottom two choices, lowest of all the skills.

Information tools and technology was a top two choice for 38% of professionals. However, it was a bottom two choice by just as many.

Half (50%) of professionals ranked monitoring and evaluation in their second or third skills. Some (41%) placed it in the bottom two.

Fundraising was the skill professionals least wished to develop. Almost half (44%) of professionals ranked it as their least desired skill and few (23%) ranked it in their top two.

Outcomes Assessment

Which watershed training/meetings have you attended in the past?

Professionals were most likely to have attended a LMW (39%) or Iowa Watershed Academy (31%) meeting. Only a small number had attended the Fishers' and Farmers' Partnership (12%) and Minnesota Watershed Specialist Training (3%). Majority of professionals had not attended any meetings/trainings (26%).

A wide range of trainings were mentioned, including the Iowa Water Conference (11 responses). The complete list is shown below:

"Iowa Water Conference" (x11)	"DATCP Producer Led Conference" (x2)	"Driftless Symposium"
"One Water Summit" (x2)	"Stream and Watershed Integrated Management (SWIM)"	"BWSR Academy"
"U of MN Water Resources Conferences" (x2)	"Rainy River Headwaters Watershed Meeting (amongst MN, Canada, and respective government & environmental agencies)."	"MN Extension programs"
"MN Assoc of Watershed Districts conferences" (x2)		"Wisconsin Lake Leaders"
"WI Land & Water Conference" (x2)	"WI Producer-led Watershed Protection annual meetings"	"Civic engagement training"
"North Central Region One Water Action Forum"	"Numerous trainings and meetings sponsored by the Iowa conservation partnership (IDALS, DNR, NRCS)"	"Farmer led conference"
"Numerous farmer-led group workshops and conferences"		"Soil health summit"
"State and regional watershed project coordinator meetings"	"Conservation Districts of Iowa fall conference"	"Practical Farmers of Iowa"
"U of MN Extension Watershed Cohort Training"	"Annual Project Coordinator Meetings"	
"Drainage, hydrology, sediment collaborative"	"Partnership for River Restoration and Science in the Upper Midwest"	
"ISU Extension Community Leaders"	"WMAs of Iowa meetings/forums"	

Which of the following LMW meetings have you attended?

Few professionals had attended previous LMW meetings, with the largest number (24) attending the 2019 meeting. In 2017 and 2018, 13 professionals attended LMW meetings. Prior to 2016, at most 3 professionals indicated they had attended the meetings.

Outcomes Assessment

To what extent have you applied the tools/strategies you learned about from the meetings/trainings you attended?

Not at all, 4%

A little bit, 72%

To a large extent, 24%

Professionals reported that they had applied tools and strategies learned from meetings **a little bit**, with **72%** of professionals choosing this option. Some (**24%**) felt they had applied them **to a large extent**, and only **4%** felt they **had not applied them at all**.

Responses under “**A little bit**” suggested trainings were generally useful or shared some knowledge, but it was not all pertinent, did not stick, or remained too general.

Responses under “**To a large extent**” indicated professionals had taken and applied tools learned in trainings

To what extent do you feel meetings/trainings you attended helped you develop connections/contacts with your peers?

Not at all, 3%

A little bit, 53%

To a large extent, 45%

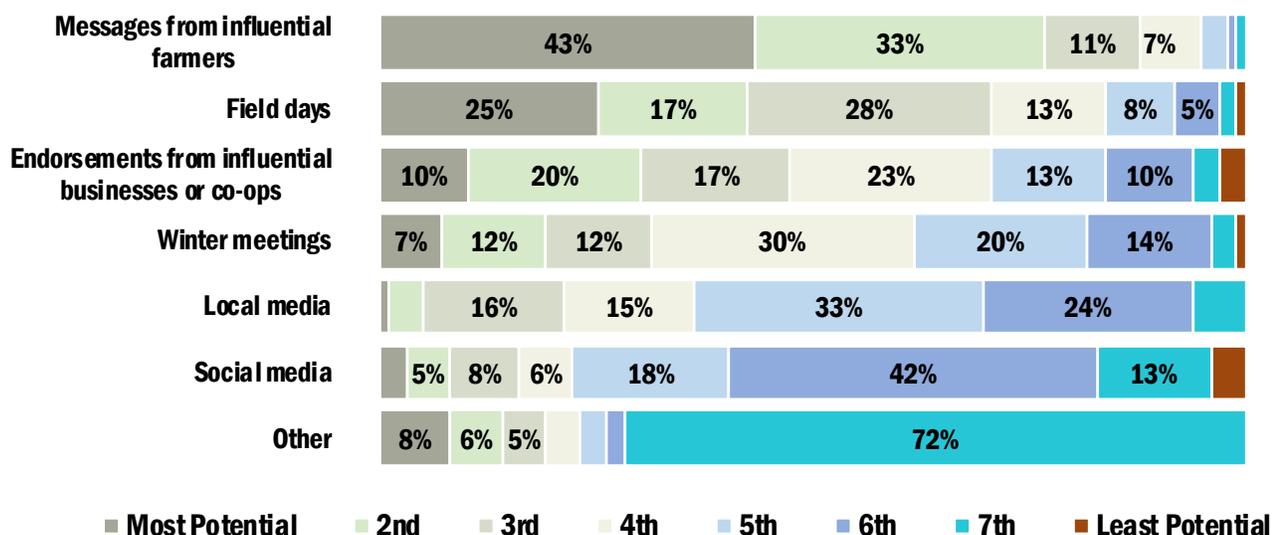
Professionals were much **more likely** to feel that meetings and trainings helped **develop connections or contacts with their peers**. About **45%** felt this was so **to a large extent**, while a little over half (**53%**) felt it was **to a little bit** extent.

Responses under “**A little bit**” highlighted trainings expanding professionals' network. However, some professionals noted that events do not always produce geographically useful connections.

Responses under “**To a large extent**” focused on the value of the meetings/trainings over less-personal forms of communication for networking, especially for those in niche positions.

Project Strategies

Which outreach strategies do you feel have the greatest potential?



Outreach strategies	Mean rank
Messages from influential farmers	2.0
Field days	2.9
Endorsements from businesses or co-ops	3.7
Winter meetings	4.0
Local Media	4.7
Social media	5.3
Other	5.8

Messages from influential farmers had the greatest potential as 75% of professionals placed it in their top two.

Fewer than half of (42%) professionals identified field days as a top two strategy

Endorsements from businesses or co-ops was a top two choice for 30% of professionals, and third or fourth for 40%.

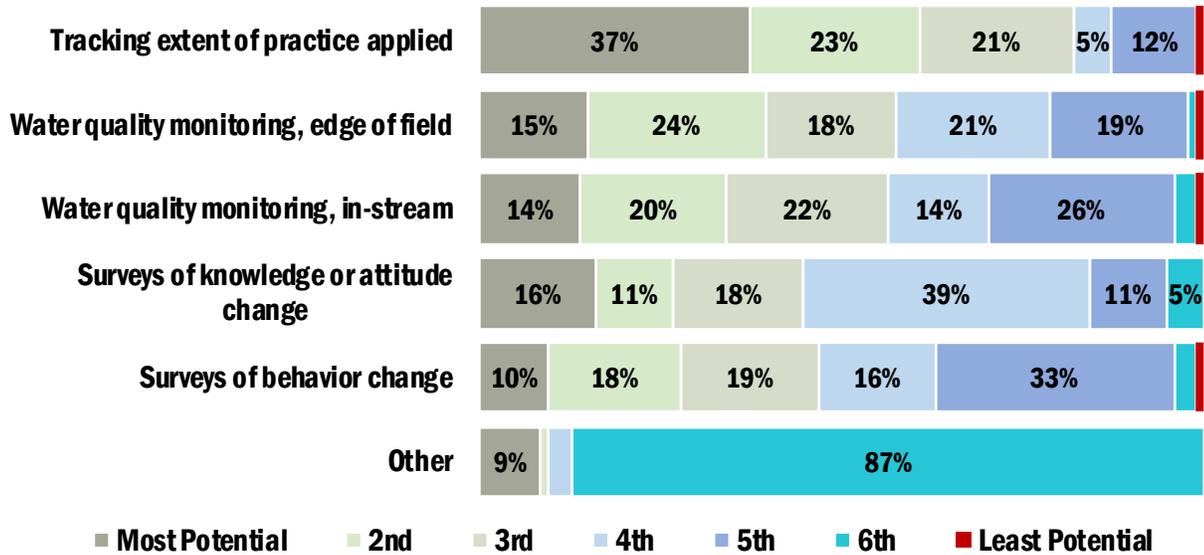
About 19% of professionals placed winter meetings in their top two, while 50% placed it fourth or fifth.

About a third (30%) of professionals placed local media as a bottom three choice, and 48% identified it as fourth or fifth. Social media was placed in the bottom three by 59% of professionals and the top two by fewer than 10%

Detailed responses are presented in [Appendix E](#).

Project Strategies

Which metrics do you feel have the greatest potential?



Metric	Mean rank
Tracking extent of practice applied	2.4
Monitoring - edge of field	3.1
Monitoring - instream	3.3
Surveys of knowledge or attitude change	3.3
Surveys of behavior change	3.6
Other	5.5

Professionals ranked the two **water quality monitoring** options and the two **survey** options **similarly**, with mean ranks of between 3.1 - 3.6.

More than half (60%) of professionals ranked **tracking extent of practice applied** in the **top two** choices. It had a mean rank of 2.4.

Water quality monitoring in **edge of field** (40%) and **in-stream** (35%) locations were selected as a **top two** options. **Edge of field** monitoring was slightly preferred to in-stream.

Professionals preferred **surveys of knowledge or attitudinal change** to **surveys of behavior change**. Although about 27% of them selected these metrics as their **top two**, 16% selected knowledge change as their **bottom three** choice compared to 35% who selected surveys of **behavior change** as their **bottom three**.

Project Strategies

Which metrics do you feel have the greatest potential? – other responses

Professionals identified many other responses which are categorized and presented below:

Landscape Tracking / Impacts

“Soil monitoring (in field) - erosion + soil health” (1st)

“Tracking of landscape changes in the watershed, not just practices payed for (e.g. transect surveys of tillage, cover crops and other such inventories)” (1st)

“Tracking density of the extent practices are applied in a specific geography” (1st)

“Flood Reduction” (1st) “SNAP+” (1st)

“Tracking environmental impact” (2nd)

“Nutrient reductions” (3rd)

“Aerial imagery assessments” (4th)

“Impact on local water resources.” (7th)

Concerns

“It concerns me that this survey even asks if tracking extent of practices applied (acres/linear feet, etc.) as these kinds of metrics have almost zero correlation to water quality.” (1st)

“I believe that sometimes landowners complete surveys in a manner to appease what we want to hear” (6th)

Financial Metrics

“Economics (ROI)” (1st)

“Tracking economic return” (1st)

“Tracking \$ amounts (money talks to farmers)” (2nd)

“Calculating ROI on every project being considered guided by diagnostic monitoring data has produced the greatest documented improvements in water quality for the least investment compared to any other implementation strategy currently being employed.” (4th)

“Cost- long-term benefit analysis” (6th)

Others

“One on one farm visits” (2nd)

“Models to estimate load reduction” (4th)

“Recognition of good stewards in the WS” (4th)

Project Strategies

Which geospatial planning and/or modeling tools do you feel have the greatest potential?

Professionals preferred **watershed scale models (37%)** to **field scale models (25%)**. Most professionals (**60%**) reported that they **needed to know more** before they could provide a response.

Additional responses are shown below:

Watershed Scale

ACPF (x14) HSPF-SAM (x4) PTM App (x4) SWAT (x2) SNAP+ HEC-HMS NDTI STEPL ArcGIS ArcMAP

“Cumulative effects are going to mask/hide improvements at the watershed scale for anything below 25% implementation...possibly more. Not to mention legacy issues”

“Land use change measured by spring and fall cover”

“Groundwater Restoration and Protection Strategies (GRAPS)”

“Habitat modeling tools are needed to identify and prioritize multiple benefits of practices.”

Field Scale

SNAP+ (x4) PTM App (x4) Profit Zone manager (x4) Ag solver Agleader SMS or similar TruTerra

“Any field tool, field walkovers, etc.”

“Any tool that implements cost benefit into conservation planning development”

“The models that show unprofitable areas of the field”

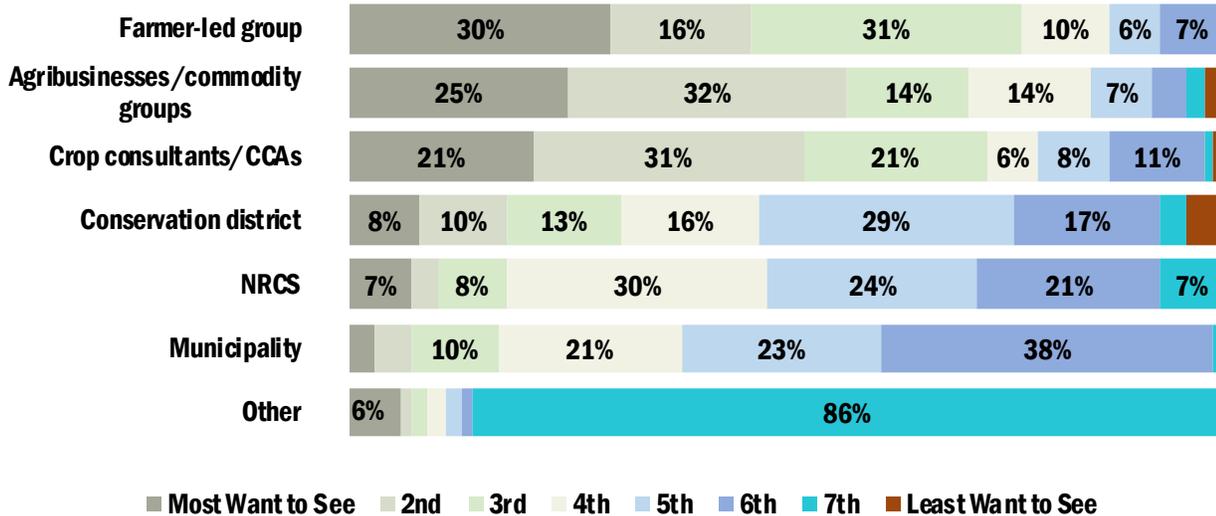
“This provides a basis for 1-to-1 discussion with a farmer, an advantage crop consultants and agronomists have.”

“NTT is what I use. I'd like more training on other field scale modeling tools.”

“Farm scale is more accurate”

Project Strategies

Which partners do you want to see MORE engaged in meeting water quality objectives?



Partners	Mean rank
Farmer led group	2.7
Agribusiness/commodity groups	2.8
Crop consultants/CCAs	2.9
Conservation district	4.3
NRCS	4.5
Municipality	4.8
Other	6.4

About half of professionals ranked farmer led groups, agri-business, or crop consultants in their top two. These groups were all closely ranked between 2.7 – 2.9.

The lower ranked partners were also comparatively ranked. Conservation district was placed in the top two by 18% of professionals but were placed in the bottom three by 24%.

10% of professionals put NRCS in the top two partners, while 28% placed it in the bottom three.

Municipality was the least desired partner as 39% of professionals placed it in the bottom three, versus 7% who placed it in the top two. It had a mean rank of 4.8.

Project Strategies

Which partners do you want to see MORE engaged in meeting water quality objectives – Other responses

Other responses are categorized as shown below:

Landowners / farmer organizations

“Landowners” (1st) “Farm rental property owners” (1st) “Local landowners” (2nd)

“Public Land Managers (county/state/federal)” (4th)

“The CCA organization approved training almost exclusively focuses on production and almost never included suggestions for protecting water resources let alone how to help farmers maximize profits (again, the focus has been yield).” (6th)

“Farmer led groups that are interested in learning and growing and change. NOT obstructionist farmer led "groups" that are working to stop even the development of watershed plans like we see in MN” (7th)

“Farmers, landowners, cafos”(7th)

Large Industries: Food, Financial, Agriculture

“Consumers eating for water quality. A greater focus on how grass-fed food production GREATLY reduces nutrient and sediment losses to lakes, rivers, wetlands, groundwater, etc. would have the greatest impact on water quality.” (1st)

“Financial Institutions/Ag Lenders” (1st) “Industry - Cargill, ADM, etc” (1st)

“Food processors (i.e. General Mills)” (3rd) “Ag supply chain” (4th)

“Lenders and trust officers.” (4th)

“Downstream supply chain organizations (grain processors and food companies” (5th)

Government

“State legislators” (2nd) “Local government” (3rd) “State Government” (5th)

“Unfortunately will have to enforce regulations on some” (8th)

Miscellaneous

“University Extension” (1st) “Confinement owners & operators” (2nd) “Tile contractors” (2nd)

“Drainage districts” (3rd) “Local business, rotary, etc” (5th) “Water users” (6th)

“Environmental groups” (7th)

Training and Networking Preferences

How far are you willing to travel for training?

Professionals were generally willing to travel long distances for training. About 61% were willing to travel at least 200 miles, with around 17% of them willing to go more than 200 miles. 37% were willing to travel up to 100 miles.

How long are you willing to attend a training? (Select all that apply)

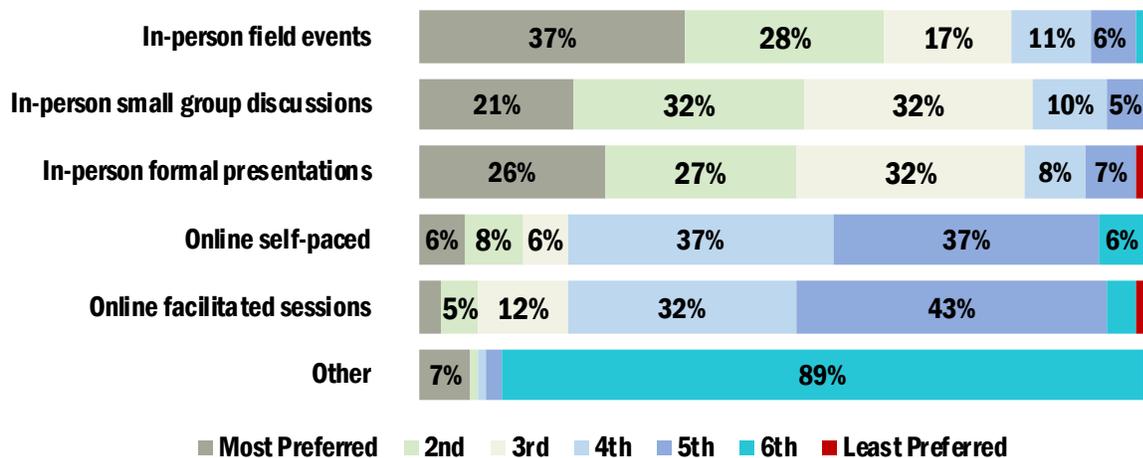
More than half (56%) of professionals preferred two-day trainings. About a third (27%) were willing to attend three-day trainings and 40% were willing to attend a full day training. Few (21%) were willing to attend a half day.

What do you feel is a reasonable registration fee for an in-person training?

Most (78%) professionals felt that up to \$100 was a reasonable fee. The remaining 22% felt that up to \$200 was a reasonable fee.

Training and Networking Preferences

What are your preferred methods for learning?



Preferred method	Mean rank
In-person field events	2.3
In-person small group discussions	2.5
In-person formal presentations	2.5
Online self-paced classes	4.1
Online facilitated sessions	4.2
Other	5.6

All in-person-events were preferred over online sessions. Professionals ranked the in-person events similarly with a mean rank between 2.3 – 2.5.

Small group discussions and formal presentations were ranked nearly equally, with 53% of professionals identifying them as top two methods of learning. A total of 85% of professionals put them in the top three, slightly higher than field events (82%). Fewer than 10% placed the others in their bottom three position.

In-person field events was the most preferred method of learning with a mean rank of 2.3. More than half (65%) professionals ranked it in the top two. Few (7%) ranked it in the bottom three.

Some (14%) professionals ranked online self-paced classes in the top two compared to 43% put in the bottom three. Facilitated sessions were in the bottom three for 48%. Most ranked them as fourth or fifth preferred.

Training and Networking Preferences

What are your preferred methods for learning?

Professionals identified several other responses which are categorized and presented below:

In-Person Groups

“Round table discussions” (1st) “Hands-on demonstrations” (1st)

“Panel discussions with Q and A and breakout groups” (1st)

“In-person, critical thinking through a case study” (2nd)

“Sessions led by other watershed professionals” (4th)

“Multiple breakout sessions” (5th)

In-Person Individual

“1-on-1 OJT (on the job training - learning from more experienced colleague, working on real world projects together ... kind of like a mentor)” (1st)

“Apprenticeship” (3rd)

Hybrid In-Person / Online

“I like a combination of all of the below” (1st) “Tutorial” (1st)

“Hybrid of in person with an ongoing learning network (online)” (4th)

“Online - search on social media groups” (6th) “Combination of 1, 2, 3, 4” (6th)

“Online options are nice if I cannot make in person” (6th)

“In the era of COVID-19, it seems reasonable to organize meetings virtually as an additional option for the small group discussion and formal presentations.” (6th)

“In-person formal or online self paced will work. Interested in success stories. Seems success is correlated to time spent with people - don't have time to do that.” (6th)

Miscellaneous

“I'm well along in my career and apparently considered an "expert" (e.g. I've taught numerous courses, workshops, university instruction, publications, books, etc.). I've grown a little jaded towards trainings. We need to spend more time on the ground just working with farmers - what we are doing is not rocket science, it's building relationships, trust, and partnerships.” (1st)

“Printed resources” (5th)

Training and Networking Preferences

Who do you rely on to develop greater professional competency?

Professionals relied on **other coordinators (82%)**, **local partners (77%)**, and **University Extension (56%)** more than any other sources.

Few professionals relied on **Midwestern Watershed Meetings (23%)** and **Fishers and Farmers Partnership (11%)**.

Regional groups like the **Iowa Watershed Academy (22%)**, **Wisconsin-Producer Led Meetings (12%)**, and **Minnesota Watershed Specialist Training (3%)** attracted a small proportion of overall responses.

Professionals offered many other responses which are categorized and presented below:

Colleagues

“Fellow office staff”
“Co-workers”
“Specialized training; local partners and state agency staff”
“Internal staff and resources”
“Regional Coordinator”

Online Resources

“Other relevant webinars”
“Online education resources”
“Finding materials online to read”

Producers /Agronomists

“Local producer knowledge”
“Producers”
“Farmers and Landowners”
“Agronomists, county staff”
“Agronomists who have true insight into how difficult it is to change farmer behavior”

Non-profits / Advocacy Groups

“Iowa Water Conference” “MN Association of SWCD”
“NRCS” (x6) “Wisconsin Land + Water”
“The Nature Conservancy”
“Scott County Partners for Watersheds”
“Iowa Conservation Partnership (IDALS, DNR, NRCS, SWCDs)”

Government / State Agencies

“Dept of Ag, DNR” “WI DATCP”
“Board of Water and Soil Resources”
“State Agencies (i.e. BWSR)”
“Illinois Soil and Water Conservation District Employee Association Trainings”
“BWSR (MN Board of Water and Soil Resources)”

Miscellaneous

“There are not many opportunities outside of standard NRCS trainings (when looking broadly over the past 10 years)”

“I look to emerging technologies in industry and elsewhere to see if there are opportunities for new applications within the field of water resources management.”

“Reading journals, articles, books, and online sources” “CDI yearly conference”

Training and Networking Preferences

What methods would you find most useful for engaging with other watershed professionals?

Methods	Mean rank
In-person	1.7
One-on-one phone/email	3.3
Online networking sessions	3.4
Online discussion forum	4.0
Mentorship program	4.1
Online map	4.6

In-person was the clear top choice for professionals with a mean rank of 1.7.

Online discussion forum was a top two choice for 18% of professionals while it was placed in the bottom three by 45%. It was ranked very similarly to the mentorship program which a top two choice of 25% of professionals

Very few (4%) professionals chose online maps as a top two and it was the bottom three for 58% of professionals with the lowest mean rank of 4.6.

One-on-one phone/email was a top two choice of 40% of professionals. It was placed as the bottom three by 24% of them. Online networking sessions were slightly less preferred as a top two, for 29%.

“... Not an answer, but just a comment that this was one of the hardest questions to rank. I ranked online discussion forum last, but I think that would still be a really useful tool...” (7th)

“... These are all good ideas! I don't think the map would be the most valuable item but it is a GREAT IDEA...” (7th)

“... A mentorship program would be great for new coordinators. I wish there would have been one when I first came on, thankfully I had worked in the office for 4 years prior to taking the PC position so I was able to observe and work with the previous PC...” (7th)

“... quarterly watershed roundtable” (1st)

Training and Networking Preferences

Please give an example of training/event you attended that you really liked

The most popular conferences mentioned were [Water Conference](#), [LMW](#), [Iowa Watershed Academy](#) and other state specific meetings organized in Wisconsin, Illinois and Minnesota.

The meetings/training/conference focused on watershed issues, soil health, conservation practice and the audience included farmers.

See [Appendix F](#) for the list of detailed responses.

Please give the name of a speaker that you really liked

Popular speakers mentioned by professionals included [Gabe Brown](#), [Chad Pergacke](#) and [Ryan Stockwell](#).

See [Appendix G](#) for the list of detailed responses.

Training and Networking Preferences

If a professional certification program for watershed coordinators existed, would you want to become certified?

About half (47%) of professionals responded that they **may** want to become certified.

Slightly more professionals said **Yes** (27%) than said **No** (25%).

In the space for comments, professionals' concerns included the fact that a program would create more **barriers to entry** in the profession. Some professionals expressed doubts if it would **produce professional benefits** such as a **higher salary**, **job security**, or **improvement of relevant skills**.

Detailed responses can be seen in [Appendix H](#).

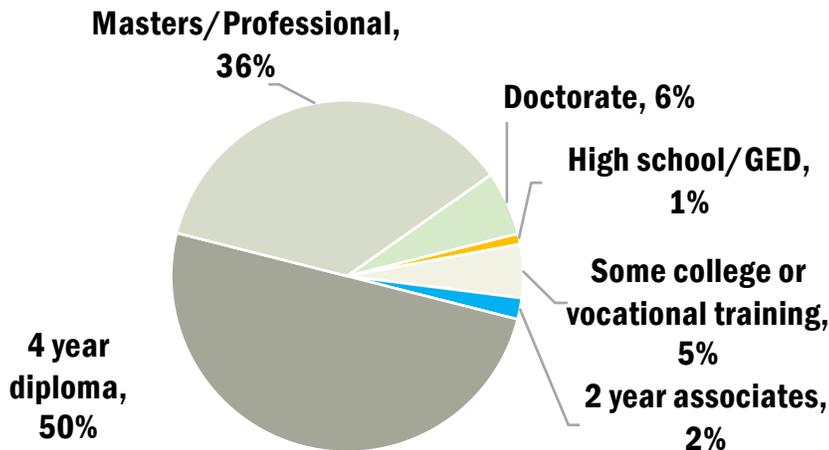
If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming?

Professionals were split on this question with 37% wanting to be a **mentee** and 34% wanting to be a **mentor**. Around 30% of the professionals selected **neither**. Full comments in the "other" section suggested that many professionals wanted to be both. Others indicated that they were too busy.

Detailed responses under the three choices are shown in [Appendix I](#).

Demographic Data

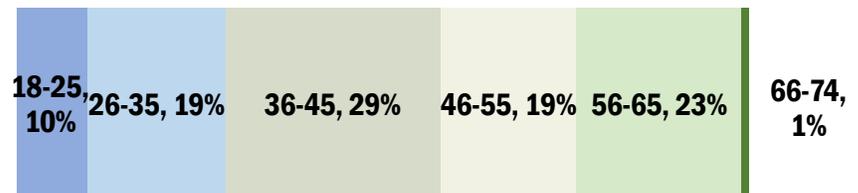
What is your highest level of education?



Exactly half (50%) of professionals have a four-year degree. More than a third (36%) have a masters or professional degree. The remaining 14% have a doctorate degree (6%), some college or vocational training (5%), and 2-year associate degree (2%).

What is your age?

Our sample included professionals of all ages. About a third (29%) were under 35, about half (48%) were between 36 and 55, and 24% were over 55.



What is your gender?

The sample is well balanced between professionals who identified as male (51%) and those who identified as female (46%). We did not observe any non-binary professionals. Some (3%) professionals did not disclose their gender.

Advanced Analysis

In this section, we present key findings from advanced analysis which involved breaking down responses by subcategories. These results help demonstrate where professionals of different career stages or backgrounds have unique needs, strengths, and experiences.

We performed cross tabulations of age, years of work experience, area of expertise, and farming background. The variables were compared primarily with responses to questions in the Needs Assessment and Training and Networking preferences sections. These variables were chosen in consultation with Craig Ficenece, Program Director of Sand County Foundation.

After performing a range of possible cross tabulations, we present results which are significant at $p = 0.10$ instead of the usual $p = .05$ used in Social Science research due to small subgroup sample sizes (between 15 and 35) which render it difficult to meet statistical significance at that level of rigor. In some instances, we include results that are outside the cut off, but near, if they are of particular interest.

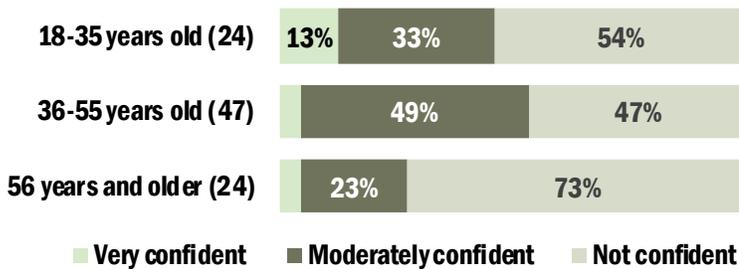
Advanced Analysis - Age

The data were analyzed in three main categories to improve statistical power. These were 18 – 35 years old (young cohort, n = 29) 36 – 55 years old (middle cohort, n = 48) and 56 years and older (oldest cohort, n= 24). Samples sizes vary as respondents missed some questions or reported they were not responsible for an activity.

Needs Assessment

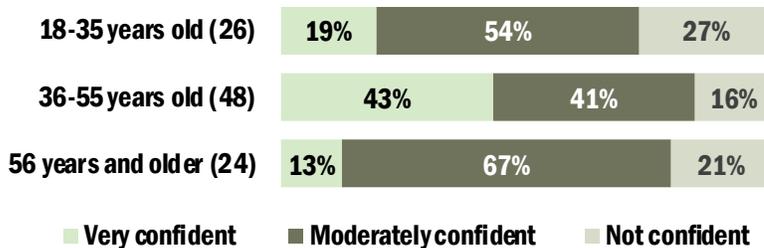
Fundraising skills

Securing private sector funding (p = .075)



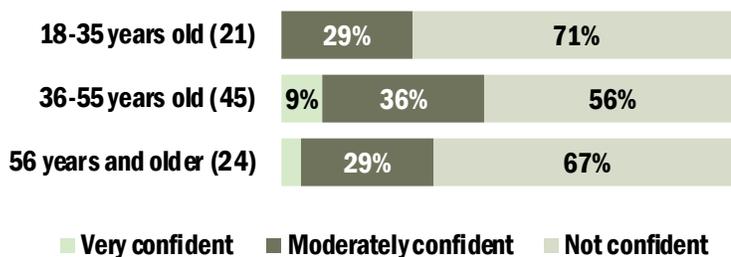
While all groups lacked confidence in securing private sector funding, nearly 20% more of the oldest group reported not being confident in that skill.

Identifying federal grant opportunities (p = .06)



Professionals in the 36-55-year-old group were most confident in identifying federal grant opportunities. Most (43%) professionals in this group reported being very confident than the other age groups.

Utilizing other funding mechanisms (p=.032)

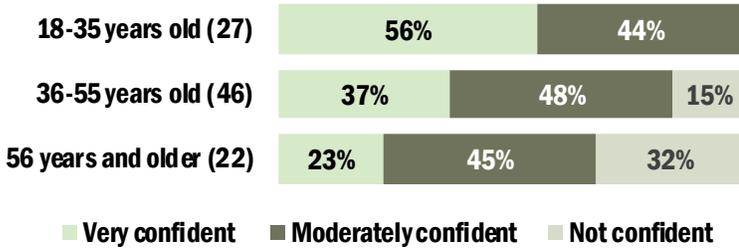


Professionals in the 36-55-years-old group were most confident in utilizing funding mechanisms. All age groups generally reported lower levels of confidence in this skill.

Advanced Analysis - Age

Outreach and Education skills

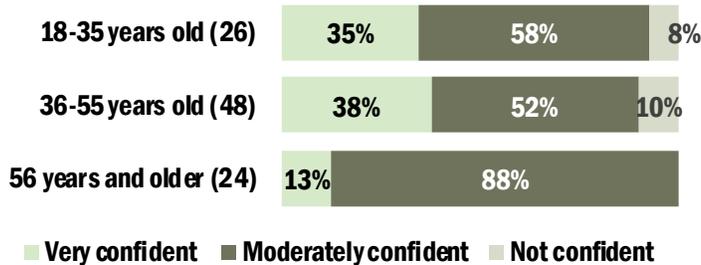
Utilizing social media (p=.06)



There is a clear indication of younger professionals having more confidence in utilizing social media than older ones.

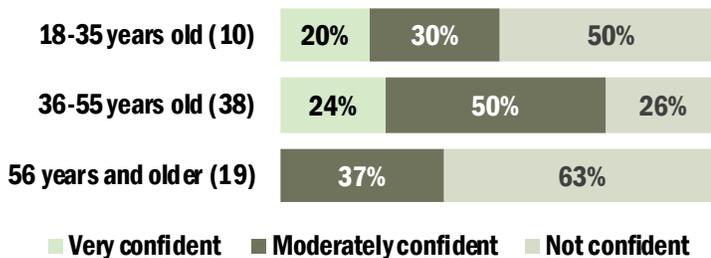
Leadership skills

Recruiting partners (p=.028)



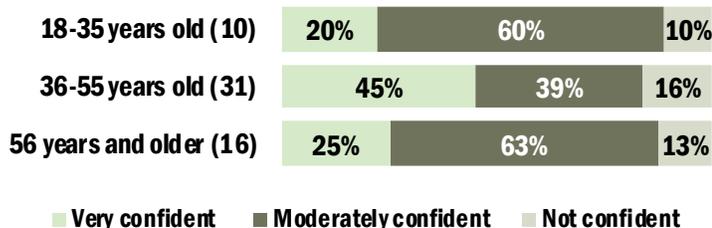
Professionals in the oldest group were significantly less confident in recruiting partners. The younger cohorts reported more confidence in this skill.

Influencing policy at the state level (p=.00)



The 36-55-years-old group had the highest confidence overall in influencing policy, about 74% of them reported they were very or moderately confident. Half of the 18 – 35-year-old group reported not being confident in this skill.

Attracting quality applicants (p=.055)



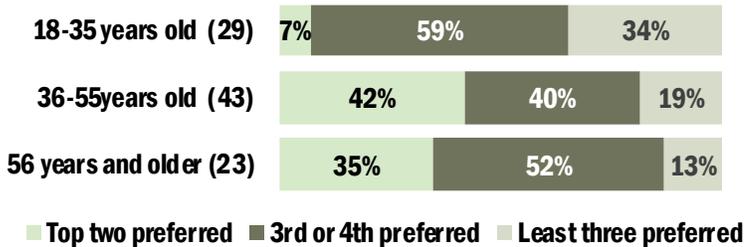
Professionals aged between 36-55-years old reported the most confidence in attracting quality applicants. The youngest professionals had comparable responses to older professionals.

Advanced Analysis - Age

Learning and Engagement

Preferred methods for engagement

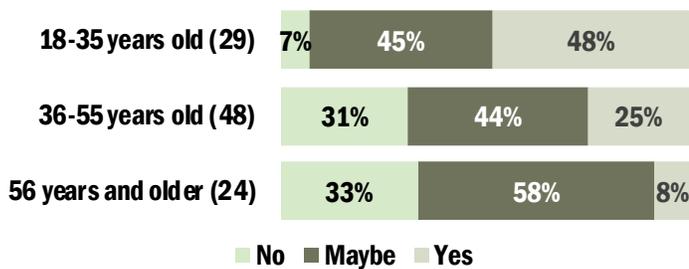
Online video networking sessions (p=.02)



The youngest cohort reported lower preference for online video networking compared to the older cohorts.

Certification program

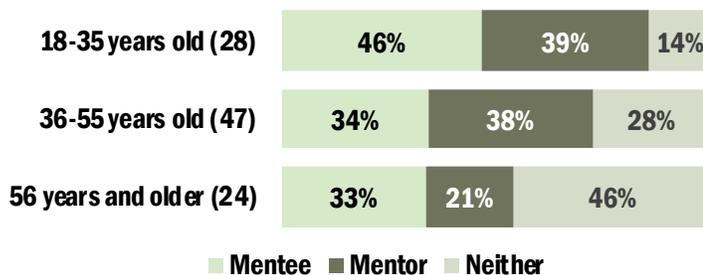
Certification program (p=.008)



The youngest cohort was most interested in a certification program. The two older cohorts were equally likely to say No. The oldest cohort was far less likely to say Yes.

Mentorship program

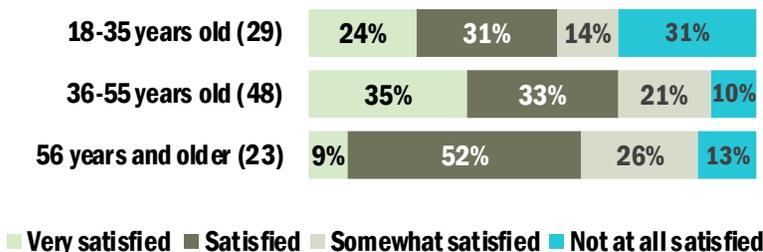
Mentorship program (p=.13)



Across age groups, professionals were interested in being mentees. Younger cohorts were more likely to choose mentee. The oldest cohort was most likely to say neither.

Job satisfaction

Satisfaction with benefits (p=.062)



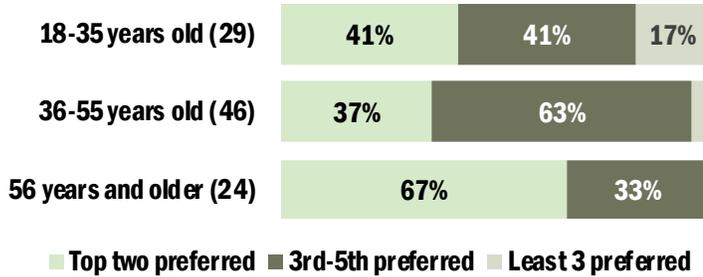
The youngest cohort was far more likely to be unsatisfied with benefits. The oldest cohort was least likely to be very satisfied with their benefits, although they reported being satisfied overall.

Advanced Analysis - Age

Learning and Outreach

Partners to engage more

Farmer led group (p=.085)



The oldest cohort reported significant preference for farmer led groups. The youngest cohort had a distinct portion ranking this approach among the lowest options.

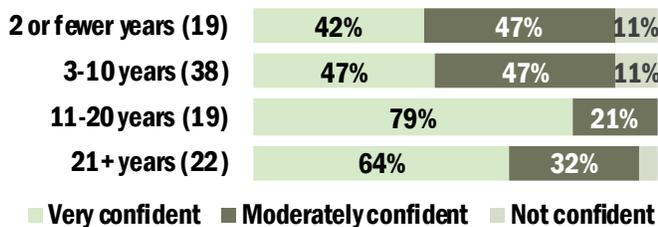
Advanced Analysis – Years of Work Experience

The data were analyzed across four categories. These were **2 or fewer years** (less experienced, n = 22), **3 – 10 years** (experienced, n= 38), **11 – 20 years** (more experienced, n = 20) and **21+ years** (most experienced, n = 22).

Needs Assessments

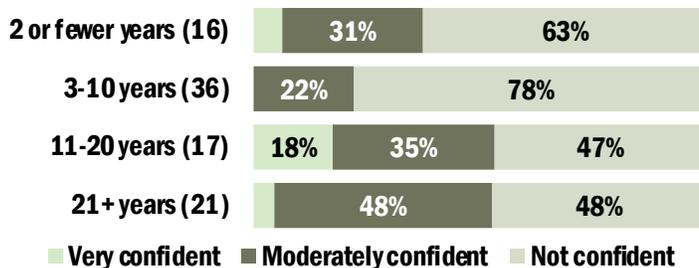
Fundraising skills

Identifying state and local grant (p=.07)



More experienced professionals were more confident in identifying state and local grants.

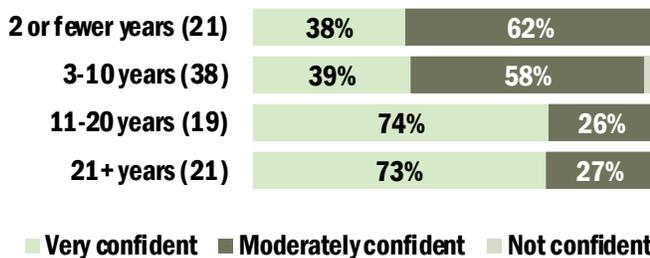
Utilizing other funding mechanisms (p=.01)



More experienced professionals were more confident in utilizing other funding mechanisms, though there was a substantial lack of confidence across all experience levels.

Monitoring and Evaluation skills

Defining relevant, measurable goals (p=.079)



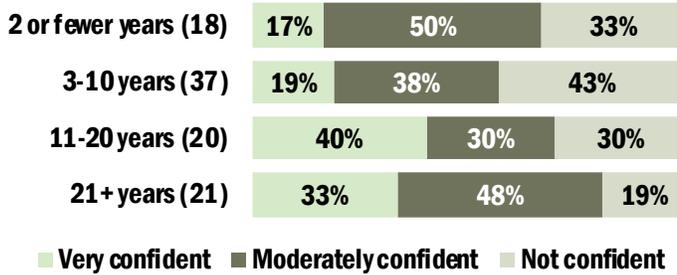
The more experienced cohorts were more confident defining relevant, measurable goals. The less experienced groups reported moderate confidence in the skill.

Advanced Analysis – Years of Work Experience

Needs Assessments

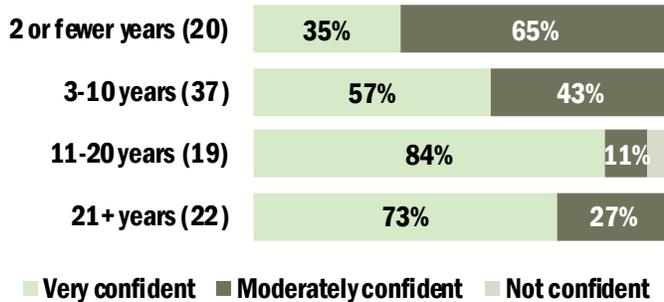
Information tools and technology skills

Applying hydrologic models at the watershed scale (p=.088)



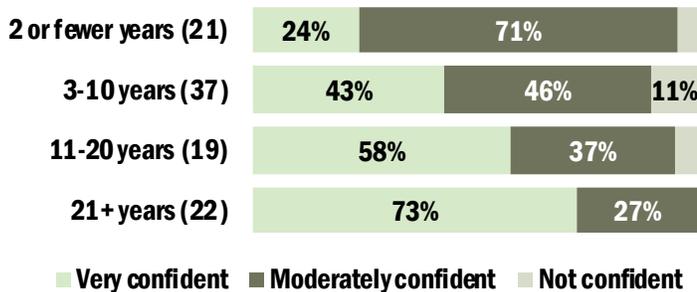
Professionals with up to 10 years of experience had lower confidence in applying hydrologic models at the watershed scale. In comparison, the more experienced and most experienced groups reported more confidence in the skill.

Prioritizing most effective conservation practices (p=.033)



Professionals with between 3 – 20 years' experience reported significantly more confidence in prioritizing most effective conservation practices.

Identifying high risk areas within a watershed (p=.093)



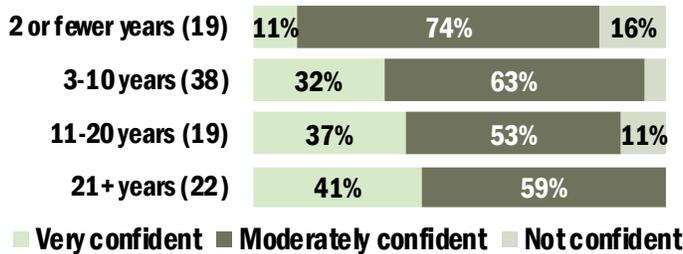
Professionals' confidence in identifying high risk areas in a watershed increased with experience. Overall, very few professionals lacked confidence in this skill.

Advanced Analysis – Years of Work Experience

Needs Assessments

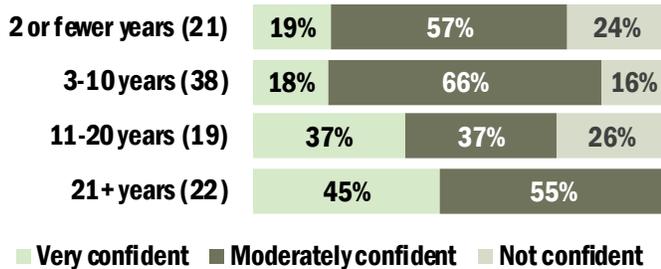
Leadership skills

Recruiting Partners (p=.069)



Professionals with 2 or fewer years of experience reported being less confident in recruiting partners.

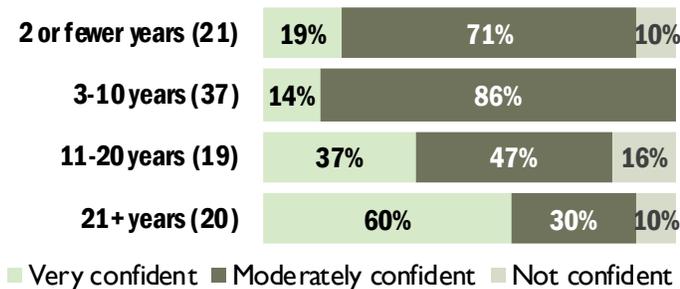
Addressing conflict (p=.085)



Professionals who were most experienced were more confident in addressing conflict. Among those with less than 20 years of experience, there was a significant proportion who were not confident.

Engaging with stakeholders

Mid/late adopter farmers (p=.004)



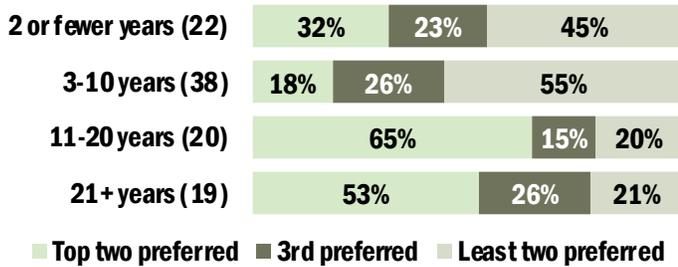
More experienced professionals had more confidence in engaging with mid/late adopter farmers.

Advanced Analysis – Years of Work Experience

Needs Assessments

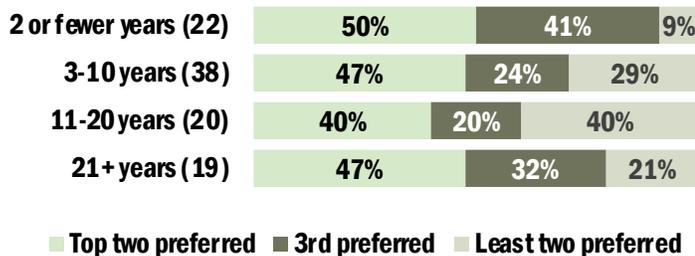
Skills to develop

Information tools and technology (p=.076)



Professionals with more than 11 years of experience prioritized information tools and technology as a skill to develop. In comparison those with less than 10 years' experience were not as interested in the skill.

Outreach and education (p=.086)

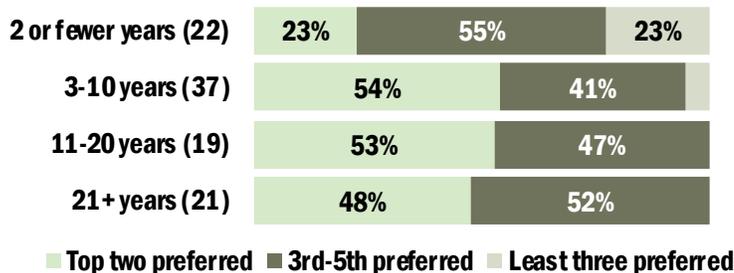


All the groups had a similar proportion of professionals expressing high interest in developing outreach and education skills.

Learning and Engagement

Partners to engage

Farmer led groups (p=.094)



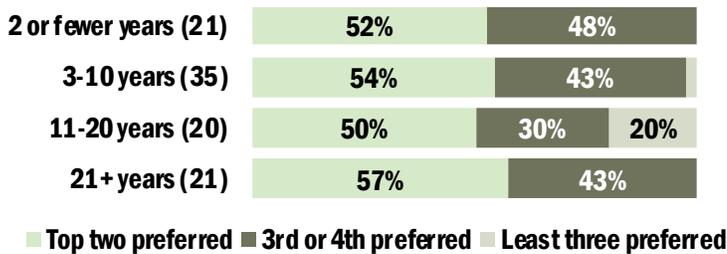
Farmer led groups were highly rated by the more experienced professionals. Those with 2 or fewer years of experience did not prefer this approach.

Advanced Analysis – Years of Work Experience

Learning and Engagement

Preferred methods for learning

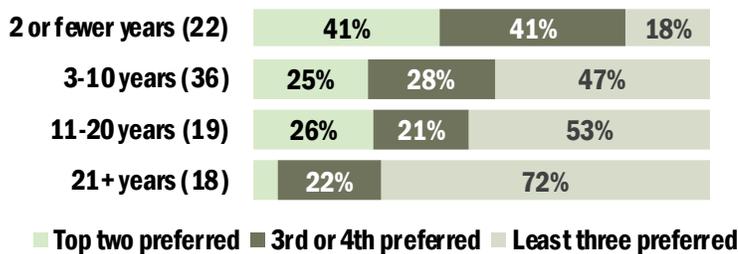
In-person, small group discussions (p=.006)



Professionals with 11-20 years of experience **did not prefer small group discussions**. All levels of experience tended to respond similarly to this method.

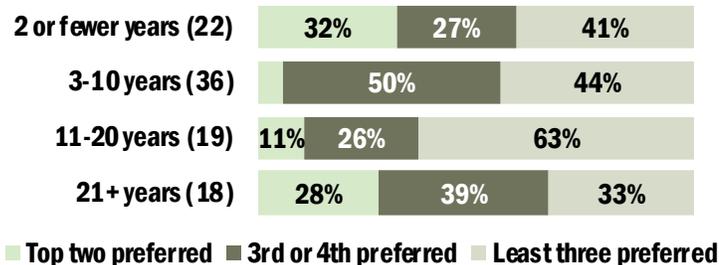
Preferred methods for engagement

Mentorship (p=.042)



The **most experienced** professionals were **not interested** in a **mentorship program**. Few (6%) chose it as their first two preferred choices.

Online discussion forum (p=.12)



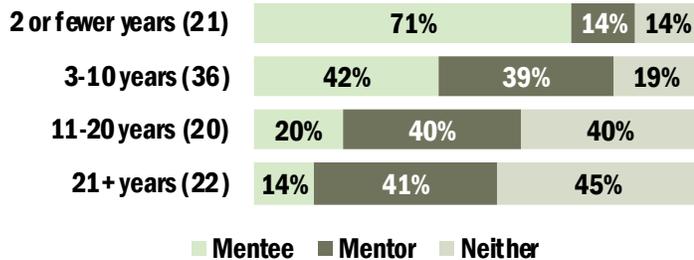
Professionals varied in support of **online discussion forums**. The **less experienced** (32%) and the **most experienced** (28%) groups **preferred** this method of engagement. The remaining groups did not prefer it as much.

Advanced Analysis – Years of Work Experience

Learning and Outreach

Mentorship program

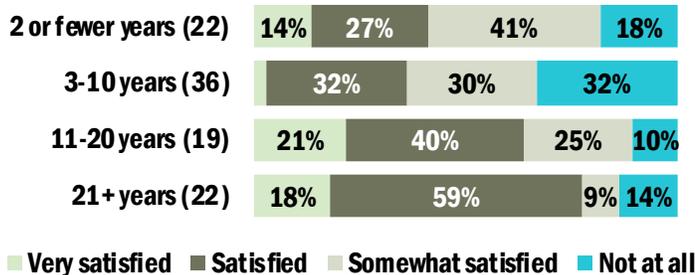
Participation in Mentorship Program (p=.002)



Less experienced professionals preferred being mentees. Professionals with more than 11 years of experience were more likely to prefer being mentors or neither.

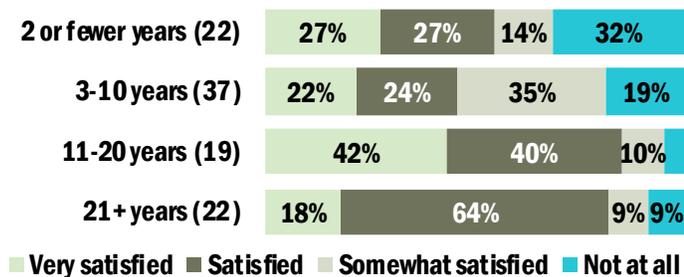
Satisfaction with job security and benefits

Satisfaction with Job Security (p=.058)



Less experienced professionals, particularly those in the 3-10-year groups, were not at all satisfied with job security. Those in the 2 or fewer years were not at all satisfied with benefits.

Satisfaction with Job Benefits (p=.011)



Advanced Analysis – Area of Expertise

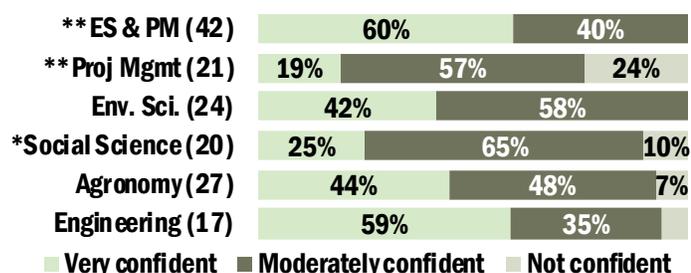
About 40 professionals had both project management and environmental science backgrounds. For data analysis, this category were labelled as ES & PM. Professionals with only a project management background were labelled as project management and those with only an environmental science background, as env. sci. Due to smaller sample sizes, other professions were not split or checked for overlap.

Since the question had a 'select all that apply' option, each occupation group is assigned a p-value for the difference against all of those not in that occupation, instead of a global p-value across all response options.

Needs Assessments

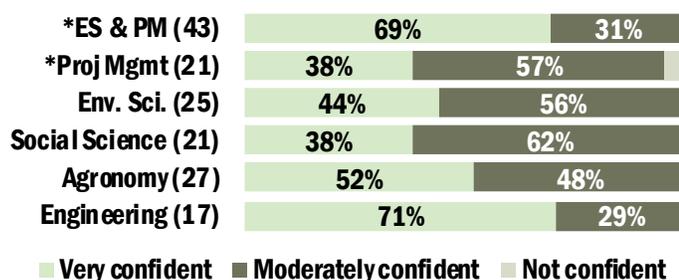
Monitoring and Evaluation Skills

Tracking Environmental Metrics



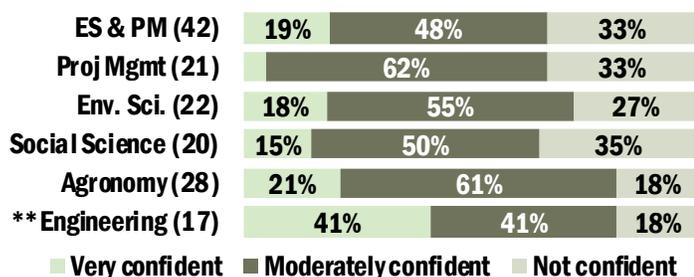
Professionals with a project management and social science background reported less confidence in tracking environmental metrics than the rest of the sample. Those in the ES & PM category reported more confidence.

Defining Relevant, Measurable Goals



In defining relevant measurable goals, professionals with a background in project management were less confident than the rest of the sample. Those in the ES & PM category were more confident than other professionals.

Tracking Economic Metrics



Professionals with a background in engineering reported more confidence in tracking economic metrics than the rest of the sample.

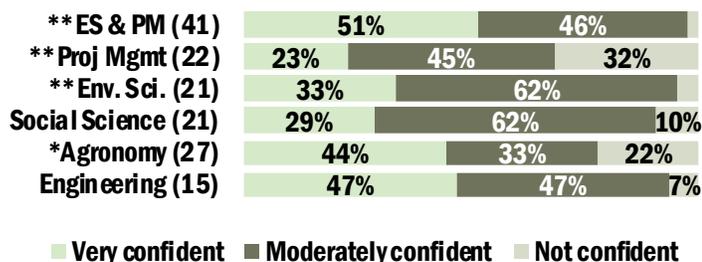
Note: * = p < .1
** = p < .05

Advanced Analysis – Area of Expertise

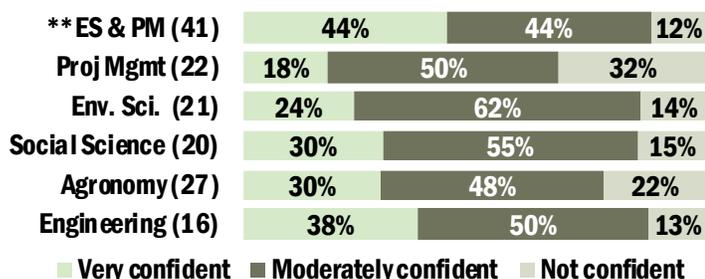
Needs Assessments

Fundraising Skills

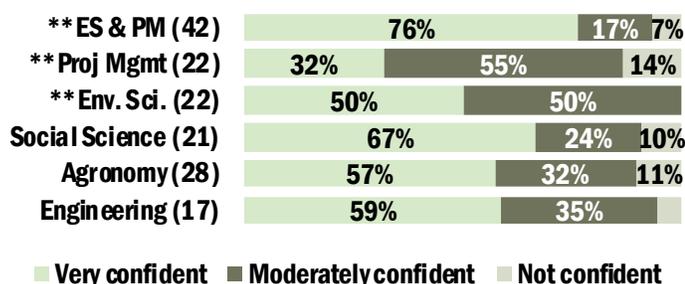
Writing Competitive Grants



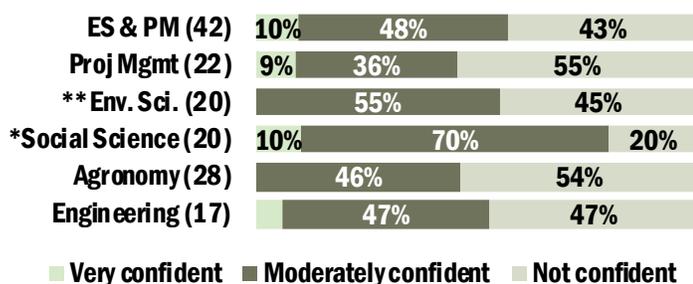
Identifying Federal Grants



Identifying State and Local Grants



Identifying Private Foundation Grant Opportunities



Professionals in the ES & PM category were significantly more confident than the other professionals in all the items except identifying private foundation grants.

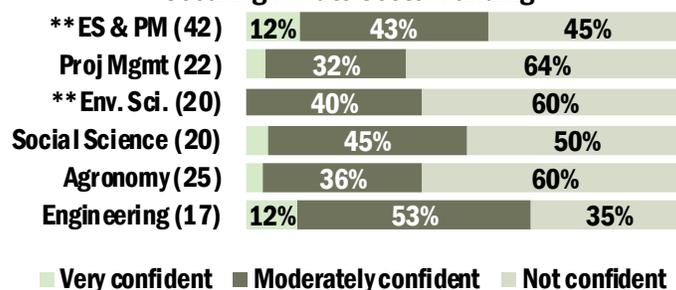
Professionals with a project management background had less confidence in writing competitive grants and identifying state and local grants.

Professionals with an environmental science background tended to have lower confidence in all the items.

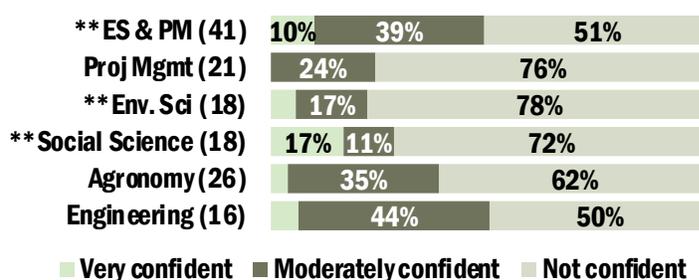
Those with a social science background had more confidence utilizing other funding mechanisms and identifying private foundation grants.

There was no significant differences among engineers. A significant number of professionals with a background in agronomy (22%) were not confident in writing competitive grants.

Securing Private Sector Funding



Utilizing Other Funding Mechanisms



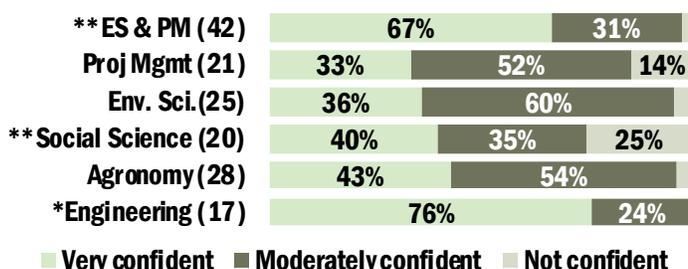
Note: * = $p < .1$,
** = $p < .05$

Advanced Analysis – Area of Expertise

Needs Assessments

Information tools and technology skills

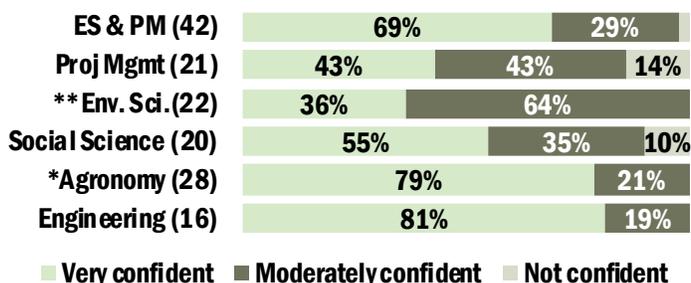
Identifying high risk areas within a watershed



Professionals in the ES & PM category reported more confidence in all items except identifying high risk areas within a field

Professionals with a project management background had significantly less confidence in applying hydrologic models at the watershed scale.

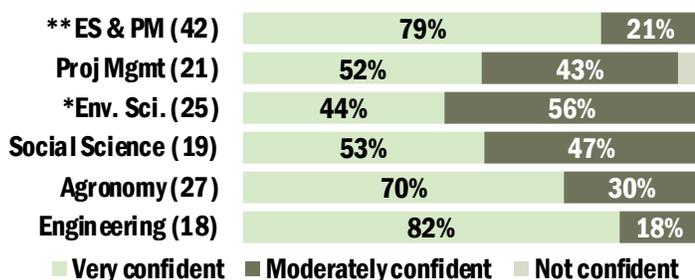
Identifying high risk areas within a field



Those with an environmental science background reported being moderately confident at identifying high risk areas within a field and prioritizing conservation practices

Those with a social science background had lower confidence in identifying high risk areas in a watershed.

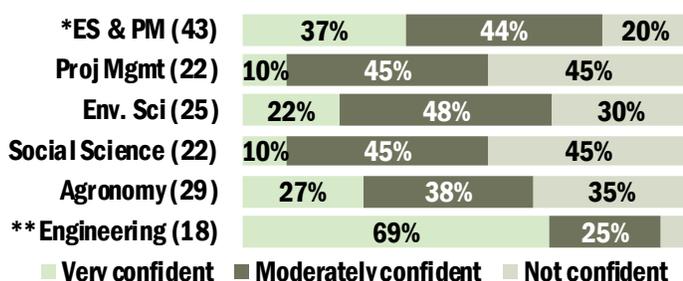
Prioritizing most effective conservation practices



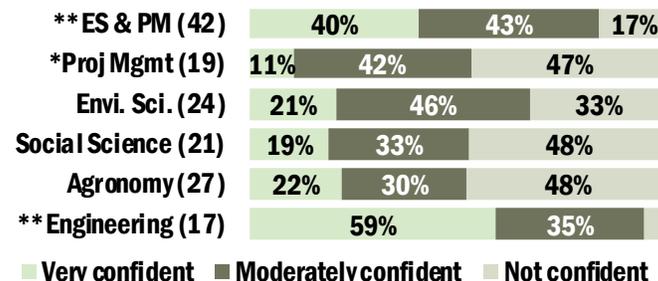
Professionals with an agronomy background were very confident in identifying high risk areas within a field.

Those with an engineering background were very confident at identifying high risk areas in a watershed and applying hydrologic models at both scales.

Applying hydrologic models at the field scale



Applying hydrologic models at the watershed scale



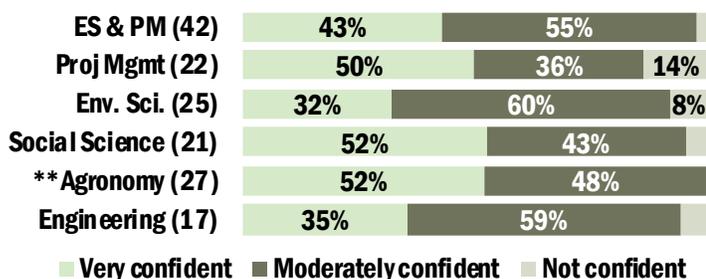
Note: * = p < .1
** = p < .05

Advanced Analysis – Area of Expertise

Needs Assessments

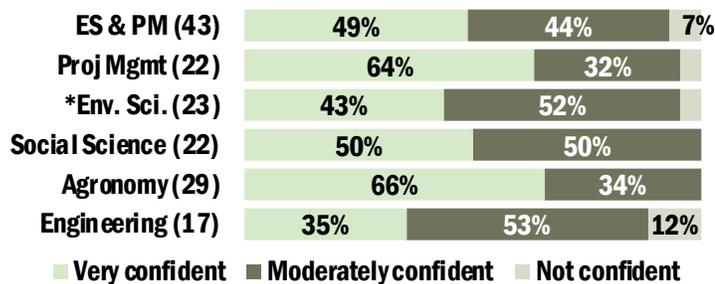
Outreach and education skills

Working with the media



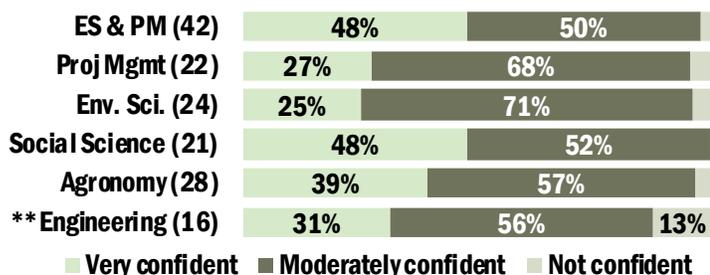
Professionals with a background in agronomy and social science were more confident than other groups at working with the media. All professionals with a background in agronomy reported confidence in this activity.

Planning/delivering a field day



Those with an environmental science background were less confident in planning or delivering a field day.

Developing an outreach strategy



Some (13%) professionals with a background in engineering were less confident than other professionals in developing an outreach strategy.

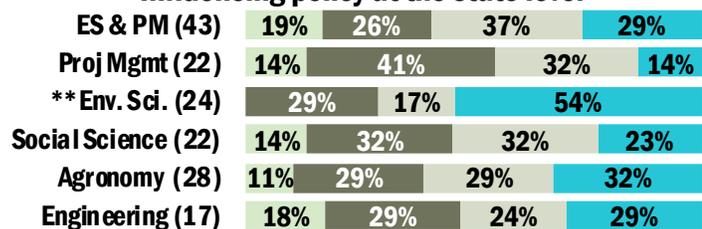
Note: * = $p < .1$
 ** = $p < .05$

Advanced Analysis – Area of Expertise

Needs Assessments

Leadership skills

Influencing policy at the state level

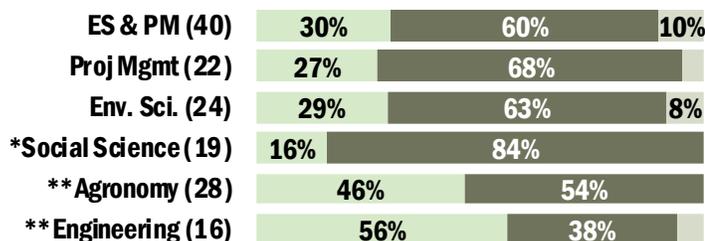


Very confident ■ Moderately confident ■ Not confident ■ Not responsible

Professionals with a background in environmental science were the least confident in influencing policy at the state level of all the groups.

Engaging with stakeholders' skills

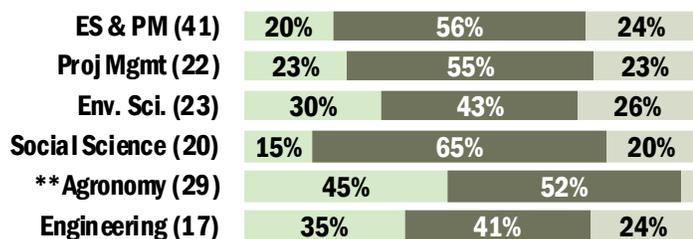
Mid/Late Adopter Farmers



Very confident ■ Moderately confident ■ Not confident

Professionals with a background in agronomy and engineering reported more confidence in engaging mid/late adopter farmers. Most of those with a social science background reported being moderately confident.

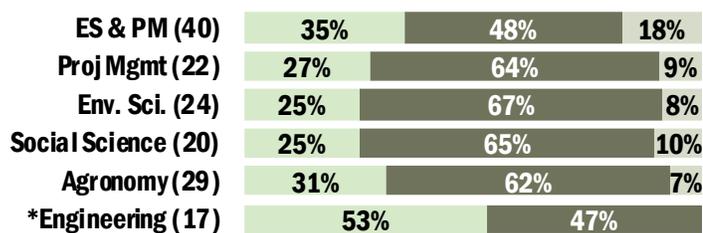
Ag Retailers and Consultants



Very confident ■ Moderately confident ■ Not confident

Those with a background in agronomy reported being the most confident in engaging with agricultural retailers and consultants.

Local Non-Operator Landowners



Very confident ■ Moderately confident ■ Not confident

Those with a background in engineering reported being the most confident with local, non-operator landowners.

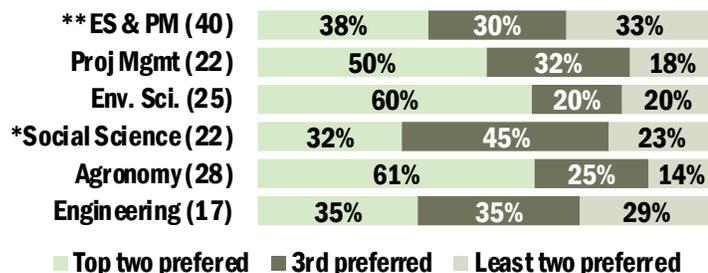
Note: * = p < .1
** = p < .05

Advanced Analysis – Area of Expertise

Need Assessments

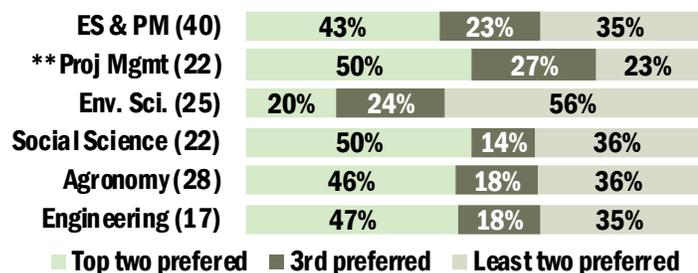
Skills to develop

Outreach and Education



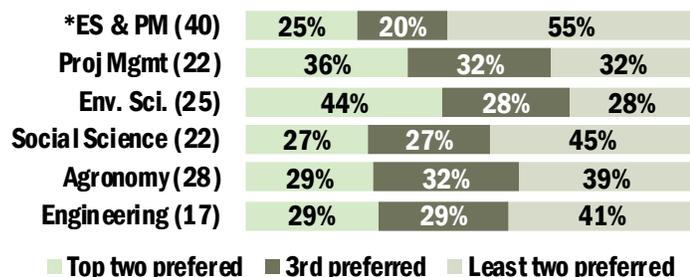
Professionals in the ES & PM or social science backgrounds had the least preference to pursue outreach and education skills.

Information Tools and Technology



Those with a project management background were slightly more likely to prefer information tools and technology.

Monitoring and Evaluation



Professionals with an ES & PM background were less interested in developing their monitoring and evaluation skills.

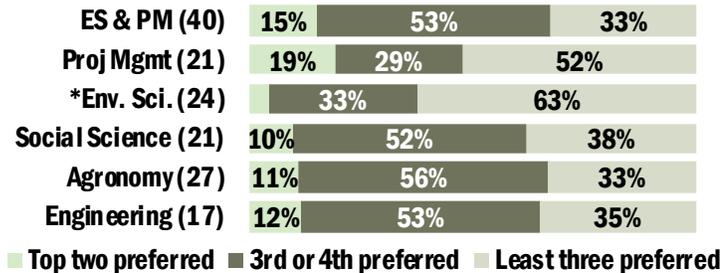
Note: * = p < .1
 ** = p < .05

Advanced Analysis – Area of Expertise

Learning and Engagement

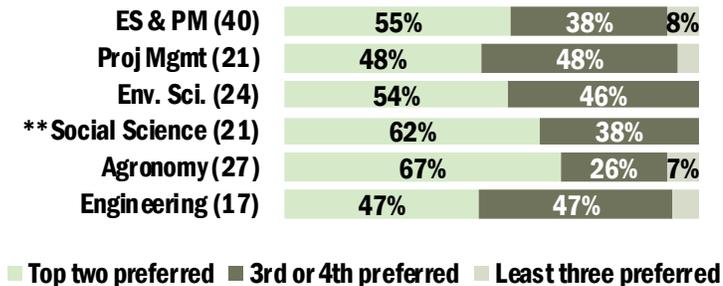
Preferred methods for learning

Online self paced classes



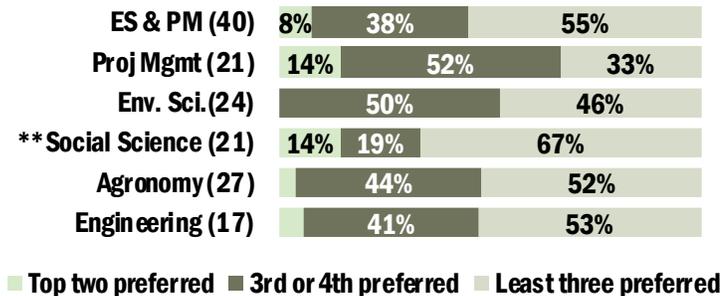
Professionals with an environmental science background had less preference for online self-paced classes than other professionals.

In-person small groups



Professionals with a social science and agronomy backgrounds had somewhat higher preference for in-person small groups than other professionals.

Online facilitated sessions



Professionals with social science backgrounds preferred online facilitated sessions.

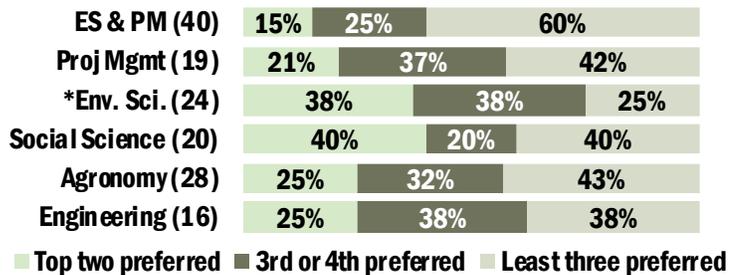
Note: * = p < .1
** = p < .05

Advanced Analysis – Area of Expertise

Learning and Engagement

Preferred methods for engagement

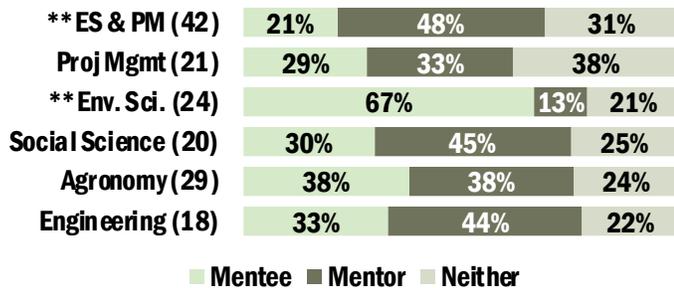
Mentorship Program



Professionals with an **environmental science** backgrounds preferred a **mentorship program** than other professionals.

Mentorship program

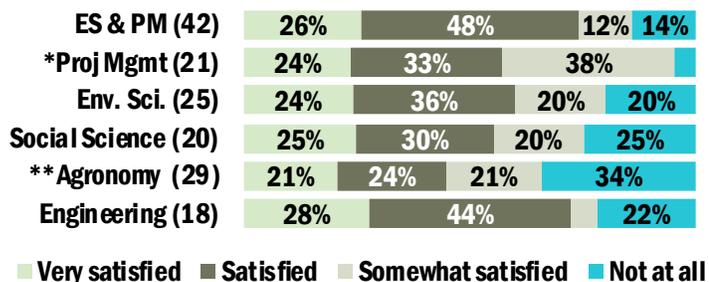
Mentorship Program



Professionals with an **environmental science** background were much **more interested** in being **mentees** than other professionals. **ES & PM** professionals led in **preferring** to be **mentors**.

Job satisfaction

Benefits



Professionals with a background in **agronomy** were slightly **less satisfied** with their **job benefits** than other professionals. **Project management** professionals were only **somewhat satisfied**.

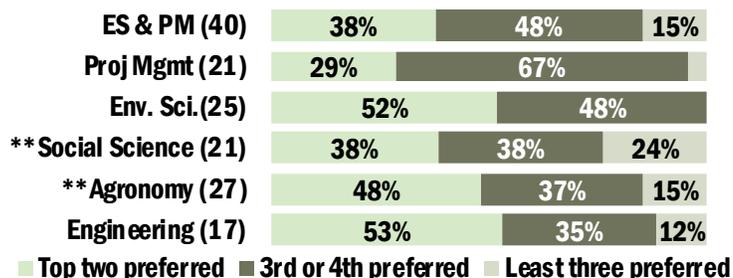
Note: * = p < .1
** = p < .05

Advanced Analysis – Area of Expertise

Learning and Outreach

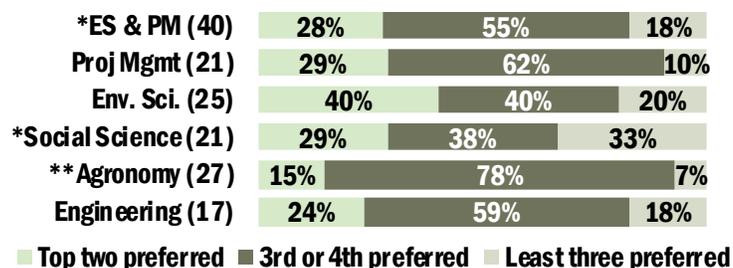
Outreach strategies

Field days



Professionals with a social science background were less likely to prefer field days. Those with a background in agronomy were more likely to prefer them.

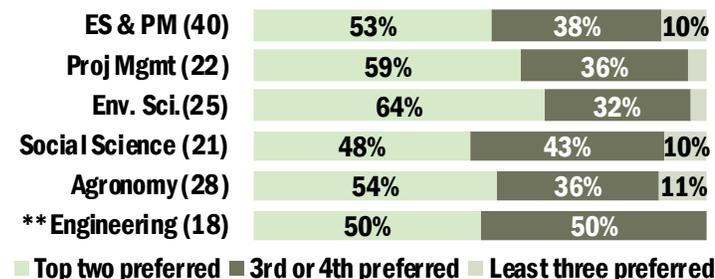
Endorsements from influential business



Professionals with a background in agronomy moderately preferred endorsements from influential businesses. Those with a social science background were less likely to prefer this option.

Partners to engage more

Agribusiness



All professionals almost equally preferred engaging agribusiness.

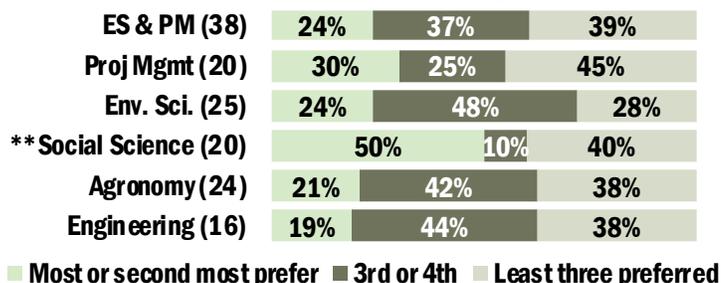
Note: * = p < .1
** = p < .05

Advanced Analysis – Area of Expertise

Learning and Outreach

Metrics to use

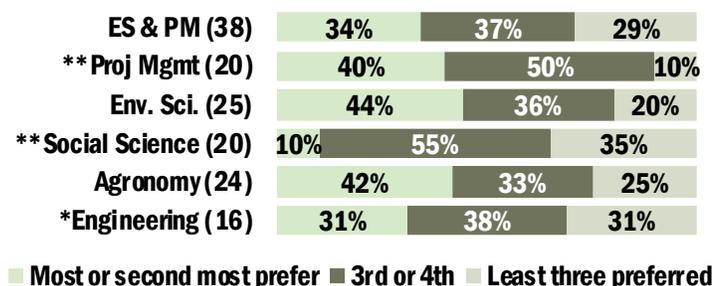
Surveys of Behavior Change



Professionals with a social science background had more preference for surveys of behavior change.

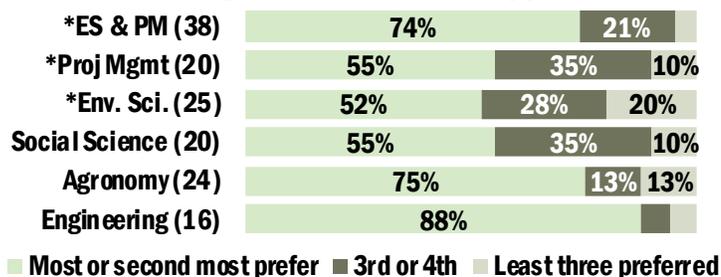
However, a significant proportion of other professionals placed it in the bottom three.

Water Quality Monitoring - Edge of Field



Professionals with a background in social science preferred water quality monitoring - edge of field less than other professionals.

Tracking Extent of Practice Applied



Professionals with ES & PM backgrounds preferred tracking extent of practice applied. Those with backgrounds in environmental science or project management did not prefer this approach.

Note: * = p < .1
** = p < .05

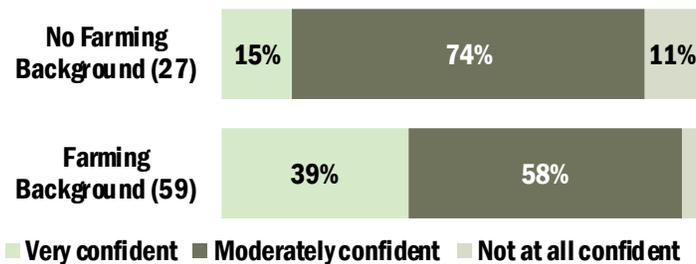
Advanced Analysis – Farming Background

Responses were condensed into two categories. Those who grew up, worked, or made decisions on a farm were considered as 'farming background'. All others were considered as 'no farming background'. Most respondents with a Certified Crop Advisor (CCA) background indicated further on or off farm experiences to designate their category.

Needs Assessments

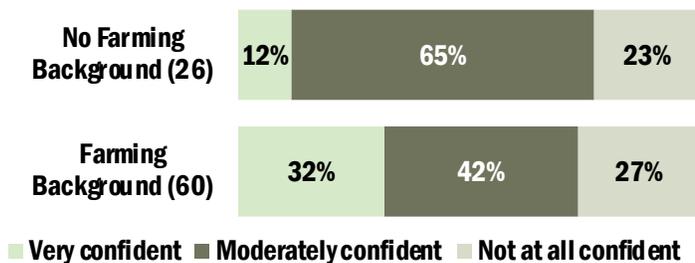
Engaging with stakeholders

Mid/Late Adopter Farmers (p=.083)



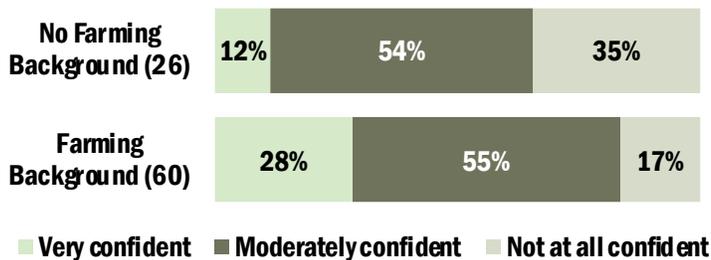
Professionals with a farming background were more confident engaging late adopter farmers.

Absentee non-operator landowners (p=.039)



Professionals with a farming background were more confident engaging absentee landowners, though a quarter remained not at all confident.

Ag retailers and consultants (p=.042)



Professionals with a farming background were more confident engaging retailers and consultants.

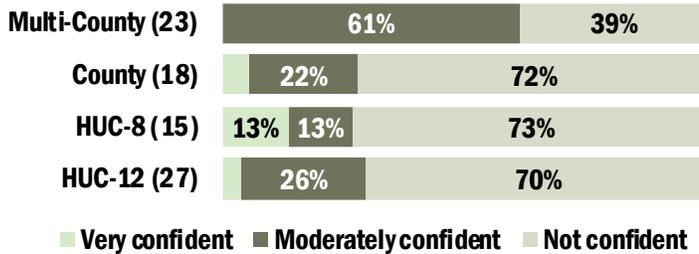
Advanced Analysis – Geographic Extent of Work

Needs Assessments

Fundraising skills

Utilizing Other Funding Mechanisms

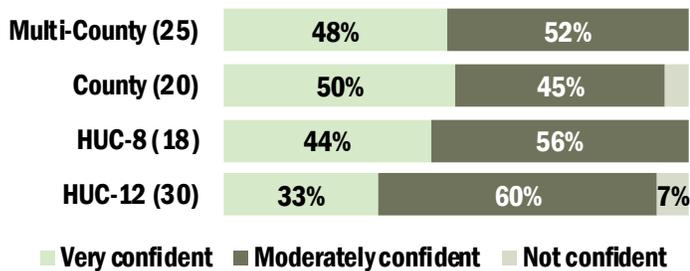
(p=.098)



Professionals with projects at the multi-county level reported being moderately confident in utilizing other funding mechanisms.

Confidence engaging with stakeholders

Non-Farming Public (p=.039)

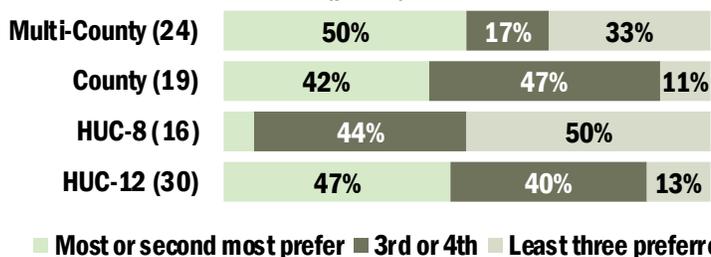


Overall, professionals with various project levels were confident engaging non-farming public. However, those with HUC-12 project levels reported somewhat lower confidence engaging with the non-farming public.

Preferred method of engagement

One-on-one phone/email discussions

(p=.072)



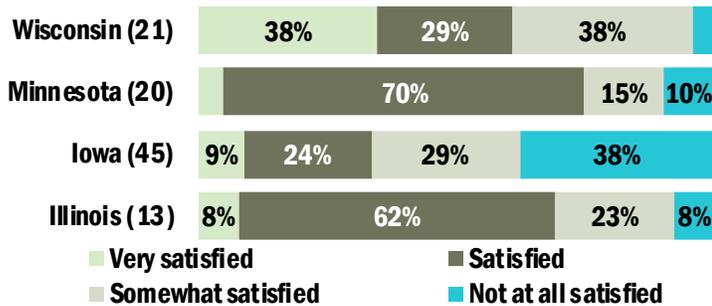
Professionals preferred one-on-one phone/ email discussions. However, those who work on HUC-8 level projects did not prefer those methods.

Advanced Analysis – By State

Skills and Satisfaction

Satisfaction with job

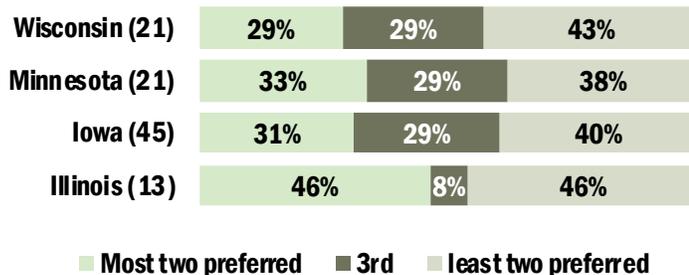
Job Security (p=.001)



For both job security and benefits, Iowa had significantly fewer professionals who were satisfied than the other states.

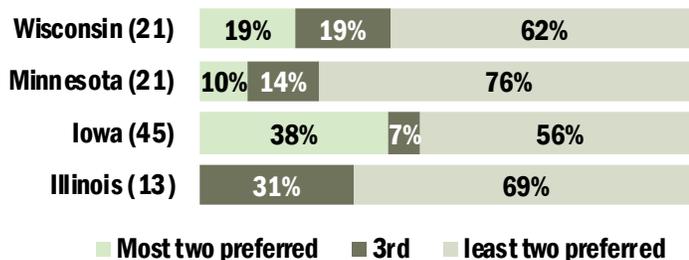
Skills to develop

Monitoring and evaluation (p=.076)



Professionals in Illinois had greater preference for monitoring and evaluation.

Fundraising (p=.03)



Professionals in Iowa preferred to develop their fundraising skills.

State Specific Data - Iowa

Background Information

We sent the survey to 76 email addresses in Iowa and received 46 responses. The response rate for the state was 61%. Results presented in this section are based on the number of responses received from Iowa only.

What best defines the geographic extent of your work?

More than half (54%) of professionals in Iowa worked on HUC-12 and HUC-8 projects and about a third (28%) work on multi-county projects.

What is your area of expertise? (Select all that apply)

Most professionals had a background in project management (61%) and environmental science (63%).

What is your employment sector?

Half (47%) of professionals were employed in a conservation district. Very few (8%) worked for the state and none work for a university or in the private sector.

How long have you been in your current field of work?

Just under half (44%) of professionals have been in their current field of work for between 3 – 10 years. Few (13%) have been in their role for more than 20 years and 24% have been there for less than 2 years. The remaining 18% have been in their role for between 11 – 20 years.

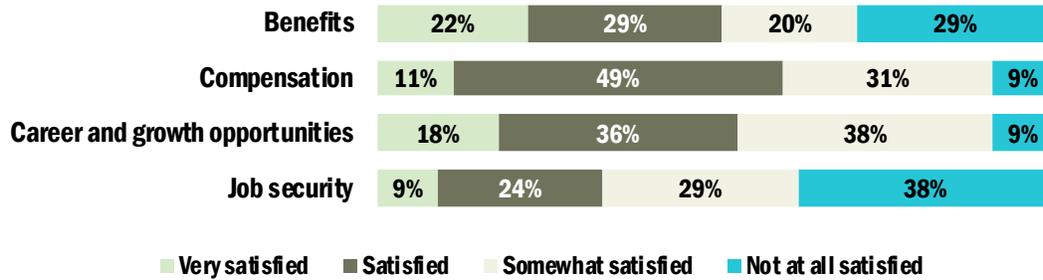


State Specific Data - Iowa

Background Information

How would you rate your satisfaction with the following aspects of your work?

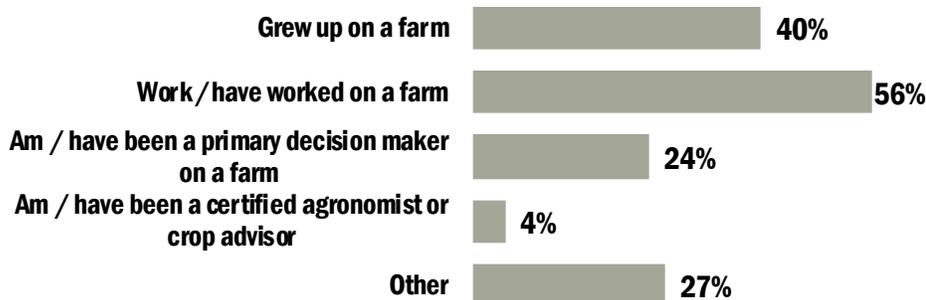
Majority (91%) of professionals in Iowa reported that they were somewhat or more satisfied with compensation. However, many professionals in the state were not at all satisfied with benefits (29%) and job security (38%).



What is your primary motivation to do agricultural watershed conservation work? (rank order)

About half (54%) of professionals ranked water quality as their primary motivation to do agricultural watershed conservation work.

What is your farming background?



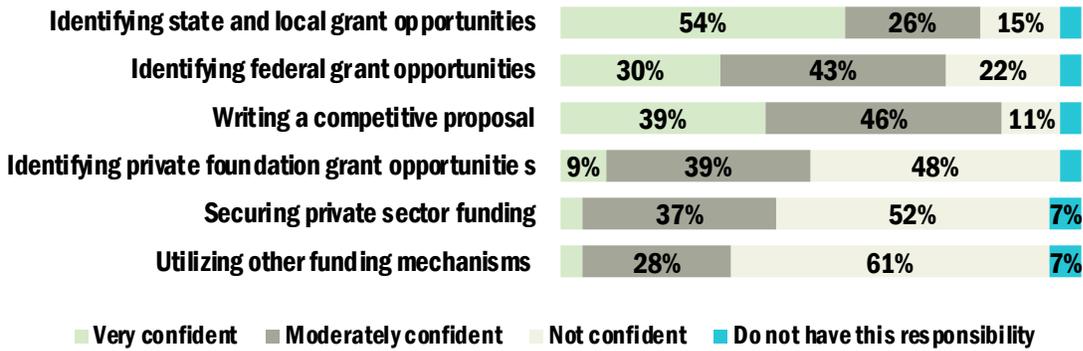
Professionals had various farming backgrounds. More than half grew up on a farm, and 40% worked/still work on a farm. Very few (4%) are/have been a certified agronomist or crop advisor.



State Specific Data - Iowa

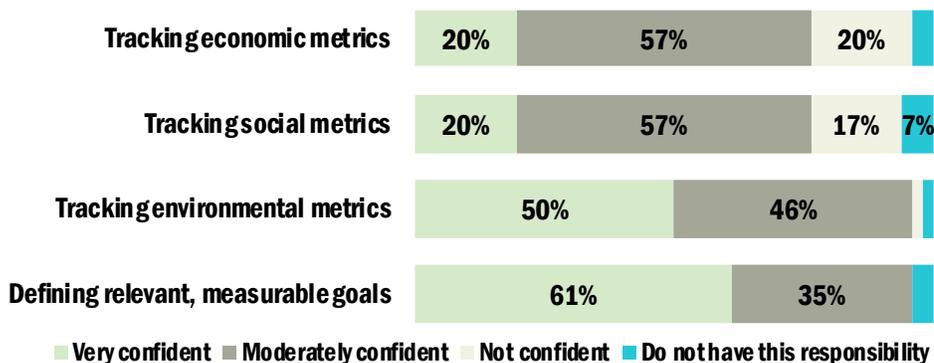
Needs Assessment

How confident are you in conducting the following fundraising activities?



Professionals were to an extent confident in identifying local, state, and federal grant opportunities. More than 40% reported not being confident in identifying private foundation grant opportunities, securing private sector funding and utilizing other funding mechanisms.

How confident are you in conducting the following monitoring and evaluation activities?



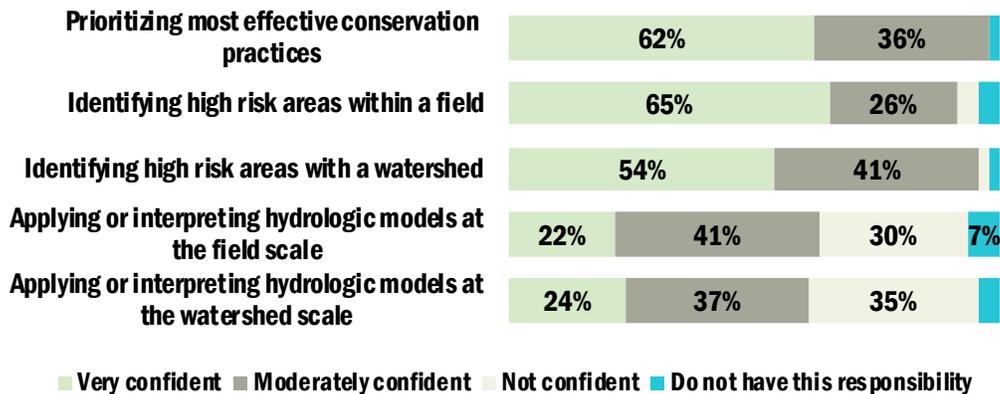
Professionals reported being confident in conducting most of the activities, with some weakness in tracking economic and social metrics.



State Specific Data - Iowa

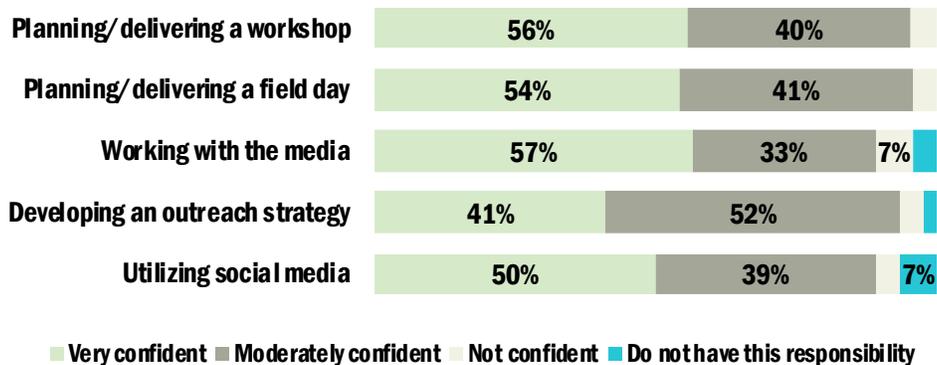
Needs Assessment

How confident are you in conducting the following information tools and technology activities?



Although the majority of professionals were confident in conducting most of the activities, about a third reported no confidence in applying or interpreting hydrologic models at both the field (30%) and watershed scales (35%).

How confident are you in conducting the following outreach and education activities?



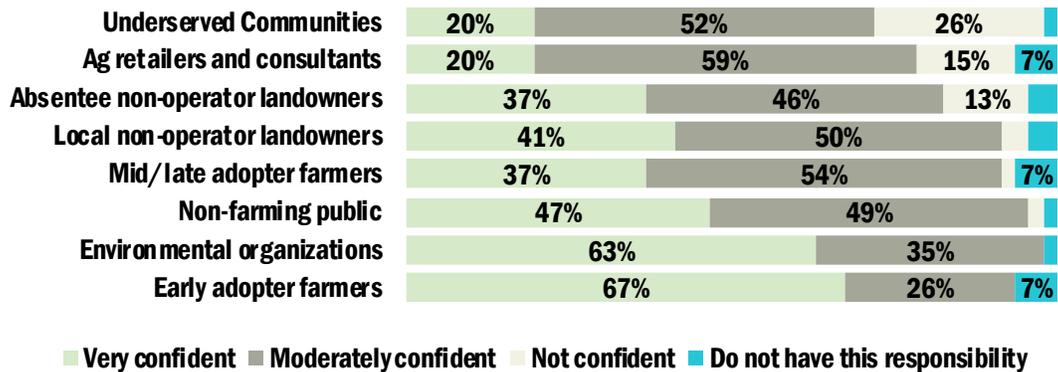
Professionals reported being confident in conducting all the activities.



State Specific Data - Iowa

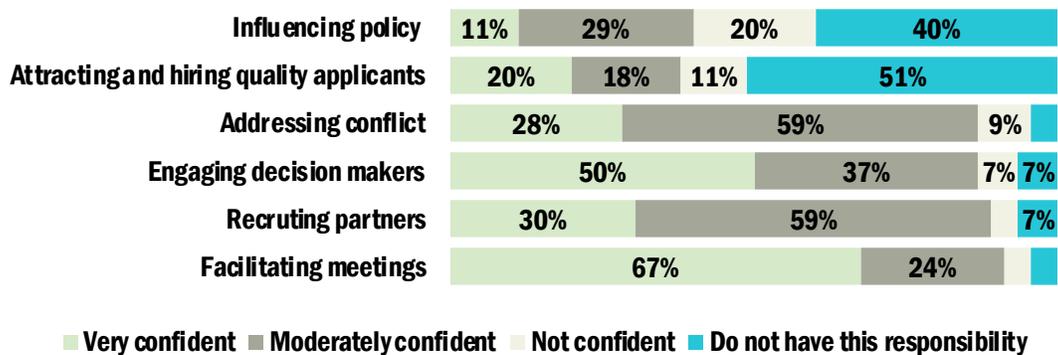
Needs Assessment

How confident are you engaging with the following stakeholders?



Professionals were **very confident** engaging **environmental organizations** (63%) and **early adopter farmers** (67%). About a **third** (26%) were **not confident** in engaging with **underserved communities**.

How confident are you in conducting the following leadership activities?



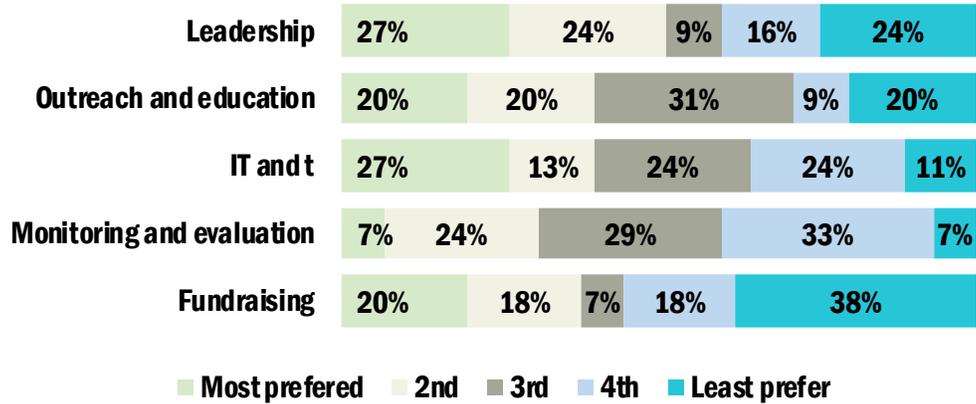
In comparison to the three other states, more professionals from Iowa were **confident** in conducting **most of the activities** listed in this section.



State Specific Data - Iowa

Outcomes Assessment

Which skills do you wish to develop in your professional capacity?



About a **third** of professionals reported they wished to develop **leadership** and **information tools and technology** skills most.

Which watershed training(s)/meeting(s) have you attended in the past?

Professionals (**70%**) were more likely to attend the **Iowa Watershed Academy meetings** than other meetings.

To what extent have you applied the tools/strategies you learned about from the meetings/trainings you attended?

Most (**70%**) professionals reported they had **applied a little bit** of the tools and strategies they learned about from meetings/trainings. About a **third (28%)** have done so **to a large extent**.

To what extent do you feel meetings/trainings you attended have helped you develop connections/contacts with your peers?

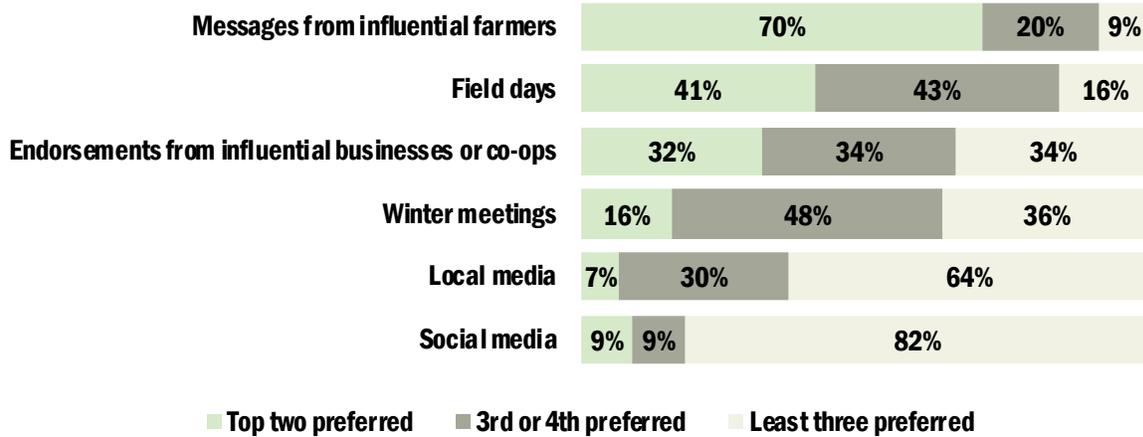
About **half (55%)** of professionals reported they felt that the meetings/trainings they had attended had helped them **develop connections/contacts** with their peers **to a large extent**. Most of the remaining **45%**, felt they helped them **a little bit**.



State Specific Data - Iowa

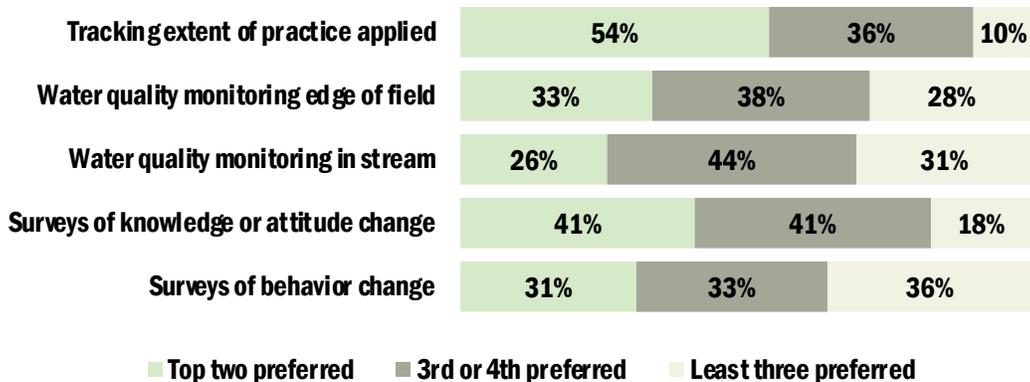
Project Strategies

What outreach strategies do you feel have the greatest potential?



About 71% of professionals ranked **messages from influential farmers** in their top two responses as having the greatest potential.

Which of the following metrics do you feel have the greatest potential?



About half (54%) of professionals ranked **tracking extent of practices applied** in their top two responses as having the greatest potential.



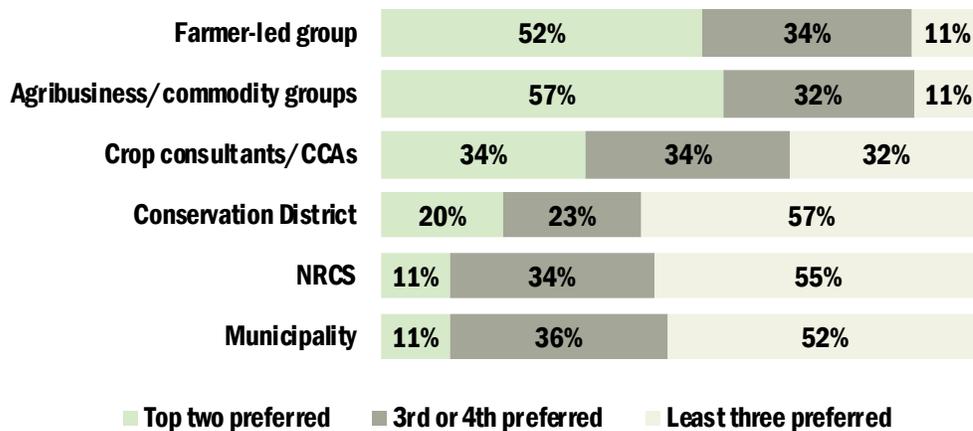
State Specific Data - Iowa

Project Strategies

What geospatial planning and/or modeling tools do you feel have the greatest potential?

About half (53%) of professionals reported that they needed to know more in order to provide a response to the question. The remaining had their greatest potential in watershed scale (30%) and field scale (17%) geospatial planning and or modelling tool.

Which partners do you most want to see MORE engaged in meeting water quality objectives?



Professionals preferred farmer-led (30%) and agribusiness/commodity groups (32%) as partners for engagement in meeting water quality objectives.

How long are you willing to commit to an in-person watershed training/networking meeting?

Professionals were flexible in how far they were willing to travel for an in-person watershed training/network meeting. About 98% were willing to travel 100 miles or more for such meetings.



State Specific Data - Iowa

Training and Networking Preferences

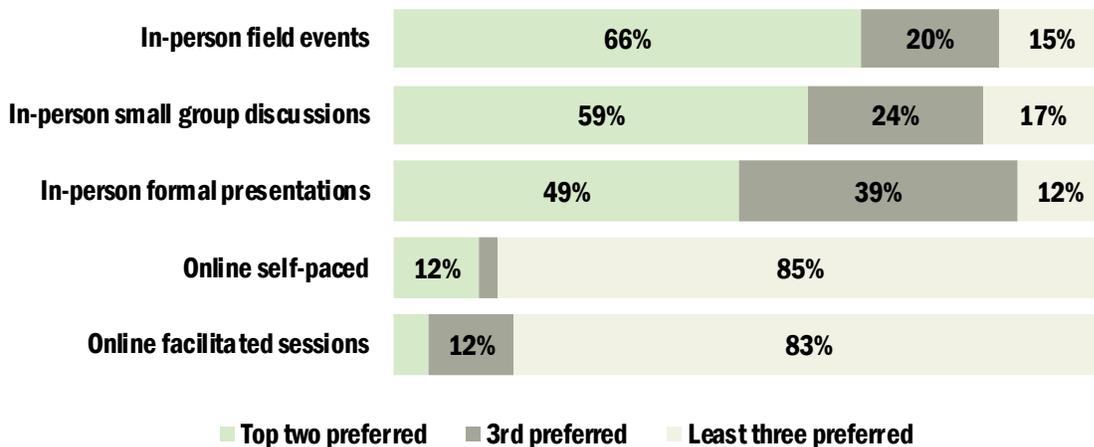
How long are you willing to commit to an in-person training?

Most professionals were willing to commit **two days** to an in-person training. More than a **third (37%)** of them are willing to commit to **three days**.

What do you think is a reasonable registration fee for an in-person training?

Generally, professionals reported that **up to \$100** was a reasonable fee.

What are your preferred methods for learning?



About **two-thirds (66%)** of professionals prefer **in-person field events**.



State Specific Data - Iowa

Training and Networking Preferences

Who do you rely on to develop greater professional competency?

Professionals' three choices included coordinators from local watershed projects (91%), local partners (72%), and the Iowa Watershed Academy (50%).

Which methods would you find most useful for engaging with other watershed professionals

Professionals ranked in-person events as their first choice (71%).

If a professional certification program for watershed coordinators existed would you want to become certified?

Some (44%) of professionals indicated they were interested in certification.

If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming?

About half (47%) of professionals expressed interest in being mentors.

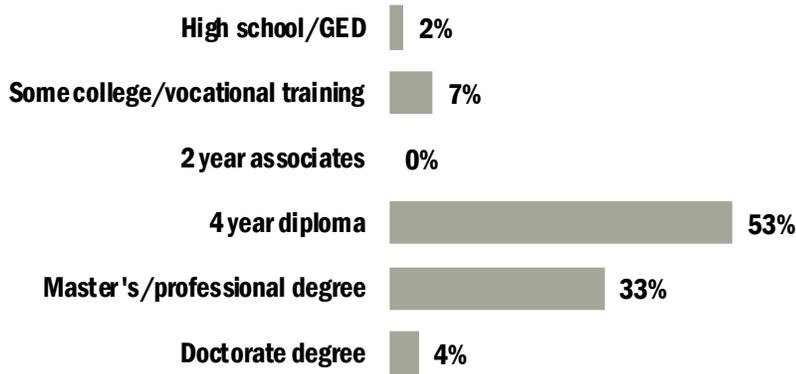


State Specific Data - Iowa

Demographics

What is the highest level of education you have completed?

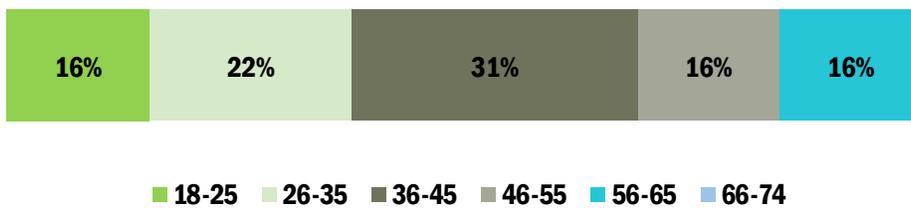
Highest level of education



Majority (92%) of professionals had at least a 4-year diploma.

What is your age in years?

Age (years)



Most professionals were 36 years or older (62%).

What is your gender?

Professionals were split equally between men (52%) and women (48%).



State Specific Data - Illinois

Background Information

We sent the survey to 23 email addresses in Illinois and received 14 responses. The response rate for the state was 61%. Results presented in this section are based on the number of responses received from Illinois only.

What best defines the geographic extent of your work?

Most (72%) professionals in Illinois worked on HUC-12 and HUC-8 projects. Few (14%) worked on county and multi-county projects.

What is your area of expertise? (Select all that apply)

Most professionals had a background in project management (79%) and environmental science (50%).

What is your employment sector?

More than half (57%) of professionals were employed by non-profits. The remaining were employed in a conservation district (29%) and the university (14%).

How long have you been in your current field of work?

A third (36%) of professionals have been in their current field of work for less than 2 years. About a third (29%) have been in their role for between 3 - 10 years and 21% have been there for between 11 – 20 years. The remaining 14% have been in their role for more than 20 years.

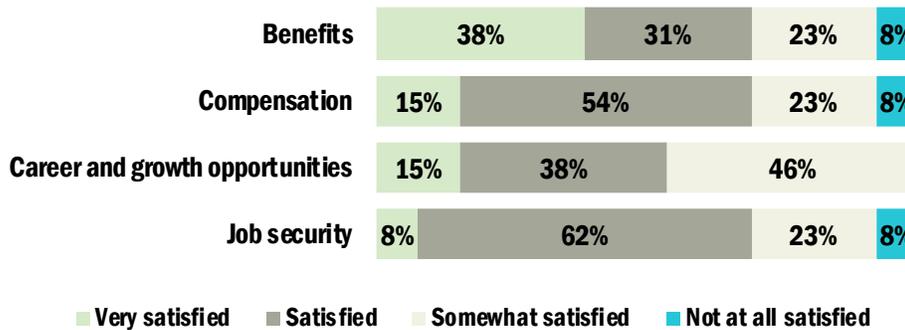


State Specific Data - Illinois

Background Information

How would you rate your satisfaction with the following aspects of your work?

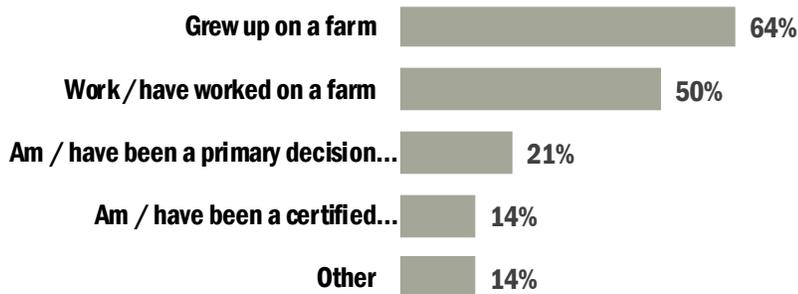
On the whole, professionals in Illinois reported that they were **at least somewhat satisfied** with their conditions of work. Very few were **not at all satisfied** with **benefits (8%)**, **compensation (8%)**, or **job security (8%)**.



What is your primary motivation to do agricultural watershed conservation work? (Select all that apply)

The **majority (85%)** of professionals ranked **water quality** as their **primary motivation** to do agricultural watershed conservation work.

What is your farming background?



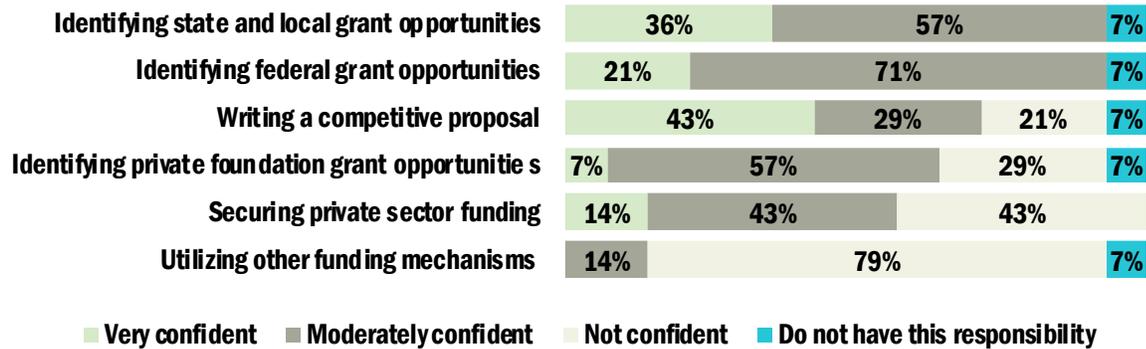
Professionals had various farming backgrounds. More than **half grew up on a farm** or **worked/still work on a farm**. Very few (**4%**) are/have been a **certified agronomist** or crop advisor.



State Specific Data - Illinois

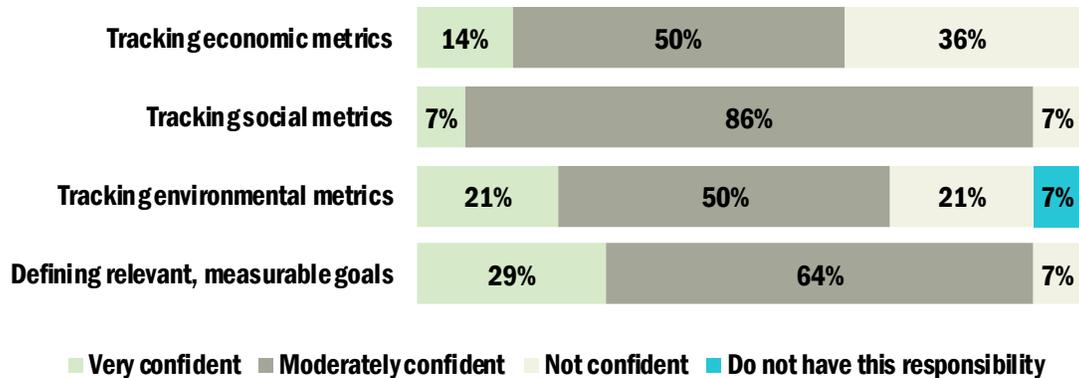
Needs Assessment

How confident are you in conducting the following fundraising activities?



Professionals were confident in most fundraising activities. However, majority reported not being confident in utilizing other funding mechanisms (79%) and securing private sector funding (43%).

How confident are you in conducting the following monitoring and evaluation activities?



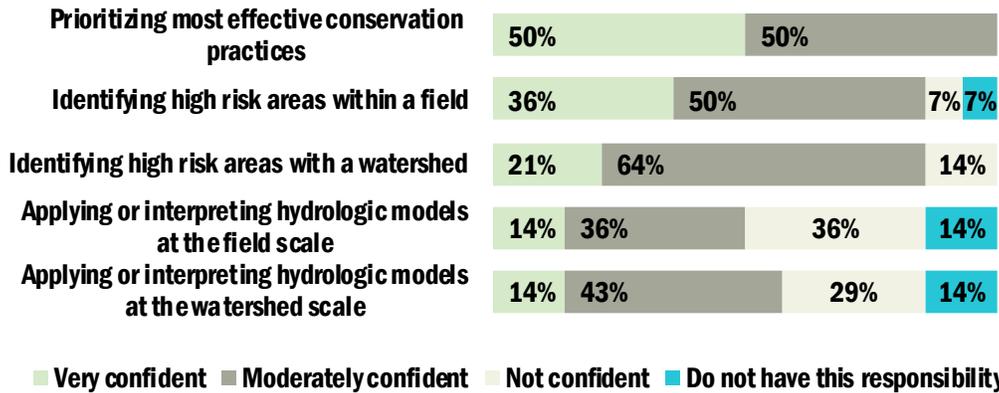
Professionals reported being confident in conducting some activities. Some reported not being confident in tracking economic metrics (36%) and environmental metrics (21%).



State Specific Data - Illinois

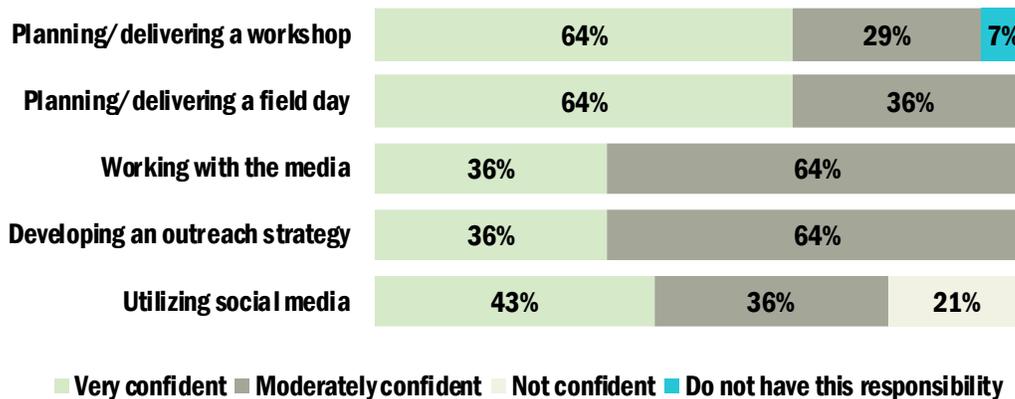
Needs Assessment

How confident are you in conducting the following information tools and technology activities?



Although majority of professionals were confident in conducting most of the activities, about a third reported not being confident in applying or interpreting hydrologic models at both the field (30%) and watershed scales (35%).

How confident are you in conducting the following outreach and education activities?



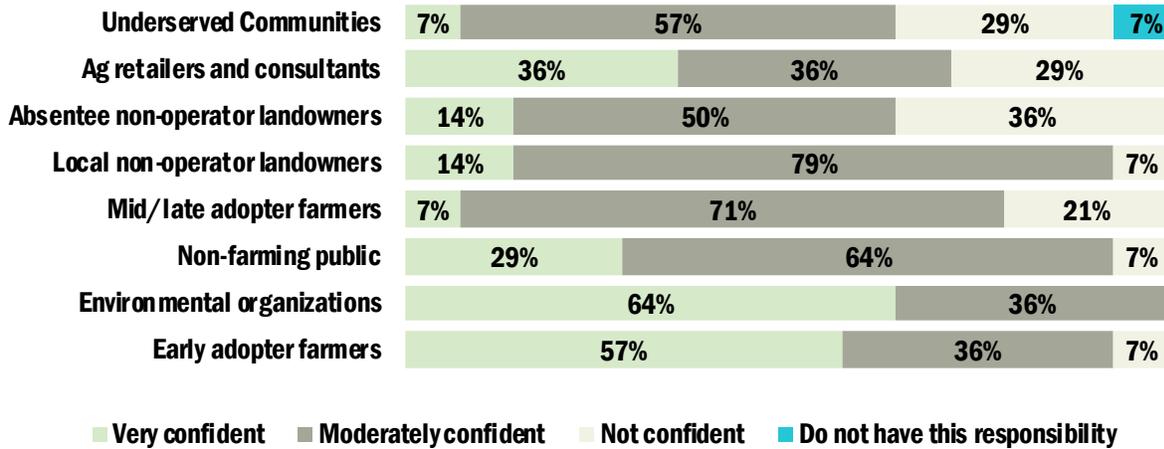
Most professionals were confident in topics that relate to outreach and education. Some (21%) reported not being confident in utilizing social media.



State Specific Data - Illinois

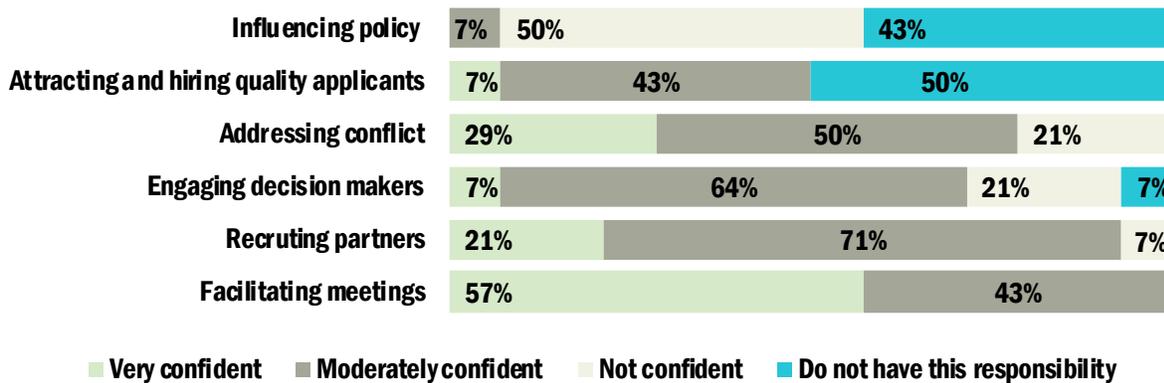
Needs Assessment

How confident are you engaging with the following stakeholders?



Professionals were **very confident** engaging environmental organizations (64%) and **early adopter farmers** (57%). Areas they were **not confident** in included engaging **mid/late adopter farmers** (21%), **underserved communities** (29%), **ag retailers and consultants** (29%), and **absentee non-operator landowners** (36%).

How confident are you in conducting the following leadership activities?



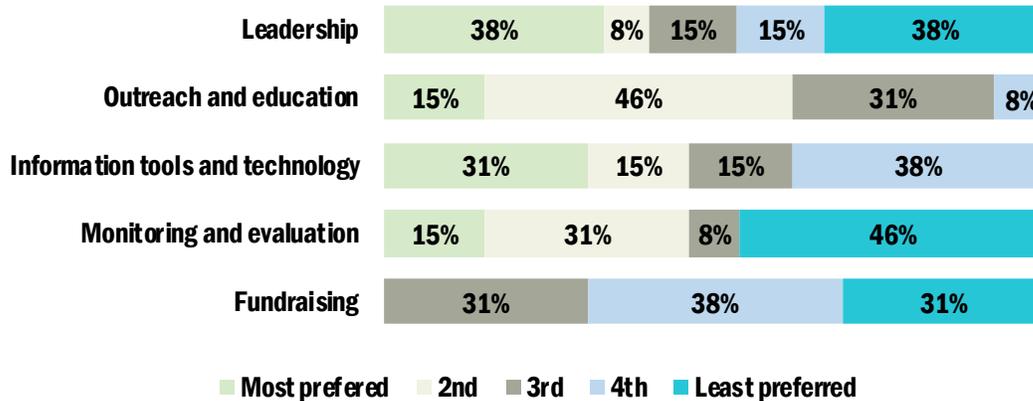
Generally, professionals reported **some extent of confidence** in most of the activities under leadership. However, **half of them reported not being confident** in **influencing policy**.



State Specific Data - Illinois

Outcomes Assessment

Which skills do you wish to develop in your professional capacity?



About a **third** of professionals reported they wished to develop **leadership (38%)** and **information tools and technology (31%)** skills.

Which watershed training(s)/meeting(s) have you attended in the past?

Most (57%) professionals have attended **LMW meetings** than other meetings and about a **third (36%)** had attended **none** of the meetings/trainings listed.

To what extent have you applied the tools/strategies you learned about from the meetings/trainings you attended?

Majority (**78%**) of professionals reported they had applied a **little bit** of the tools and strategies they learned about from meetings/trainings and **22%** have done so to a large extent.

To what extent do you feel meetings/trainings you attended have helped you develop connections/contacts with your peers?

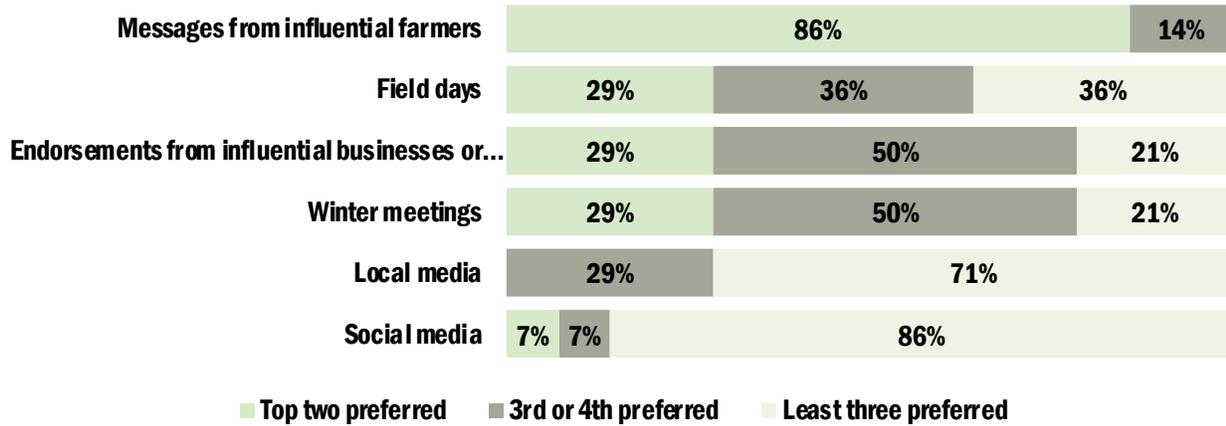
Majority (**78%**) of professionals reported they felt that the meetings/trainings they had attended had **helped them develop connections/contacts with their peers**; and **22%** reported the meetings/trainings have helped them a little bit or not at all.



State Specific Data - Illinois

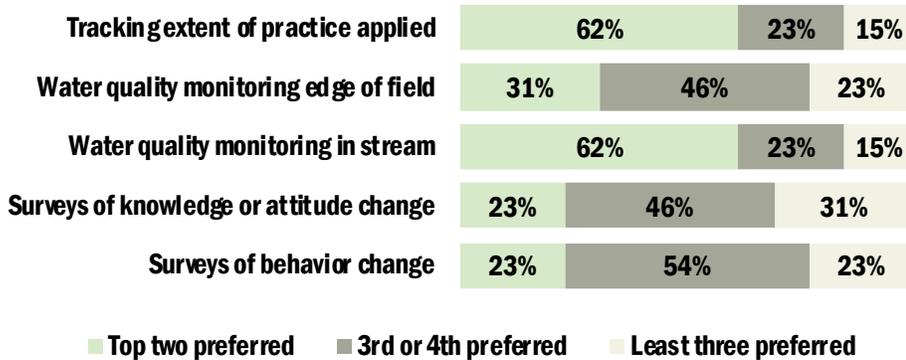
Project Strategies

What outreach strategies do you feel have the greatest potential?



A large portion (86%) of professionals ranked messages from influential farmers in their top two responses as having the greatest potential.

Which of the following metrics do you feel have the greatest potential?



About two-thirds of professionals ranked tracking extent of practices applied (62%) and water quality monitoring in stream (62%) in their top two responses as having the greatest potential.



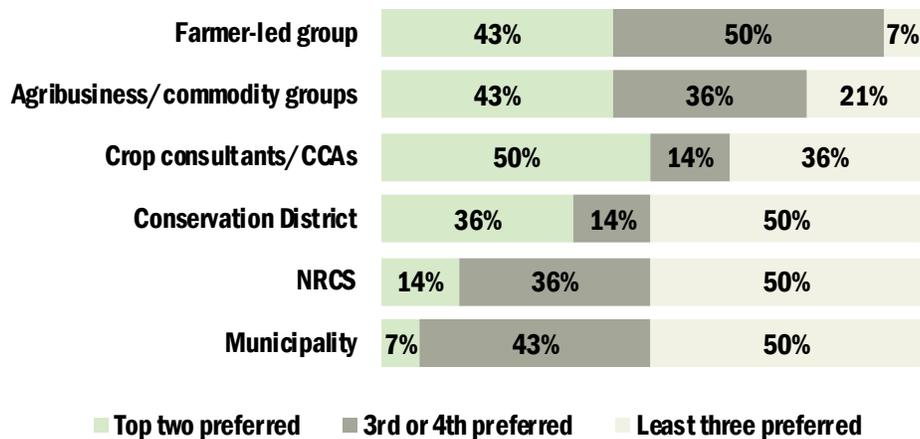
State Specific Data - Illinois

Project Strategies

What geospatial planning and/or modeling tools do you feel have the greatest potential?

Majority (81%) of professionals reported that they **needed to know more** in order to provide a response to the question. The remaining had their **greatest potential in watershed scale (19%)** geospatial planning and or modelling tool.

Which partners do you most want to see MORE engaged in meeting water quality objectives?



Professionals preferred **crop consultants/CCAs (50%)** and **farmer-led groups (43%)** as a **top two** partners for engagement in meeting water quality objectives.



State Specific Data - Illinois

Training and Networking Preferences

How long are you willing to commit to an in-person watershed training/networking meeting?

Professionals were flexible in how far they were willing to travel for an in-person watershed training/network meeting. About 72% were willing to travel 100 miles or more for such meetings.

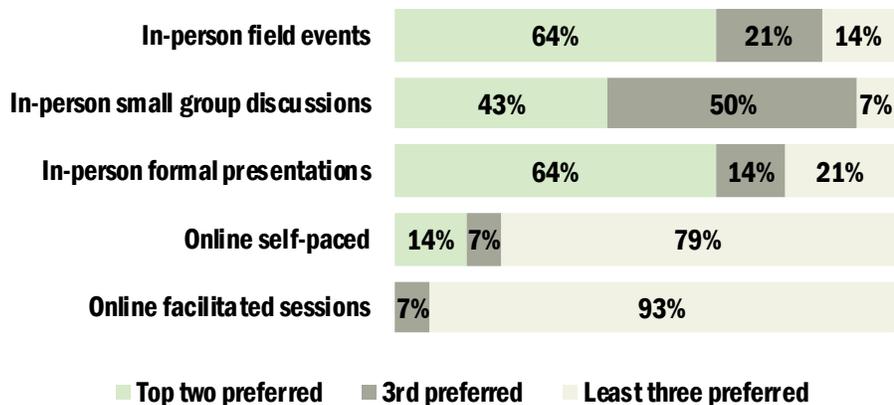
How long are you willing to commit to an in-person training?

Most professionals were willing to commit two days to an in-person training. About a third (29%) of them are willing to commit to three days.

What do you think is a reasonable registration fee for an in-person training?

Generally, professionals reported that up to \$100 was a reasonable fee. However, about a third (29%) indicated that up to \$200 was reasonable.

What are your preferred methods for learning?



About two-thirds of professionals prefer in-person field events (64%) and in-person formal group discussions (64%).



State Specific Data - Illinois

Training and Networking Preferences

Who do you rely on to develop greater professional competency?

Professionals top two choices included coordinators from local watershed projects (91%), and local partners (72%).

Which methods would you find most useful for engaging with other watershed professionals

Professionals ranked in-person events as their first choice (86%).

If a professional certification program for watershed coordinators existed would you want to become certified?

Some (36%) of professionals indicated they were interested in certification.

If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming?

More than a third (38%) of professionals expressed interest in being mentees. Almost half (46%) responded neither.

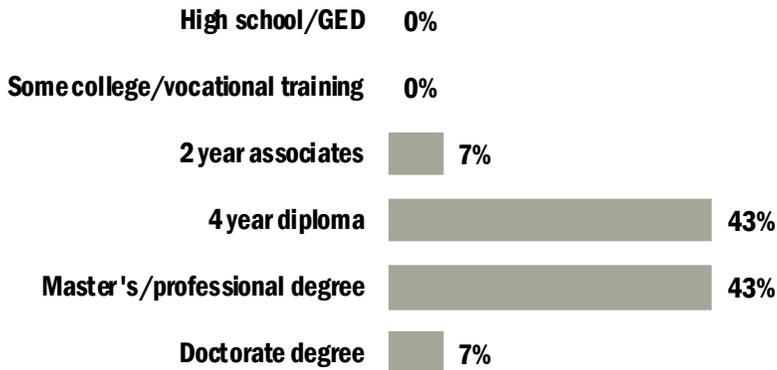


State Specific Data - Illinois

Demographics

What is the highest level of education you have completed?

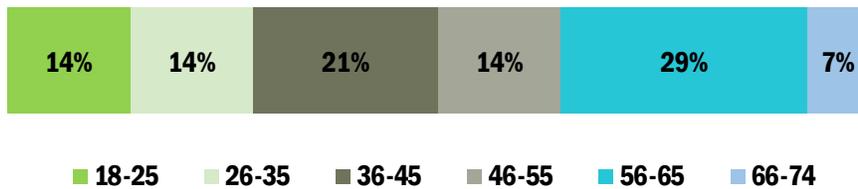
Highest level of education



Majority (93%) of professionals had at least a 4-year diploma.

What is your age in years?

Age (years)



Most were 36 years or older (72%).

What is your gender?

Most professionals identified as female (71%).



State Specific Data - Minnesota

Background Information

We sent the survey to 79 email addresses in Minnesota and received 21 responses. The response rate for the state was 27%. Results presented in this section are based on the number of responses received from Minnesota only.

What best defines the geographic extent of your work?

67% of professionals in Minnesota work on county or multi-county projects. Few work on HUC-12 (10%) and HUC-8 (19%) projects.

What is your area of expertise? (Select all that apply)

Most professionals have a background in project management (57%) and environmental science (62%).

What is your employment sector?

Majority (57%) of professionals are employed in a conservation district. Some work for non-profits (14%) and the private sector (5%). None work for the State, municipality, university, independent contractor or volunteer.

How long have you been in your current field of work?

A third (33%) professionals have been in their current field of work for between 3 - 10 years. About a third (29%) have been in their role for between 11 - 20 years and more than 20 years. The remaining 10% have been in their role for less than 2 years.

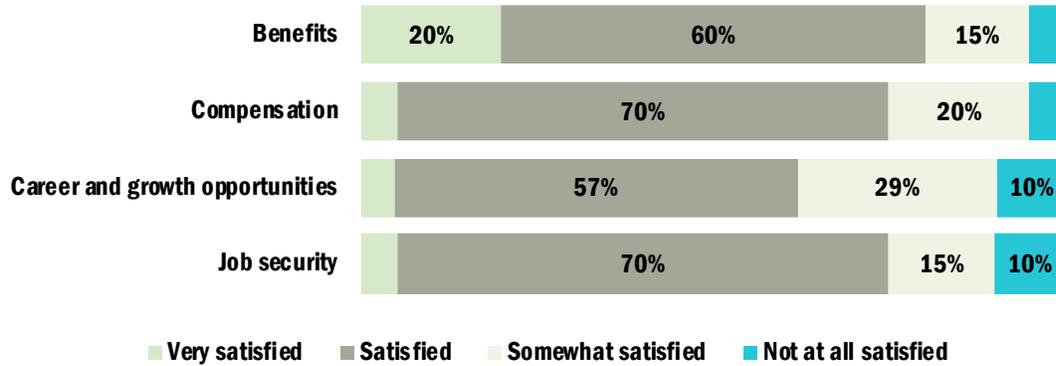


State Specific Data - Minnesota

Background Information

How would you rate your satisfaction with the following aspects of your work?

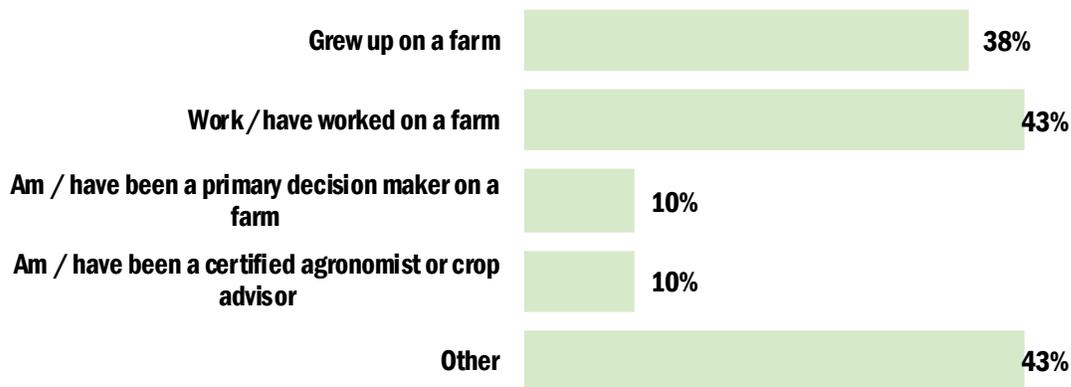
Overall a significant majority of professionals in Minnesota reported that they were somewhat or more satisfied with compensation (95%), benefits (95%), job security (90%) and career growth and opportunities (90%).



What is your primary motivation to do agricultural watershed conservation work? (Select all that apply)

The majority (80%) of professionals ranked water quality as their primary motivation to do agricultural watershed conservation work.

What is your farming background?



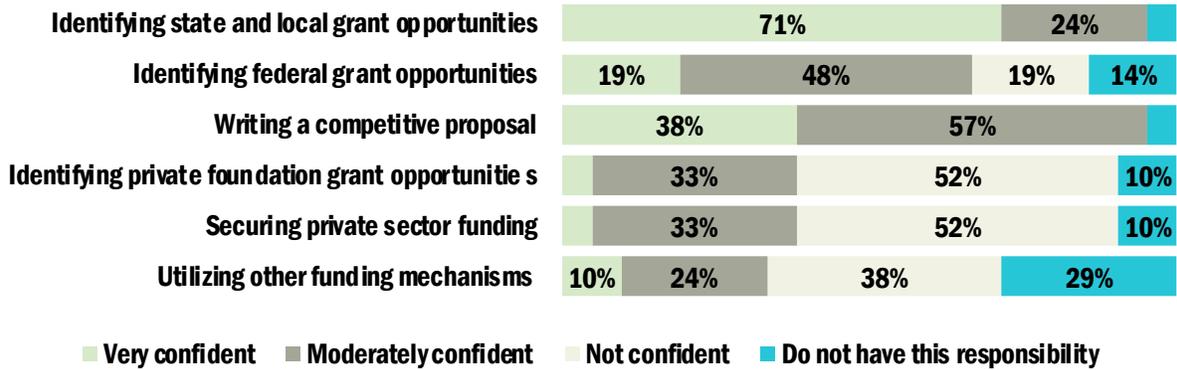
Professionals had various farming backgrounds. Some grew up on a farm (38%), worked/still work on a farm (43%). Very few (10%) are/have been a certified agronomist or crop advisor.



State Specific Data - Minnesota

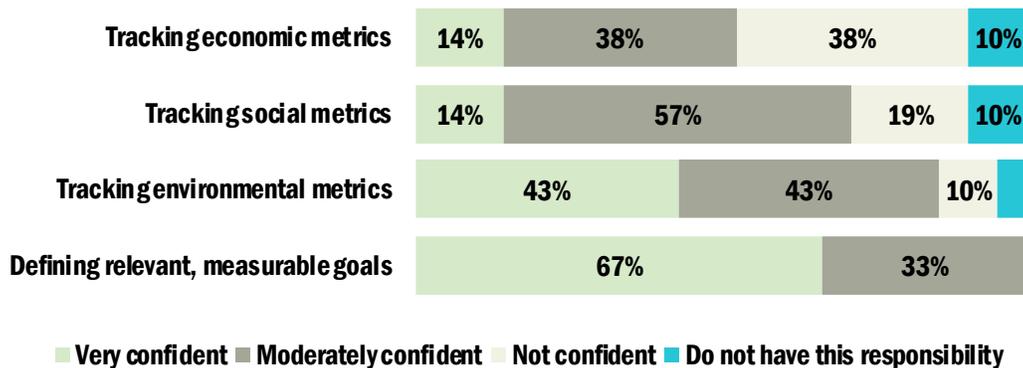
Needs Assessment

How confident are you in conducting the following fundraising activities?



Professionals were to an extent confident in identifying local, state, and federal grant opportunities. Some reported NOT being confident in identifying private foundation grant opportunities (52%), securing private sector funding (52%), and utilizing other funding mechanisms (38%).

How confident are you in conducting the following monitoring and evaluation activities?



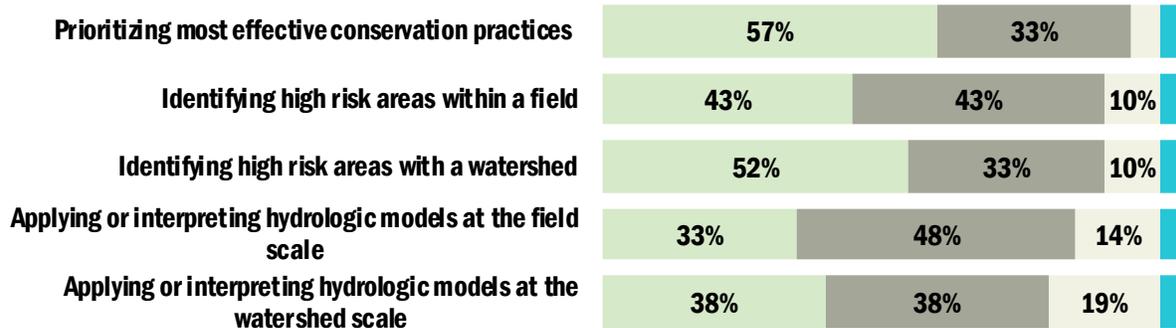
Professionals reported being confident in conducting most of the activities. However, some reported not being confident in tracking economic metrics (38%) and tracking social metrics (19%)



State Specific Data - Minnesota

Needs Assessment

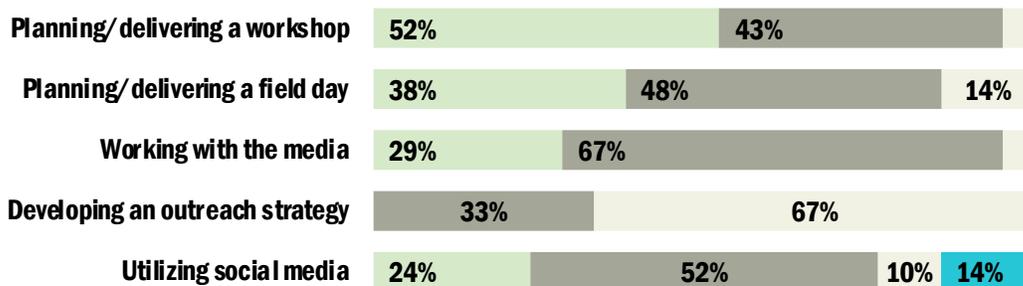
How confident are you in conducting the following information tools and technology activities?



■ Very confident
 ■ Moderately confident
 ■ Not confident
 ■ Do not have this responsibility

Most professionals were **confident** in conducting the **listed activities**. A few reported **not being confident** in **applying or interpreting hydrologic models** at both the **field** (19%) and **watershed scales** (14%).

How confident are you in conducting the following outreach and education activities?



■ Very confident
 ■ Moderately confident
 ■ Not confident
 ■ Do not have this responsibility

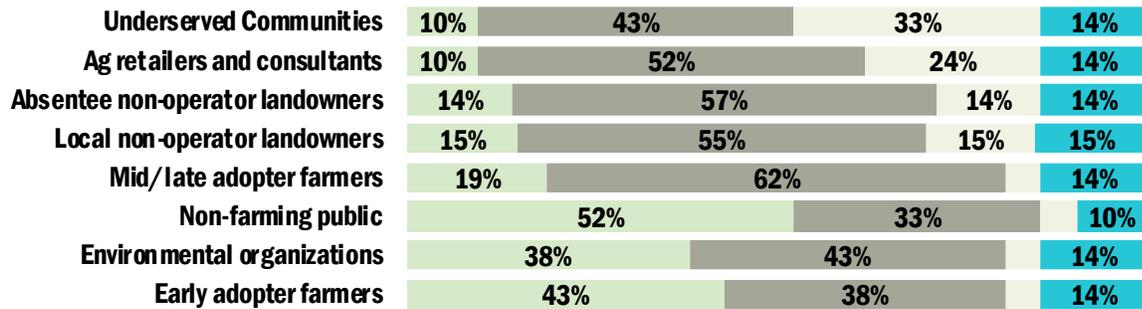
Many professionals were **confident** in **most topics** that relate to outreach and education. However, more than **two-thirds** (67%) of professionals were **not confident** in **developing an outreach strategy**.



State Specific Data - Minnesota

Needs Assessment

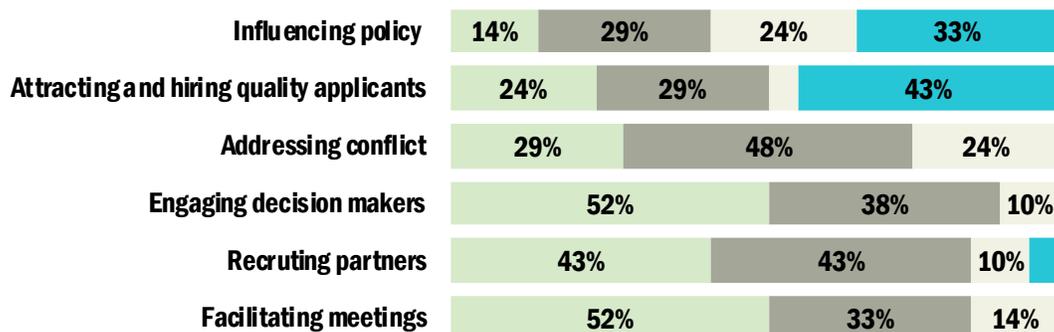
How confident are you engaging with the following stakeholders?



■ Very confident
 ■ Moderately confident
 ■ Not confident
 ■ Do not have this responsibility

Professionals were **very confident** engaging **non-farming public** (52%) and **early adopter farmers** (43%). About a third (33%) were not confident in engaging with **underserved communities** and a quarter (24%) were not confident with **agricultural retailers and consultants**.

How confident are you in conducting the following leadership activities?



■ Very confident
 ■ Moderately confident
 ■ Not confident
 ■ Do not have this responsibility

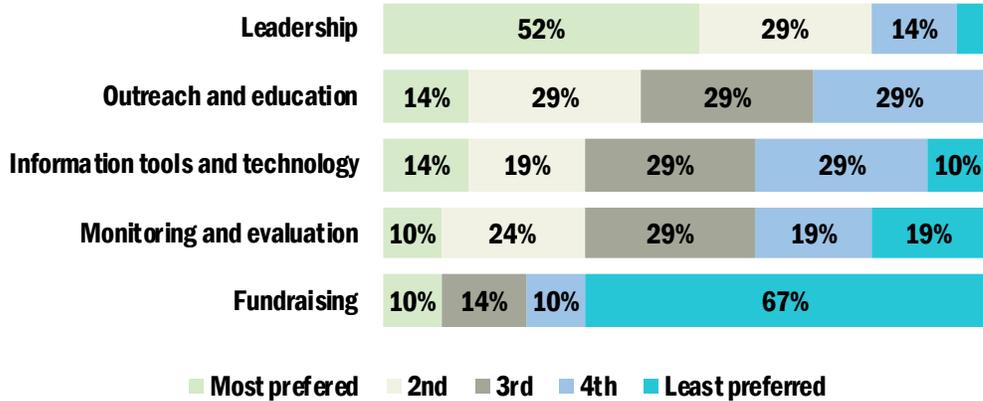
Professionals were to an extent **confident** in most of the activities. About 24% of them are **not confident** in **influencing policy** and **addressing conflict**.



State Specific Data - Minnesota

Outcomes Assessment

Which skills do you wish to develop in your professional capacity?



About half of professionals reported they wished to develop leadership skills. Fundraising was their least preferred skill (67% least preferred)

Which watershed training(s)/meeting(s) have you attended in the past?

A few (24%) professionals have attended LMW meetings. Most (43%) had not attended any of the meetings/trainings listed.

To what extent have you applied the tools/strategies you learned about from the meetings/trainings you attended?

More than half (58%) of professionals reported they had applied a little bit of the tools and strategies they learned about from meetings/trainings. About a third (33%) had done so to a large extent.

To what extent do you feel meetings/trainings you attended have helped you develop connections/contacts with your peers?

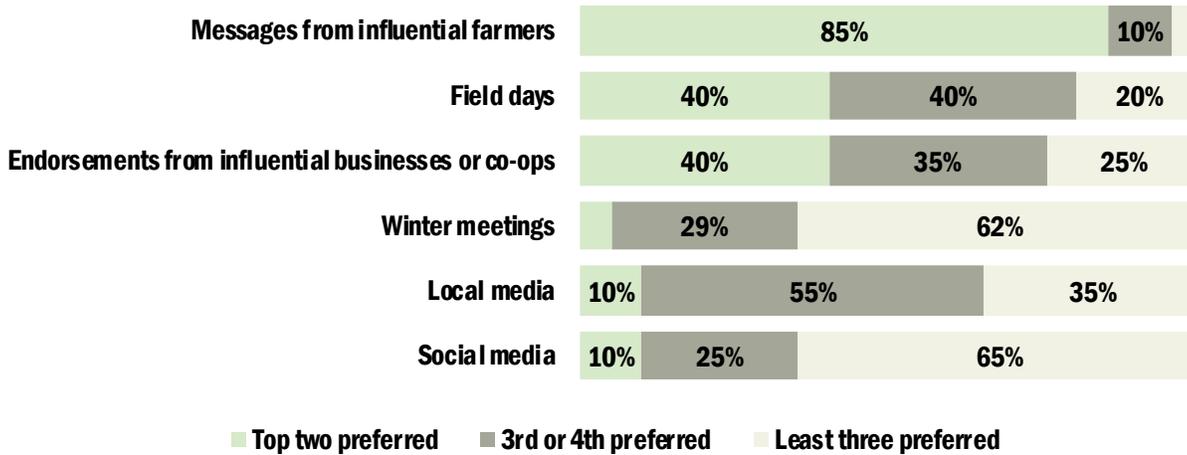
The majority (84%) of professionals reported they felt that the meetings/trainings they had attended had helped them develop connections/contacts with their peers a little bit or to a large extent.



State Specific Data - Minnesota

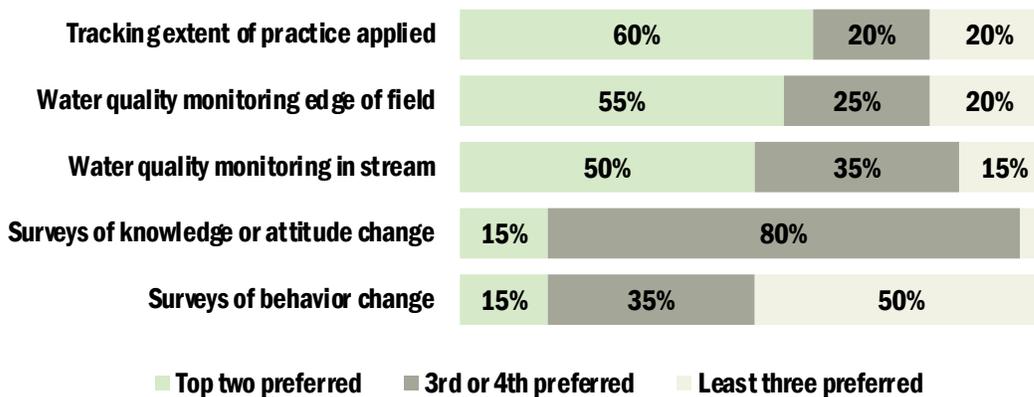
Project Strategies

What outreach strategies do you feel have the greatest potential?



Most (85%) professionals ranked **messages from influential farmers** in their **top two** responses as having the greatest potential.

Which of the following metrics do you feel have the greatest potential?



More than half (60%) of professionals ranked **tracking extent of practices applied** in their **top two** responses as having the greatest potential, while **water quality monitoring** was also **highly preferred**



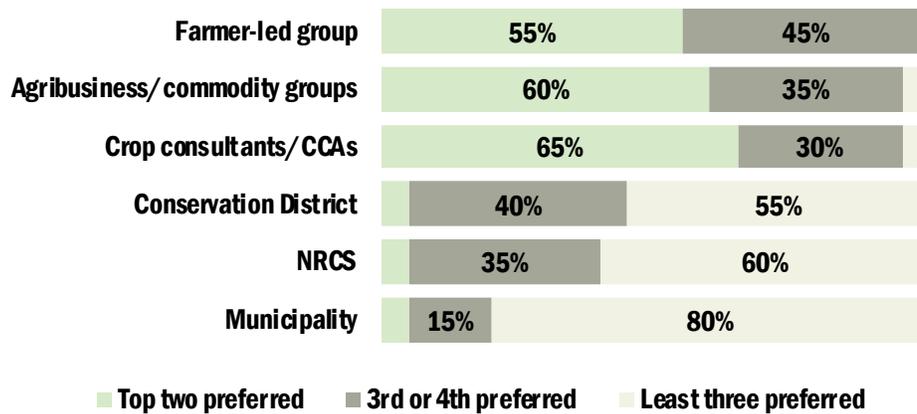
State Specific Data - Minnesota

Project Strategies

What geospatial planning and/or modeling tools do you feel have the greatest potential?

About a **third (33%)** of professionals reported that they **needed to know more** in order to provide a response to the question. The remaining had their greatest potential in **watershed scale (62%)** and **field scale (48%)** geospatial planning and or modelling tool.

Which partners do you most want to see MORE engaged in meeting water quality objectives?



Professionals highly preferred **crop consultants/CCAs (65%)**, **agribusiness/commodity groups (60%)** and **farmer-led groups (55%)** as partners for engagement in meeting water quality objectives.



State Specific Data - Minnesota

Training and Networking Preferences

How long are you willing to commit to an in-person watershed training/networking meeting?

Professionals were flexible in how far they were willing to travel for an in-person watershed training/network meeting. About 95% were willing to travel 100 miles or more for such meetings.

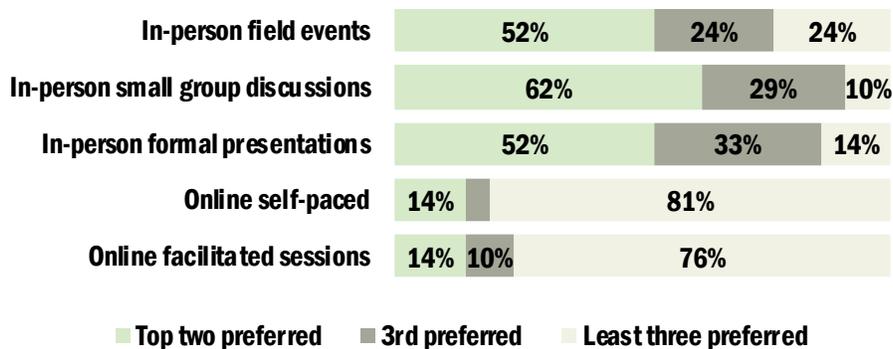
How long are you willing to commit to an in-person training?

Most professionals were willing to commit two days to an in-person training. A few (19%) of them are willing to commit to three days.

What do you think is a reasonable registration fee for an in-person training?

Generally, professionals reported that up to \$100 was a reasonable fee.

What are your preferred methods for learning?



In-person methods of learning are preferable to online options. About half of professionals preferred in-person field events (52%), in-person presentations (52%), and two-thirds preferred in-person small group discussions (62%).



State Specific Data - Minnesota

Training and Networking Preferences

Who do you rely on to develop greater professional competency?

Professionals' three choices included university extension (62%), coordinators from local watershed projects (76%), and local partners (86%).

Which methods would you find most useful for engaging with other watershed professionals

Professionals ranked in-person events as their first choice (58%).

If a professional certification program for watershed coordinators existed would you want to become certified?

More than half (57%) of professionals indicated they were interested in certification.

If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming?

About a third (35%) of professionals expressed interest in being mentors. 40% were interested in neither.



State Specific Data - Minnesota

Demographics

What is the highest level of education you have completed?

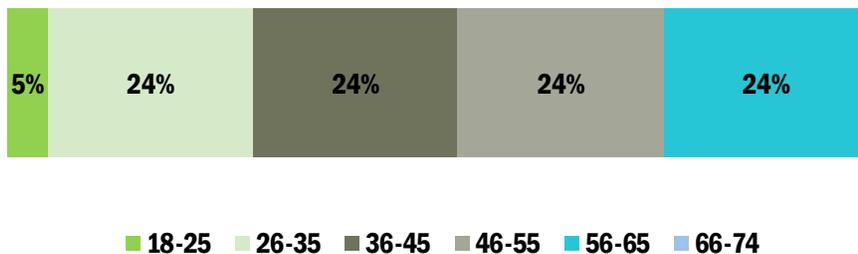
Highest level of education



Majority (90%) of professionals had at least a 4-year diploma.

What is your age in years?

Age in years



Most were 36 years or older (72%).

What is your gender?

Most professionals identified as male (52%).



State Specific Data - Wisconsin

Background Information

We sent the survey to 57 email addresses in Wisconsin and received 22 responses. The response rate for the state was 39%. Results presented in this section are based on the number of responses received from Wisconsin only.

What best defines the geographic extent of your work?

Half (50%) of professionals in Wisconsin worked on county and multi-county projects. Few (18%) work on HUC-12 and HUC-8 projects.

What is your area of expertise? (Select all that apply)

Most professionals have a background in project management (59%) and environmental science (68%).

What is your employment sector?

About a third of professionals were employed in a conservation district (27%) and by the state (27%). Very few (5%) worked for a university, with the municipal, independent contractor or volunteer. None worked in the private sector.

How long have you been in your current field of work?

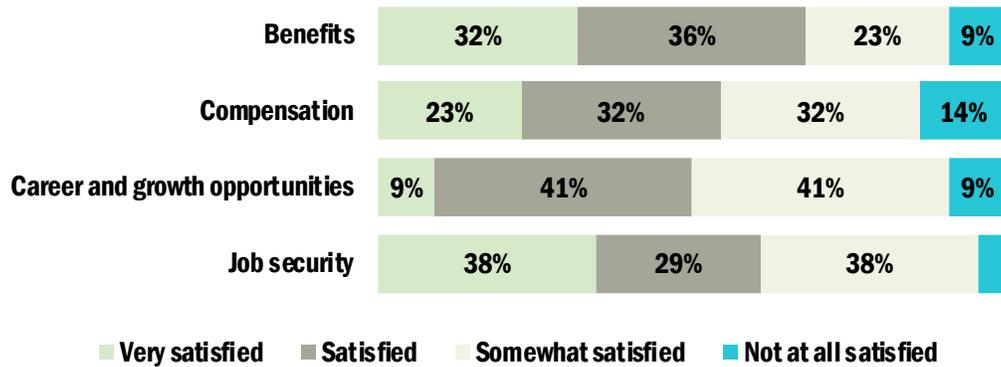
Most (36%) of professionals have been in their current field of work more than 20 years. About a third (32%) have been in their role for between 3 - 10 years. Few (14%) have been there for between 11 - 20 years. The remaining 18% have been in their role for less than 2 years.



State Specific Data - Wisconsin

Background Information

How would you rate your satisfaction with the following aspects of your work?

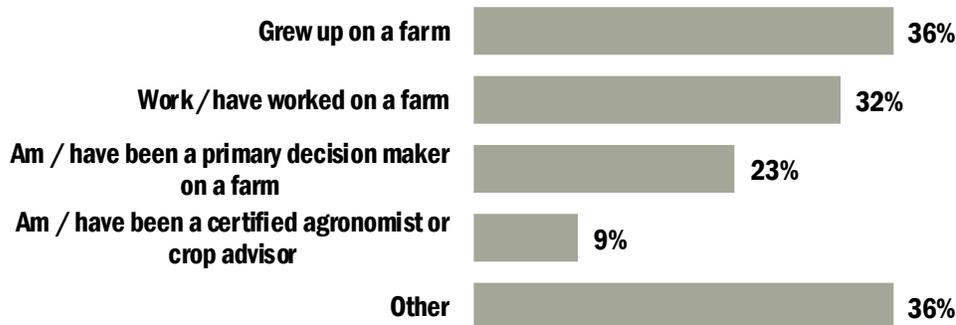


Majority (95%) of professionals reported that they were satisfied with job security. Few (14%) were not at all satisfied with compensation

What is your primary motivation to do agricultural watershed conservation work? (select all that apply)

Half (50%) of professionals ranked water quality as their primary motivation to do agricultural watershed conservation work.

What is your farming background?



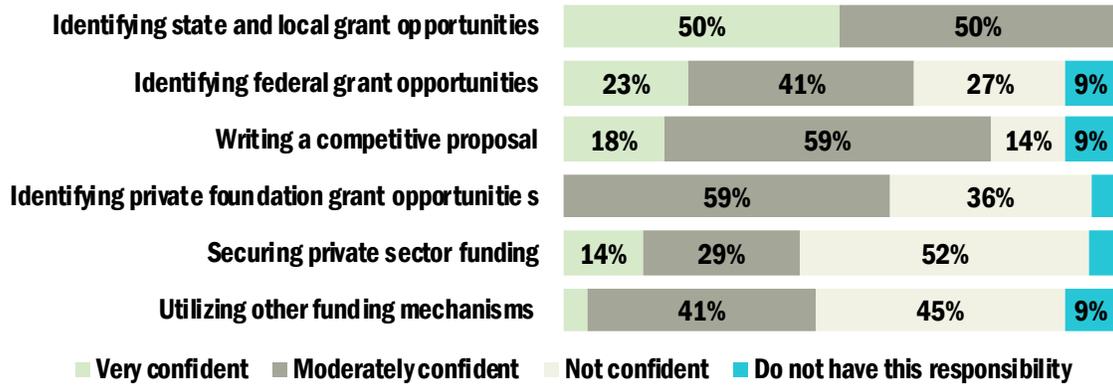
Professionals had various farming backgrounds. Around a third grew up on a farm or worked/still work on a farm. Very few (9%) are/have been a certified agronomist or crop advisor.



State Specific Data - Wisconsin

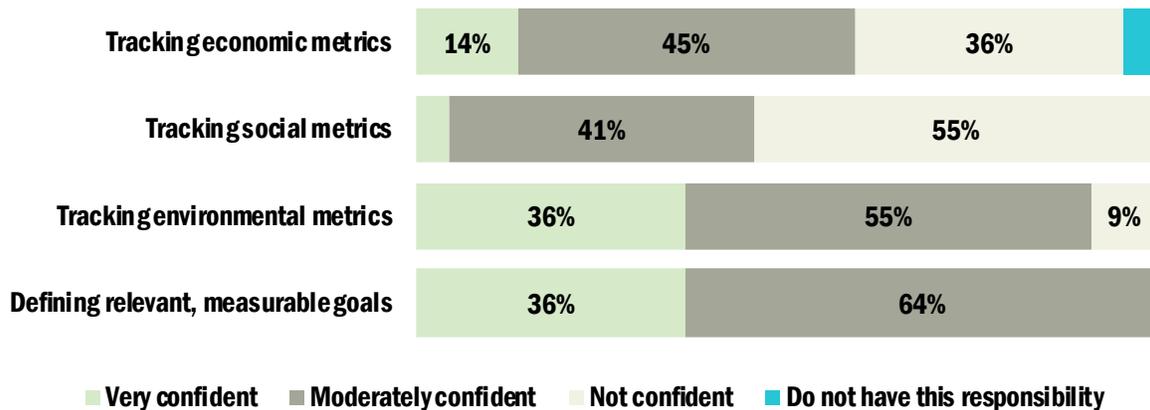
Needs Assessment

How confident are you in conducting the following fundraising activities?



Professionals were to an extent confident in identifying local, state, and federal grant opportunities. More than 40% reported not being confident in securing private sector funding (52%) and utilizing other funding mechanisms (45%).

How confident are you in conducting the following monitoring and evaluation activities?



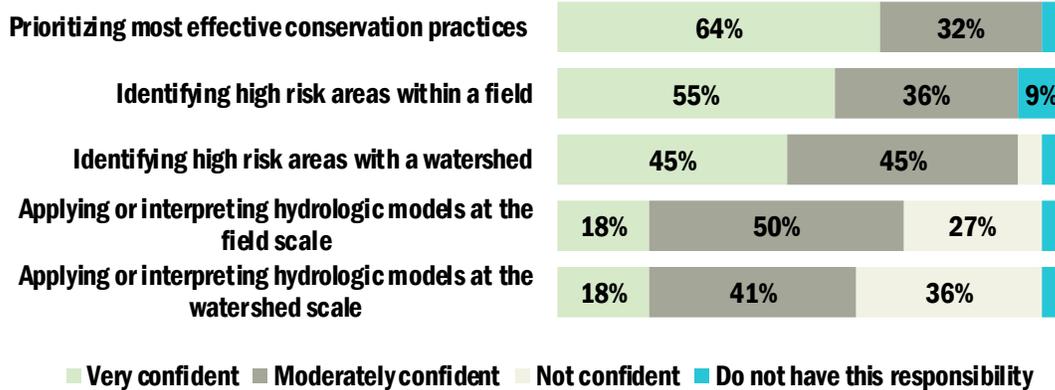
Professionals reported being confident in conducting most of the activities. Some reported not being confident in tracking economic metrics (36%) or tracking social metrics (55%).



State Specific Data - Wisconsin

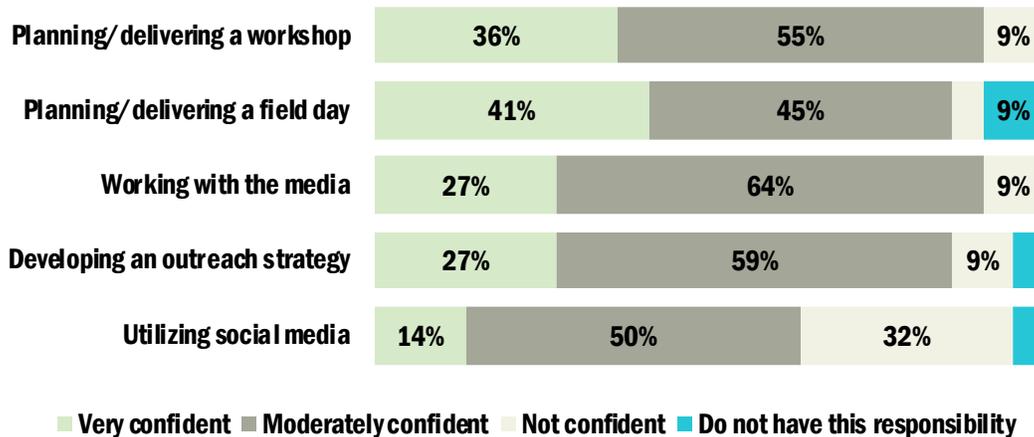
Needs Assessment

How confident are you in conducting the following information tools and technology activities?



Although majority of professionals were confident in conducting most of the activities, about a third reported not being confident in applying or interpreting hydrologic models at both the field (27%) and watershed scales (36%).

How confident are you in conducting the following outreach and education activities?



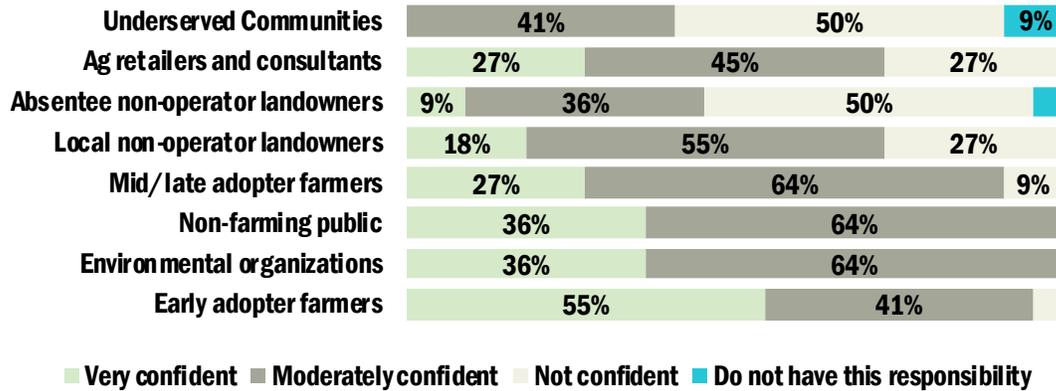
Most professionals were confident in topics that relate to outreach and education. However, a third (32%) were not confident in utilizing social media.



State Specific Data - Wisconsin

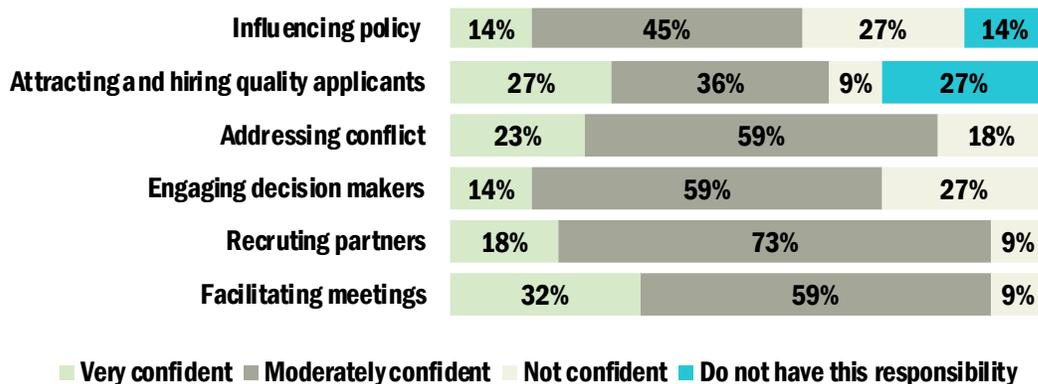
Needs Assessment

How confident are you engaging with the following stakeholders?



Professionals were confident engaging in most of the listed stakeholders. However, half of them reported not being confident in engaging underserved communities and absentee non-operator landowners.

How confident are you in conducting the following leadership activities?



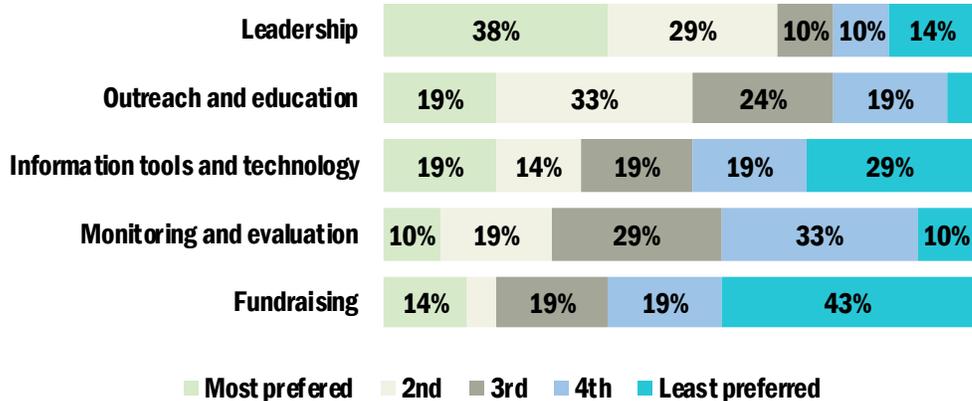
Professionals were to an extent confident in conducting most of the activities listed in this section. About a third (27%) were however, not confident in influencing policy and engaging decision makers.



State Specific Data - Wisconsin

Outcomes Assessment

Which skills do you wish to develop in your professional capacity?



About a **third (38%)** of professionals reported they wished to develop **leadership** skills.

Which watershed training(s)/meeting(s) have you attended in the past?

Professionals (**32%**) have attended **LMW meetings**.

To what extent have you applied the tools/strategies you learned about from the meetings/trainings you attended?

Majority (86%) of professionals reported they had applied **a little bit** of the tools and strategies they learned about from meetings/trainings. **7%** have done so to **a large extent**.

To what extent do you feel meetings/trainings you attended have helped you develop connections/contacts with your peers?

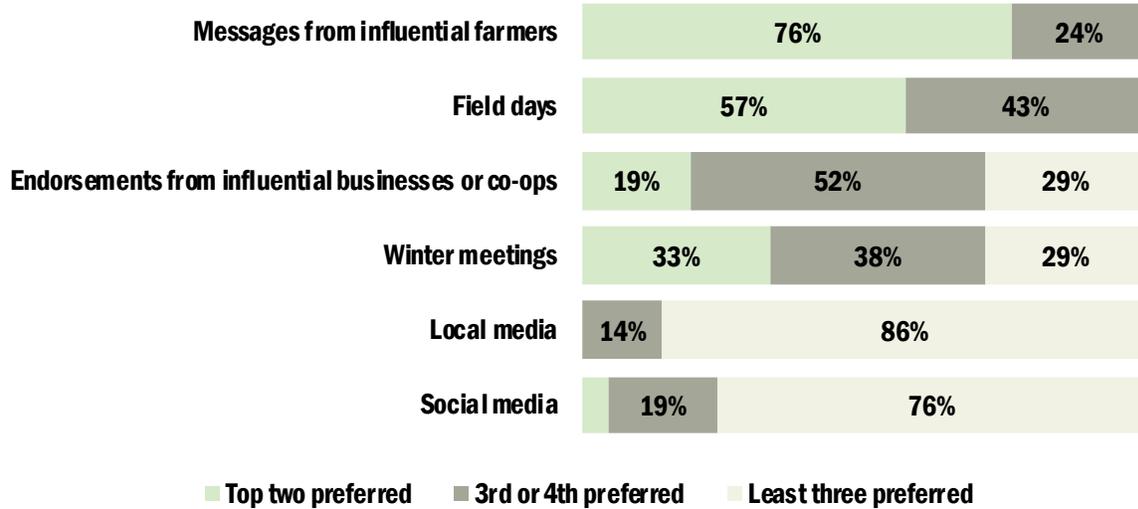
Professionals reported they felt that the meetings/trainings they have attended have helped them **develop connections/contacts** with their peers. **More than half (60%)** reported it was **a little bit** and **a third (33%)** reported it was to **a large extent**.



State Specific Data - Wisconsin

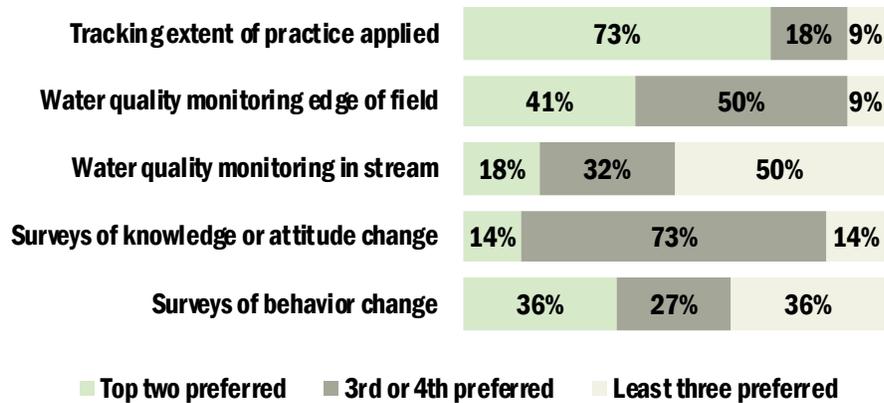
Project Strategies

What outreach strategies do you feel have the greatest potential?



Professionals ranked **messages from influential farmers** (76%) and **field days** (57%) in their **top two** responses as having the greatest potential.

Which of the following metrics do you feel have the greatest potential?



About **three-fourths** of professionals ranked **tracking extent of practices applied** (73%) and **over one-third** ranked **water quality monitoring edge of field** (27%) in their **top two** responses as having the greatest potential.



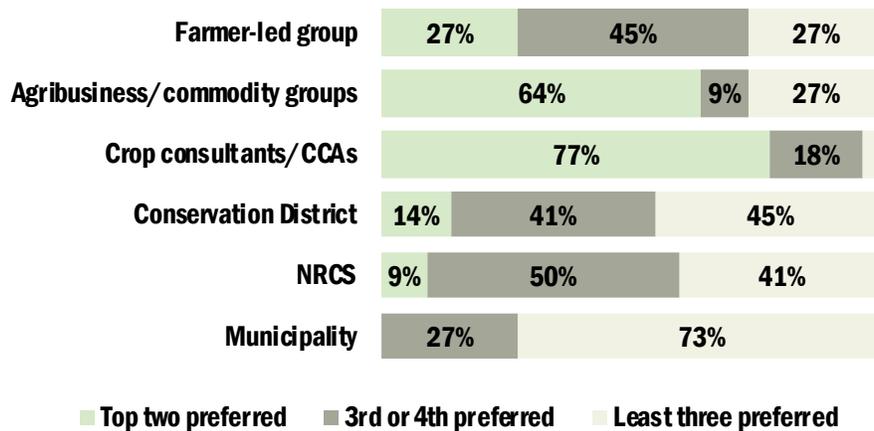
State Specific Data - Wisconsin

Project Strategies

What geospatial planning and/or modeling tools do you feel have the greatest potential?

Two-thirds (64%) of professionals reported that they needed to know more in order to provide a response to the question. The remaining had their greatest potential in watershed scale (27%) and field scale (32%) geospatial planning and or modelling tool.

Which partners do you most want to see MORE engaged in meeting water quality objectives?



Professionals preferred crop consultants/CCAs (77%) and agribusiness/commodity groups (64%) as partners for engagement in meeting water quality objectives.



State Specific Data - Wisconsin

Training and Networking Preferences

How long are you willing to commit to an in-person watershed training/networking meeting?

Professionals were flexible in how far they were willing to travel for an in-person watershed training/network meeting. About 95% were willing to travel 100 miles or more for such meetings.

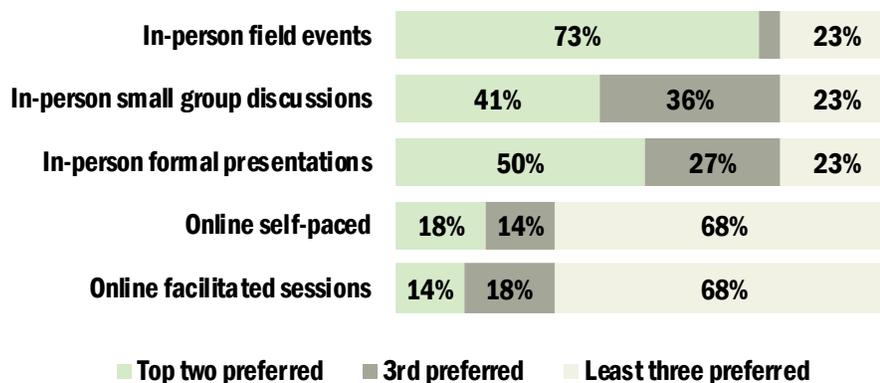
How long are you willing to commit to an in-person training?

Most professionals were willing to commit two days to an in-person training. 45% of them are willing to commit to three days.

What do you think is a reasonable registration fee for an in-person training?

Generally, professionals reported that up to \$100 was a reasonable fee.

What are your preferred methods for learning?



About three fourths of professionals prefer in-person field events (73%) and half prefer in-person formal presentations (50%).



State Specific Data - Wisconsin

Training and Networking Preferences

Who do you rely on to develop greater professional competency?

Professionals choices included coordinators from local watershed projects (64%), local partners (68%), University extension (68%) and Wisconsin producer-led meetings (55%).

Which methods would you find most useful for engaging with other watershed professionals

Professionals ranked in-person events as their first choice (52%).

If a professional certification program for watershed coordinators existed would you want to become certified?

55% of professionals indicated they were may be interested in being certified; 41% were not interested, and few (5%) expressed interest in becoming certified.

If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming?

Exactly half (50%) of professionals from Wisconsin are interested in being a mentee.

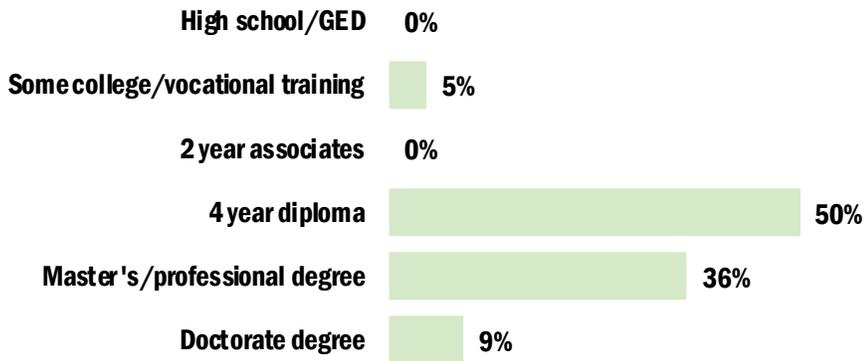


State Specific Data - Wisconsin

Demographics

What is the highest level of education you have completed?

Highest level of education



Majority (95%) of professionals had at least a 4-year diploma.

What is your age in years?

Age (years)



■ 18-25 ■ 26-35 ■ 36-45 ■ 46-55 ■ 56-65 ■ 66-74

Most were 36 years or older (91%).

What is your gender?

Most professionals identified as female (64%).



Appendix A: List of Responses

What would most encourage you to stay in your current position? (1/4)

Stable funding, job security, and job benefits/wages

Funding stability Funding availability Stable funding
Sufficient funding Consistent funding Benefits
Stable funding support Job security

Funding levels maintained or increased for conservation programs and jobs

Ongoing, long term stable funding for staff and on the ground practices

Sustainable funding / job security / better employment apparatus (e.g., there are drawbacks to having 5 elected commissioners [without an HR background] as employers)

I changed projects this year for job security and health insurance, otherwise I would have stayed with my prior project which I spent 10 years managing.

Long term employment. Maintaining pay level and retirement benefits.

Knowledge that my work goes beyond what I see day to day - has a lasting effect - and also knowing my position would be funded beyond the current grant cycle

More time spent in the field, less paperwork, better pay and benefits. You can only work so long for the love of the job.

If the position was more stable, I wouldn't have to constantly evaluate and search for additional funding sources to support my next project.

Being put in one location with a set watershed to work on for my career. Not having to find new watersheds.

Encouragement/support from agency/board members as well as sustained funding

Funding and water quality sampling opportunities

Health care; "permanent" position instead of the length of a grant.

Good pay; development of expertise

Better funding/job security

More funding, less paperwork

Increase in salary, seeing groups progress

Better benefits and long-term job security.

Security of a full-time position not funded by grants and benefits.

Making Project Coordinators in the state of Iowa a permanent position would be incredibly beneficial. Unfortunately, majority of PC's across the state have to apply for funding to keep the project viable every three years. Making PC's permanent would show that the state is serious about the water quality and soil health issues that plague Iowa.

Interesting question. I now am in a position that has secure funding. However up until 2016 I was working under short term agreements (1-3 years) so I would say a securely funded position.

Health insurance benefits. If I left my partner. Increased job security.

Not having other science job opportunities in the county

If every county I worked with developed at least one watershed project to seek additional resources for targeted implementation.

Additional staff to help with the project

An increase in pay would be the most appealing thing. Additionally, support/resources on how to conduct watershed planning. This was my first job out of college, and I had zero experience with watershed planning, but it was an expected part of my job. I had worked for almost a full year before receiving some training from a local organization in the state, so I had been trying to learn by reading online and talking with others who had some experience. Being taught how to facilitate multiple stakeholders from different industries and get them to work together towards water quality goals would also be helpful.

Appendix A: List of Responses

What would most encourage you to stay in your current position? (2/4)

Seeing results and the work paying off

Farmer satisfaction with our service and final product

We are on track to get all six impaired lakes off the impaired waters list within our watershed before I retire. This is a very motivating goal for me to achieve this goal so I can move on to other similar efforts elsewhere.

Seeing results- with just one year on a project, there are no clear results yet. Plus, setbacks with the coronavirus have seriously delayed any potential results we may have seen this summer.

Being successful and accelerating conservation adoption. SEEING RESULTS!

Practices that can be sustainable and profitable.

Seeing the benefits of the work I do (i.e. improved water quality, wildlife benefiting from habitat I restored...)

Seeing more success stories. Knowing that we're making progress and I'm being effective.

Seeing water quality improvements

Wins for people and nature - this work is challenging, but as long as I continue to see opportunities for progress, I am motivated to continue.

A feeling that I'm playing a constructive role in my county's water resource management

Significant increases in the percent of acres with continuous no-till/strip-till and reduced application of nitrogen fertilizer.

Job satisfaction. Helping farmers help the land and water in my community. Improving water quality, reducing soil loss, enhancing wildlife habitat and increasing net farm income is one of the most rewarding and noble careers one can engage in. I tell all my interns and those I mentor, if you love what you do you will never "work" a day in your life!

The work itself is rewarding

I wouldn't leave it's very rewarding Enjoy the work

I stay in my line of work because I like to work with people to find solutions to a problem or at least a solution to a situation.

Very much enjoy my work. Plus I'm getting close to retirement, so need to stay with the state retirement plan I'm on.

I enjoy the work and putting conservation on the ground

For Mother Nature and for our farmers

Seeing the farmers want to do better- to save money and make a living while protecting our resources

I wouldn't leave it's very rewarding

I stay in my line of work because I like to work with people to find solutions to a problem or at least a solution to a situation.

It is gratifying to be able to help others.

Profession; love agriculture and helping the environment

Knowledge that my work goes beyond what I see day to day - has a lasting effect - and also knowing my position would be funded beyond the current grant cycle

The challenge of assisting farmers to become better stewards of their farms and increase their profitability at the same time.

Good health, good attitude

I enjoy the work and putting conservation on the ground

Appendix A: List of Responses

What would most encourage you to stay in your current position? (3/4)

More support from the government needed

Encouragement/support from agency/board members as well as sustained funding

Elected officials that treat others with respect

To see earnest desire for system change from state and federal leaders and gov.

Success, support from state and federal government

First: policies providing clear incentives for farmers and landowners to engage in conservation efforts that protect our water and land. Second: removal of bottlenecks such as shortages of engineering staff.

Actual state-level coordination and dedication for source water protection

Continued support of the 1W1P program from both local and state partners

Better income; better government and social support for ag conservation.

Change in prioritizing and funding that is science based and locally driven, 1W1P does not seem to be fulfilling its promise and the resources expended are disproportional to the benefits. Top down directives to develop watershed plans for the purpose of getting grants does not lead to effective change.

Community, new partners, and collaboration

Community connections- I tend to invest in clients that I know well Structural development- I have not worked with watershed management or water quality before, so developing structure to the project and building my understanding of the project is very attractive. If I continue to be confused or work to kill time instead of being productive, I will move on pretty quick

Collaboration and partnerships with colleges and the public

Strong, dedicated team and partners.

Feeling like I'm connecting with producers and making a difference. And continued funding

Ag companies' global brands getting more engaged

Continued work with passionate people, local leaders. Making a difference

The opportunity to work with farmers that want to do good things. I work in a small watershed that is very conventional, so I haven't had the opportunity to do things that are experimental - I'm trying to get farmers to do basics of soil health.

A supportive supervisor and trust-based work climate

Being able to train younger employees to work with farmers and landowners in a professional manner.

Success = others in watershed share same desire

Personnel satisfaction of watching my community improve environmentally because of actions that I have been involved with. As well as a fair wage with benefits.

New programs, great work environment, like minded colleagues and friends

Appendix A: List of Responses

What would most encourage you to stay in your current position? (4/4)

Variety or flexibility

Increased project variety

Continued support from board and great staff to be innovative and try new programs

Working with a greater diversity of agricultural operations (not just corn and soybeans);
Health Benefits

Continuing to have flexibility within my position.

Remote work from home option

No plans to leave

I don't plan on leaving my position, as long as I am still needed and feel that I am being productive.

I love my work! :-)

Very much enjoy my work. Plus I'm getting close to retirement, so need to stay with the state retirement plan I'm on.

Career advancement opportunities

Pay, chance of upward mobility

Opportunities for career enhancement

More career opportunities in this line of work.

Opportunities to expand

Leadership opportunities and diverse experiences

Continued education and challenge

Opportunities for advancement within the field/organization

I am a volunteer. I don't get paid for my time, and I am a very busy and active person.

Appendix B: List of Responses

Is there a topic specific to your state (such as a state policy or program for which you want to have greater influence?) (1/2)

Specific environmental issues	A particular program or effort”
<p>Regulations on manure management and application.</p> <p>Source water protection Adoption of regenerative ag.</p> <p>Statewide or regional initiatives in Watershed Storage and Public/Private partnerships for conservation delivery</p> <p>Requiring NMPs on all farms - so many farmers still do not know/care that it is a requirement that has been in effect for 20+ YEARS!</p> <p>Flood mitigation and related practices</p> <p>Water quality or soil health education</p> <p>Farmer led projects, carbon markets for farmers, dairy sustainability projects with supply chain</p> <p>Integrating water quality and water quantity</p> <p>Phosphorus trading and credits with Municipalities.</p> <p>Groundwater Protection Rule/Nitrogen Fertilizer Rule</p> <p>Regulation of ag. fertilizer sales in nutrient rich areas; include requirements in CAFO permits to achieve tmdl load allocations on cropland</p> <p>Getting more no-till and more cover crop acres</p> <p>Management of hog manure application to reduce "over application" when combined with additional sources of nitrogen. Taking greater credit for the nitrogen in manure and requiring maximum levels of additional sources of nitrogen when combined with manure application.</p> <p>Understanding the impacts of livestock and manure management</p> <p>Agricultural drainage</p>	<p>Nutrient Reduction Exchange (NRE)</p> <p>Shortcomings of the Iowa Nutrient Reduction Strategy</p> <p>Nutrient Reduction Strategy</p> <p>Nutrient Loss Reduction Plan; State Revolving Fund</p> <p>State funding for the Illinois Nutrient Loss Reduction Strategy</p> <p>Nutrient Loss Reduction Strategy</p> <p>Nutrient Loss Reduction Strategy</p> <p>One Watershed One Plan Development</p> <p>MN Board of Soil & Water Resources One Watershed One Plan</p> <p>One Watershed, One Plan</p> <p>One Watershed One Plan Development</p> <p>One Watershed One Plan</p> <p>farmer-led statewide NPS strategy</p> <p>Funding. Funding has moved away from the local control (DNR grants, 319, Watershed Protection Funds, etc.) to ranked EQIP funds.</p> <p>Continued funding for WI State Stewardship Fund for land protection</p> <p>Iowa's Water and Land Legacy tax fund</p> <p>Funding the IWILL 3/8th cent sales tax for Iowa Conservation</p> <p>Clean Water Fund and other grants</p>

Appendix B: List of Responses

Is there a topic specific to your state (such as a state policy or program for which you want to have greater influence?) (2/2)

Policies, regulations, or funding issues

(NOTE: many of the responses coded for this were also coded in the sections above. They are not presented again)

Program

I wish I had the ability to simplify and eliminate redundancy within the programs that we administer within our field offices.

The service we provide our farmers. Not all counties provide the same customer service (even though they should). I would like there to be some accountability, so all farmers/customers are offered the same treatment/service.

I would love to see the state set a bare minimum regulation (IE, small buffer strips on each creek, enforce soil loss limits) but regulation is such a feared and politicized issue I am not comfortable discussing (yet). The truth of it is that there is a small percentage of farms with poor practices (farming up to the banks, soil filling the ditches annually, or cattle knee deep in mud, feedlots near a stream, etc.) that give the entire farming community a black eye... we need to bring them up to a minimum standard. CRP filter strip rates neared \$400/acre a few years ago and we still had folks who didn't want filter strips... incentives won't fix everything.

Exploring regulatory frameworks for conservation

Maybe a more regulated ag business to improve water quality and soil health

The voluntary (i.e. non-mandatory) basis for almost all agricultural water quality practices. What this means is that while we are hired by the state, the state also gives permission to landowners and farmers to ignore us - and most do.

Using social data to target implementation efforts instead of relying solely on bio/physical/chem data.

Not entire state, but our area - ramifications of land use decisions based on karst terrain. Addressing variable landscapes in the state.

State policy

Better coordination at the state level - there are many partners working separately on the same issues. Multiple state level meetings with different stakeholders, with some overlap in membership, but often duplicative. State agencies don't always collaborate well and makes it challenging on the local level to navigate resources and shared objectives.

Outreach activities at the policy making level

Engaging with legislators

Increasing local government participation in funding and implementation

Getting politics out of watershed funding decisions. Currently, WMAs in my state are overlooked by the Department of Ag for funding in favor of watershed projects led by ag organizations.

Increasing local government participation in funding and implementation

Not sure. My first thought is that influencing policies and programs is outside the scope of my role.

Others

The need for more diagnostic monitoring to guide implement is greatly needed. Desktop models fail across the board to identify cost-effective prioritization of implementation activities but are heavily relied upon since so few conservation professionals and agency either are not equipped or simply make no attempt to aggregate data and the cost-benefit framework needed to be highly focused on measurable results. In addition, local conservation staff have a declining understanding of ag systems let alone having any ability to discuss detailed ROI opportunities for farmers by making changes to cropping systems and techniques so as to focus on maximizing profits vs. yields. The heavy reliance on CCAs to provide NM information has led to an expansion of over application of fertilizers coinciding with an almost complete disregard for University recommendations as they relate to the MRTN.

Appendix C: List of Responses

Please elaborate on up to three of the skills above (1/5)

Leadership

Build skills to become a stronger leader

No one is a perfect leader. Always room for improvement.

Leadership Skills at the state level

I am interested in program management or leadership and would like to develop skills in this.

I'd like to become more comfortable with public meetings

More influential on a State level

Organizational Leadership

I would like to learn more about what motivates people to make changes in their operations, how to make sure we are making folks comfortable with trying new things.

Learn how to find the win-win with ag partners. How to develop those relationships

Becoming confident enough to inspire others to adopt soil health or water quality conservation practices.

Leadership is something I know I am capable of, but I would like more opportunities to develop that skill. I think seeing the big picture is very helpful when working in a watershed size scale, and I think I would do a good job of that. Developing interpersonal skills and gaining a better understanding of the employee/boss dynamic would be very helpful.

I have experience with 1W1P and I'm hoping to be a leader in implementation, action, and development of future activities for my counties and neighboring counties. I want to be known as the person to ask with 1W1P related questions.

Leadership skills for developing effective partnerships to scale up edge of field practice implementation.

Managing other employees

Developing and improving staff capacity

Organizing meetings in a COVID-19 world

Become more confident in leading meetings

Need to get more leadership from company stakeholders in the watershed.

Leadership in policy with elected officials

Engaging policy makers Interacting with policy makers

Desire a better ability to lead watershed planning efforts and implementation projects.

Learning how to help local partners to develop broad-based coalitions and to increase community capacity to implement.

I would also like to be more proficient in meeting facilitation processes.

As a senior staff person with 30 years of work experience, I would like to use this experience to provide more leadership on related topics.

Project management tools/techniques

How to be an effective leader

Leadership: more in looking for tips to better public speaking and meeting skills, besides putting myself out there and working on my public speaking skills in real time.

Recruitment in a COVID-19 world

I have some experience with leadership, but always looking to improve my skill set.

As a younger, female, I am always looking for ways to develop my leadership and the leadership of my team (staff and board)

Being a leader is something everyone in these positions must do, in some capacity. Constant reminders of what a good leader is are always welcome.

Leadership and interoffice relationships

Expand upon leadership training opportunities

How to motivate people to actually implement (would like to see actual reductions of nutrients not a shifting of nutrients from 1 bmp to another)

Working with agencies

Appendix C: List of Responses

Please elaborate on up to three of the skills above (2/5)

Information tools and technology

More training on the tools available and how to interpret/use them

Technology changes so fast anymore. Good to keep up on the most advanced.

Keeping up with technology

I am always interested in learning about new web sites or data platforms that I can utilize to make my job easier. Mainly GIS.

GIS technology Improve GIS skills GIS skills

Use of models, GIS and other tools

I need to be more adept at ARC GIS, NRCS planning tools partners must use, and Excel.

Using and creating watershed models/maps

Modeling software

I would like to learn to design watershed projects internally with CAD or other similar type design programs

I would like to better understand how to interpret and use watershed models and field-level technology to improve placement of BMPs and outreach to farmers/landowners

New technology continues to drive down the cost of collecting data as well as a means to sharing it. This is perhaps the greatest challenge society has a whole with regard to environmental impacts and educating students and the public.

Training on ACPF - how to run it

Be proficient in New NRCS Desktop

Conservation desktop training

Technical assistance

Ability to produce quality designs to land operators

Effective use of social media Social media marketing

Effective social media strategies Social media

Using social media to connect projects to state level influencers

Improvement of utilizing social media to reach stakeholders

Being able to more effectively use social media and websites to get our message out

I am a Luddite who ends up using technology more than I want to, and I need to learn more. I'm horrible at social media and prefer face to face.

Social media marketing

Being able to understand some of the technology that farmers use to make their management decisions

Understanding and interpreting technical information well enough to pass it on to landowners

I need to become better versed in current and potential future tools and technologies related to monitoring and systems management.

Regarding info tools and tech, I would like to become more fluent in video production/editing for posting educational videos

Ways to organize tracking and evaluation information would be helpful- so many of us have data and no idea what to do with it and how to store it so it is most effective and easy to navigate.

Tools for watershed scale implementation and tracking

Planter set up/ diagnostic issues

Appendix C: List of Responses

Please elaborate on up to three of the skills above (3/5)

Outreach and education

How to reach late adopters Landowner Engagement
Public education Educating Farmers Outreach tools
Reaching middle/late adopters Trust with Stakeholders
How to encourage no till Influential Communications

New ways to engage farmers, landowners, and absentee landowners

Need to engage farmers and non-farmers in the watershed to be more active in project.

Find sure-fire outreach methods to reach middle adopters

Ability to give sound ag advice to farmers to help them achieve economic and environmental goals

Better understanding on how to make the economic case for conservation

How to effectively encourage farmers to adopt cover crops

I wish to learn how to create better stories of a watershed to better engage landowners and the public

Outreach and education skills to better engage non-traditional audiences.

The ability to increase public participation in conservation programs.

Develop better teaching skills for youth and adult education

Want to provide visual tools that make a point so that individuals understand the problem or the solution

I'm always looking for ways to offer real-time information on projects and progress.

Better outreach to communities of color and absentee landowners

How to educate effectively to an audience that isn't really interested

Field day topics that make an impact

Education is essential. If I can help educate producers on the benefits of conservation, they will have a better understanding. If they have an understanding, they will be comfortable with the practice. If they feel comfortable with the practice, they will adopt it. If they adopt it, they will share their experiences and others will be more likely to adopt.

I need to develop skills in leading community discussions that focus on the shared situation regarding current and future environmental conditions among urban and rural communities.

Outreach and education are very important in our watershed projects. I think I do a good job already, but I also know there is much to learn, and I strive to bring awareness to my watershed in creative, informative, persuasive, and diverse ways. Growing and developing this skill is essential.

My entire job is outreach- if I can continue to improve my outreach and communication/ education skills, my job will continually become easier and I will be more effective at what I do

Outreach & Education: along the same lines of leadership, and more in terms of public speaking & facilitating meetings and open discussion, especially between county commissioners and SWCD board members.

More awareness on new and upcoming outreach and education tools/mechanisms

Developing materials for outreach and learning more on use of social media

The more we can share scientific information and communicate the impacts, the more we can change behaviors so as to reduce human impacts.

Communicating technical work/data more effectively

Engaging ways to share monitoring results

Changing the public perception about importance of water quality and agricultural practices that may be contributing to the problem.

Appendix C: List of Responses

Please elaborate on up to three of the skills above (4/5)

Fundraising

Finding funding Looking for grants Raising cash
Finding more funding sources Increasing donations
Grant sourcing and writing Grant writing skills
Clearing house of funding sources Raising funds
Find matching sources for funding Writing grants
Fundraising - specifically innovative financing mechanisms to that incentivize implementation.
Identifying new funding opportunities
I have little to no fundraising experience, and I know this is a skill that needs development..
Seek funding to support the needed monitoring for state funded projects
How do we identify sources of funds and how to apply for
We need more funding for our effort to support farmer-led groups, and they also need more financial support. This is primary hinderance to projects happening - need staff or contractors and to do that we need \$
Haven't dealt a lot with grant writing and see that as a skill I could improve on.
As Executive Director, I need to make sure we have \$ to keep our doors open!
For ag, if we continue to provide cost share to landowners, we will need additional funds
How to compete for funding sources when watershed is not in priority area of the state.
Fundraising is also very important to me because so much of our jobs rely on cost-share to implement practices. Learning about additional sources of funding and how to obtain them would make me an even more valuable employee not only to my employer, but also to farmers in the watershed.
Find more funding opportunities for financial assistance top producers and to fund positions within the District
Identifying funding for project implementation and long-term local coordination

Communication and interpersonal skills

Note: Many responses were cross-coded in other areas, but are only presented here

Ability to answer tough questions from farmers
Working with difficult personalities
Conflict Management Conflict Management
Handling conflict
Being more confident with conflict resolution.
Building new client and partner relationships
Partnership building/stakeholder engagement and helpful online tools for this
Better understanding what drives decisions in various stakeholder groups
I need to hone sales skills with late adopters and disengaged landowners (if this is possible).
Salesman-ship skills
Recruiting help/partners without going down a wormhole that takes too much time away from my duties. ;) Should be mutually beneficial, but not just talk.
Selling conservation practices
Expanding partnerships with nontraditional organizations/departments
Teamwork/working with others is something we can all work on- I think this could be an annual refresher for everyone. Especially important in these times when many are stressed, maybe short with coworkers.
Addressing Diverse audiences
Who can't work on their communication skills?
Communication in a COVID-19 world

Appendix C: List of Responses

Please elaborate on up to three of the skills above (5/5)

Monitoring and evaluation

Evaluate monitoring data Evaluation of sampling data

Farm level monitoring water quality monitoring

Evaluating reduction

With effective monitoring and eval, we will be better prepared to tell our story through outreach and education. The story we tell will then lead to more effective fundraising activities.

Monitoring & evaluation are my top work priorities/tasks; always looking for ways to improve, learn, and increase efficiency/reduce costs.

I tend to play a role facilitating the social aspects of water resource management in our area and would like to have a greater understanding of how to monitor and evaluate effective practices.

Measuring outcomes, tracking improvement on farms

Consistent goals and measurement methods across the state

I'd like to know where to find monitoring resources

The ability to prioritize and evaluate the benefits of applied practices.

Finding current data that is relevant to our projects and not biased.

I need to learn more about which metrics are required for growers to be poised to receive market payments for eco-system benefits.

Evaluation of practices and how it relates to a large-scale farming operation

Would like to be able to have my own research projects monitoring water quality, and spend more time on these types of efforts

I think monitoring and evaluation methods are very fluid and change as new technology is created and that's why I selected it for number 2.

Develop skills in monitoring and reporting for USACE permits

I would like to increase the capacity to conduct monitoring of watersheds pre and post conservation practice installations

Evaluation of changes to the landscape. Evaluating success.

If I can help provide evidence through monitoring and evaluation, that "proof" may help educate producers.

Other

Agronomy Nutrient management Agronomy

Profitability on Farms Input of practices

Addressing the lack of diversity in our field, and discussions about environmental justice and equity in conservation

Mass Communication effectiveness

More information/knowledge with the conservation programs

Ability to read landscapes and their ecological well-being

I'm always interested in knowing more ways to do this well.

Be able to do more conservation planning

seems people are interested in soil health, water quality but doesn't translate into actions they are excited during plan stages, but implementation is lacking

greenhouse gas emission reduction on farms

how to better prioritize and allocate resources to certain geographies and resource concerns

How to better utilize social science to influence and inspire others

Finding and utilizing new tools that are out there.

how to diversify farms, rotations and habitat

Implementation: Design experience

there's always room to learn more!

Appendix D: List of Responses

If you could hire a new employee for your project, what is the first skill you'd look for? (1/2)

Communication

Communication x4	Communicator x3	Facilitation for meetings, working with landowners, and being able to express complex topics easily.
Communication skills x7	Writing skills	Ability to understand where a farmer is coming from- why they farm the way they farm
Education and outreach	Verbal communication	Effective Communication with Landowners
Personality to communicate	Personable	Ability to work one on one with farmers
Soft skills (communication and ability to build connections)		Ability to engage with and develop rapport/trust with producers
People skills, one who wants to learn and understand through actively listening to others		The ability to go out and talk with producers and "sell" conservation practices to them
Communication skills - ability to write press releases, create outreach materials such as advertisements, flyers, social media content, etc. so I could focus my time on other activities.		Someone who could speak with both farmers and landowners about different conservation practices. They need to be able to do so without making the producer or landowner feel that they are stupid for not already knowing the information.
Good outreach/communication skills.		Facilitation for meetings, working with landowners, and being able to express complex topics easily.
Effective one on one communication		Knowledge of local production agriculture. One on one communication skills.
Confident personality with excellent one on one communication skills		Ability to talk with landowners and farmers
Outgoing and eager to learn		Adaptability in reaching different stakeholder groups
Friendliness and willingness to talk to others.		The ability to effectively communicate with a variety of stakeholders.
Writing ability and adaptability		Ability to network with a variety of stakeholders and speak to the issues at the appropriate knowledge level for those stakeholders.
People skills! Making others feel comfortable and inspired is #1.		Relatability to the customer
A great personality that makes people feel safe and trusting. Everything else can be taught.		Communication skills for engaging with the public
Ability to communicate with others/the public		Facilitation and coordination with partners
Personable. People talk and open up (and listen!) to those who are personable and friendly.		

Appendix D: List of Responses

If you could hire a new employee for your project, what is the first skill you'd look for? (2/2)

A specific background or technical skill/knowledge

Agronomy x2 Experience x2
Agronomic and soils knowledge
I would look for someone local with a practical farming background.
Understanding of conservation/environment and ability to advise groups on practices, projects, etc. and tracking the data and analyzing it to report outcomes to environment
Basic knowledge of the agriculture production industry
Natural resources interpretation skills
Knowledge of local production agriculture. One on one communication skills.
Conservation Friendly Agronomist
Farm experience, passion for conservation
Technical skills with monitoring and working with farmers
Knowledge of farming operations
Knowledge about watersheds and agriculture
Environmental or natural resource knowledge
Understanding of farming operations and field scale environmental assessments
Watershed modeling experience
CAD/design experience Graphic design/illustration
Design and engineering for ponds, sediment basins, terraces and ag waste
Engineering edge-of-field practices - we bottleneck there.
Someone to manage social media. Fundraising!
Has social science background
Ability to build community capacity
Local connections / knowledge of the watershed
Data management, interpretation, and display
Demonstrated experience bringing agriculture and conservation communities together.
Understanding of systems thinking approach
Knowledge of equipment used for assessments

Passion/work ethic

Self-motivator Attitude/Motivation Character
Adaptability Efficiency
Hard work ethic Self-starter
Passion for the project and or organization skills
Passion. If the employee is passionate about the job, they can learn most of the technicalities later.
Passion for what the job would be
Dedication to the project; willing to work irregular hours in response to storm events.
A polite respectful attitude with dependable work ethic and excellent listening skills.
Ability to get the job done; and attitude (people skills, flexibility etc.)
Outgoing and eager to learn
Organized but able to handle chaos

Other

After completing a gap analysis of existing staff skills compared to the work that needs to be completed, I target hiring for the skills needed for that work. I also use the DISC profile assessment tool to assist in confirming the skill sets needed.

Just hired two excellent people

Appendix E: List of Responses

Which outreach strategies do you feel have the greatest potential? – ‘other’ responses

One-on-One initiatives

- “one-on-one in the field” (1st)
- “One-on-one follow-up (e.g., assessing benefits of cover crops)” (2nd)
- “one-on-one site visits / conversations” (4th)
- “One on one contacts” (2nd)
- “Peer to peer communications of positive experiences” (1st)
- “any other opportunities for peer-to-peer learning and empowerment” (3rd)
- “Us (watershed coordinators) personally reaching out to farmers letting them know what we offer and how we can increase profitability on their farm” (3rd)
- “One on One Relationships” (1st)
- “One-on-one property walks” (4th)
- “one-to-one communication and trust.” (1st)
- “One on one meetings with landowners” (1st)
- “One-on-one meetings” (5th)

Small groups

- “small neighborhood meetings” (7th)
- “local community” (4th)
- “Kitchen table meetings in small groups” (3rd)

Targeted outreach to farmers/others

- Small farmer gatherings...even the coffee shop talk (1st)
- Farmer Panels (2nd)
- Farmer to farmer conversations who have already had good experiences with our programs (2nd)
- Producer-led initiatives (2nd)
- Incentive programs to start conversations with producers (7th)
- Strategies to reach non-white populations, women, and absentee landlords (5th)
- activities targeted to non-operator landowners (3rd)

Local partnerships

- Regular, transparent messaging with local partners (SWCD, NGOs, universities, NRCS, etc.) (3rd)
- Partnerships with other local organizations, such as NRCS/SWCDs (1st)
- Targeted outreach with key partners, landowners, etc. (1st)
- Targeted partnering with local organizations, schools, citizens, businesses, etc. on asking them to assist with specific messaging or simply asking them to use their connections as a multiplier effect on a targeted goal or message. (2nd)

Information spreading

- More press from Farm Journal or other respected journals. The articles can't just be blind praise but need to be in-depth with specific technical information. (4th)
- Personalized mailings (6th)
- monthly newsletters (5th)
- Targeted mailings (6th)
- interactive maps/results online (7th)
- Signs identifying conservation practices along roads (5th)

Miscellaneous

- regulation (not an outreach strategy, but certainly a heavy influence!) (1st)
- Financial analyses (3rd)
- Dollar amount of cost-share. (3rd)
- bring able to provide cost share (1st)
- Watershed scale programming (2nd)
- Good working relationships with farmers and contractors (2nd)
- Practical instruction from local ag retailers on how to successfully adopt soil health principles(e.g. equipment setup/modification, cover crop seed mixes, private agronomists who understand and advocate soil health principles) (4th)

Appendix F: List of Responses

Please give an example of training/event you attended that you really liked? (1/4)

Iowa Water Conference

Iowa Water Conference, great keynote speaker to start it off and then multiple breakout sessions led by a variety of speakers (watershed professionals, science professionals, city leaders, etc.)

Iowa Water Conference The enthusiasm of the speaker motivated us to think big and accomplish great things.

Iowa Water Conference. Lots of people to make connections and lots of discussions/presentations.

As an administrator, I tend to send program staff to trainings and events. The Iowa Water Conference through Iowa State University is one that I have attended.

Iowa Watershed Academy

Iowa Watershed Academy a few years ago - Iowa Ag Water Alliance (and Iowa Learning Farms, I believe) taught some sessions on effective communication and even practiced doing interviews - like for television or radio bits

Iowa Watershed Academy that had in-field training

Iowa Watershed Academy. It was a well-rounded training with many different presenters

Watershed academy. We broke out in smaller groups and talked about successes and failures and brainstormed pros/cons/solutions.

Iowa Watershed Academy does a great job. I like that there are a variety of presentation methods-large group presentations, small group discussion, field work. It helps you get to know people with still enough distance for an introverted person to not feel overwhelmed.

Iowa Watershed Academy, Facilitated group discussions

Other in Iowa

ISU Extension & Outreach Crops Team recently hosted a Field Basics Crop Scouting webinar. It covered a range of topics. Very beneficial refresher.

Growing Sustainable Communities conference held annually in Dubuque. It is a very inspiring event, with speakers that aren't afraid to challenge the status quo. The individual sessions feature change-makers who have accomplished major successes for the environment and public health. I really don't get this at most watershed events, because I feel like we are typically skirting the real issues.

LMW in Iowa

LMW - Dubuque, IA 2016? I really enjoyed learning about the different tools to evaluate the economics of conservation practices including the cover crop economic tool (from NRCS in MO) and AgSolver.

The 2019 LMW Meeting in Cedar Rapids was great - for many reasons! I thought there was a good diversity of topics and speakers within a central theme (Economics of Conservation ... from the Farmer's/Crop Advisor's/Landowner's Perspective) - plus the speakers themselves were excellent! I enjoyed the facilitated discussion breaks, which kept us engaged while giving us a chance to interact and network. I appreciated the diversity of attendees - from different states, different watershed roles, etc., which really helped put things in a Midwestern context (not just the Iowa context I'm used to). It was also fun - the water bar, the social and dinner at a local restaurant, and (not exactly related, but...) the opportunity to visit the museum afterwards. Finally, I appreciated the follow-up ... being able to download presentation slides from the website, the invitation to the Google Group (which I don't use as much as I could, but I still appreciate it), and getting a postcard in the mail 3 weeks later (reminding myself about aha moments, people I want to collaborate with, and some action I want to take) that stayed on my refrigerator for a long time. I have a whole binder - just from that meeting - and I have referred to it several times since the meeting (looking things up for myself, sharing things I learned with my co-workers and other colleagues).

The Midwest Leadership meeting in Cedar Rapids Iowa, Great variety of speakers, each had their own points to cover which were very useful. I also appreciated the social events which helped to get to know a few new people, each had a story to tell which I enjoyed.

2019 Leadership for Midwestern Watersheds

I really enjoyed the 2019 LMW event in Cedar Rapids because it had a good mix of speakers including commercial ag, financial experts, and conservation experts.

Four county northeast Iowa soil health workshop in Monona, Iowa on February 27, 2020. The speakers were excellent and were selected to meet the needs of the target audience.

Appendix F: List of Responses

Please give an example of training/event you attended that you really liked? (2/4)

Wisconsin based

Farmers of the Barron County Watershed winter meeting 2020. It dealt with local issue that farmers in our area could relate to and try.

Producer Led workshop hosted by DATCP - very good opportunity to share information and learn from others.

Wisconsin cover crop conference

Wisconsin Trout Unlimited

US Water Alliance: Adaptive Leadership, Madison WI June 2019

2019 WI Producer- led annual workshop

Red Cedar Watershed Conference. Diverse audience, speakers, topics, exhibitors. Lots of informal networking/ conversation time in between formal sessions.

WI Annual Farmer Led meeting

DATCP Producer-Led & WI Cover Crop Conference

Wisconsin cover crop conference; good location, farmer speakers, networking opportunity

Wisconsin Cover Crop Conference - Several hundred farmers, agribusiness professionals and conservation professionals all together discussing conservation implementation ideas

Based elsewhere

Mississippi River Network annual meetings; social time and gathering afterwards with the opportunities to have one-on-one conversations about what I want to talk about instead of the moderator-controlled topics or just presentation. Those were included too, but I need some time to network on my own after those moderated sessions.

The North Central Region One Water Action Forum held in Indianapolis was valuable because it brought together a very diverse audience and focused on ways to move watershed efforts forward in ways that engaged agriculture, municipality, and other partners. The forum inspired action toward common goals.

North Central Region Water Network's One Water Conference in 2018. It was a good mixture of formal presentations and small group discussion time, as well as time to network and meet other professionals.

Minnesota based

Farm Viability Conference in Red Wing (2019); many sessions were focused on farm economics - bottom line - if the finances work out - so will the environmental concerns

BWSR Academy in Minnesota - relevant and diverse trainings.

UMN Extension Civic Engagement Cohort - Built relationships with other outreach professionals, learned and practices techniques before moving into real world situations

BWSR Academy

MN Board of Water and Soil Resources Academy

Winter meeting in Le Sueur County on Cover Crops and Soil Health

MAWQC Nutrient Management and Nitrogen Conference- Because the speakers presented on current and new issues and shared their examples of what they did for their program.

BWSR Academy workshops on outreach with specific examples and tips of what has worked and not worked.

Midwest ag Foresight Think tank Workshop

Illinois based

Advanced Soil Health Training. This was spread out over 18 months with 6 different meetings. It took farmers and conservation professionals from Central Illinois and took us beyond the basics of soil health. I thought that it was very beneficial because of the speakers that they brought in, as well as hearing from the other participants about what they are seeing and/or doing for soil health and conservation.

Appendix F: List of Responses

Please give an example of training/event you attended that you really liked? (3/4)

Other trainings

Strategies for talking to farmers She talked about the sociology aspects of talking to others and also talked about effect ways to reach middle adopters.

Nation Wildlife Federation - Cover Crop Champions workshop. This was a two, half day workshop where we were given a presentation on what to do then broke into two groups and tried out what we had learned. We then talked about that experience in the larger group.

STREAM event put on by IDNR it was all in the field learning about stream morphology

Stream assessment protocol training. very hands on led by knowledgeable people whose jobs involve in field work

NWF had a series of webinars that just barely touched on attitudes and what motivates change in the agricultural community.. this was very interesting but not enough info to act on. This was part of their Cover Crop Champions program but there was no other info other than the webinars, it would be nice to go more in depth and have some written summaries to refer back to. Webinars are great but hard to go back and find the info you want at a later date.

Watershed Cohort, the trainers made sure to continually ensure that participants were learning the important lessons. They understood that some of the material could seem a little too personal/touchy-feely for the participants, but they balanced that with discussions. The presenters were easy to talk to and relate with.

Robin Moore - LSP's approach to reaching female landowners seems to have worked and is a great template for others to follow!

Sediment collaborative with NCED and state agency partners. Research was presented and discussed among broad stakeholders.

Farm business management. Understanding the ag business and planning. This has helped gain understanding of how farm business decisions are better connected to conservation

A soil health livestock workshop. It was very interesting to hear about soil health and how your grazing methods can come in to play with soil health. It was nice to hear about soil health associated with something other than cover crops and no till!

Watershed Planning Training - conflict resolution, team building, partnership development, consensus building, group facilitation, communication, difficult meeting behaviors, civic engagement, etc

Fishers and Farmers Partnership Watershed Leaders Network. Learned a lot from other watershed groups. Lots of open discussions and story sharing, great facilitation and questions. Activities to begin to form a plan to put our new knowledge to use in our own watershed project. Farmer input. Good combination of conservation professionals and farmers.

Fishers and Farmers Watershed Leaders Network workshops are wildly inspiring and extremely informative in practical ways - invaluable

On soil health showing the positive effect of no till on soil structure with a matching set-up of two cylinders where the clods are dropped.

Soil Health Training. A lot of are water quality concerns could be addressed with improvements in soil health.

Wetland Delineation - good balance between indoor and outdoor work. Hands on experience.

Field days

Any field day where a farmer gets to share their experiences. Events where farmer is thinking a bit outside of the box and is innovative, and snacks always help

On-farm demonstrations of what successful (regenerative) farmers are doing.

Any of our field days with farmer panels. Our farmers view things through a different lens and provide a fresh, balanced perspective.

Field day, soil ecosystems Field days with Farmers

Appendix F: List of Responses

Please give an example of training/event you attended that you really liked? (4/4)

Other

One of the PC meetings (for new coordinators) we sat in a circle and asked each other questions, gave recommendations on how to be more efficient, and provided guidance to each other on various things. It was very helpful and a great way to meet co-workers that are spread all over the state.

In 34 years of professional experience across three careers, I have only attended two training events I believed were effective. They do not often provide enough knowledge to effect change. More importantly, knowledge alone cannot help you change if there is not a meaningful and supportive context into which you bring the knowledge. There has to be some congruity between your work setting and the information you receive, or you are left with information you cannot apply. There has to be enough time for practice. Your audience has to be invested in what you know and share. I could go on, but I suspect I am making my point clear.

Working with others to engage more conservation

I enjoy hearing from early adopters talking about things they've tried and what they've learned about conservation practices.

Break out groups, short formal presentations and follow up assignments

It is great to combine classroom learning with field experiences

Appendix G: List of Responses

Please give the name of a speaker that you really liked (1/2)

Named speakers

Chad Pregracke (Living Lands & Waters) (x4)

Gabe Brown (x3)

Ryan Stockwell formerly of NWF was also good; discussing social change in farmers (x3)

Ray Archuleta (x2)

Rick Clark (x2)

Wayne Fredericks (x2)

Jason Gomes (x2)

Doug Peterson (x2)

Tina Bakehouse - she is AMAZING. PFI used her at the Cover Crop Bootcamp in Dec 2019, she gave a very effective presentation on how to give effective presentations. 110% recommend, super engaging and relatable, and I took a full page of notes instead of scrolling through Twitter on my phone

Jessie Brown

Jerry Daniels

Jason Cavadini UW Extension

Tom Cotter (Soil Health systems)

Josh Divan - Pheasants Forever - he talked about precision conservation and precision ag technology in northern Iowa. It wasn't watershed focused, but it was about the farmer's perspective and benefits.

Brian Dougherty, Iowa State Ag Engineering Field Specialist shared his insights on soil health that he had learned from farmer while travelling via a Nuffield Scholarship.

Paul Dietmann

Michael Doane, TNC

Wade Dooley - Farmer

Kamyar Enshayan

Jessica Espenshade-National Wildlife Federation

Brian Fredrickson, U of MN Extension

Jody Hornvedt (MN Extension)

Nathan Hylla from Minnesota

Chris Jones

Nicholas Jordan

Adam Kiel

Kevin Kuehner - he had such innovative and interesting approaches and results!

Ted LeBow

Matt Liebowitz.

Mark Licht

Dale Macheel

Rob Myers

Tony Peirick

Michael Mucha, Exec Director, Madison Metropolitan Sewerage District

Nancy North was a great facilitator!

Paul Robbins, Dean, Nelson Institute for Environmental Studies University of Wisconsin-Madison

Shawn Schottler (Altered Hydrology)

Craig Soupir, MN DNR Fisheries

Toby Spanier

Larry Weber, University of Iowa

Appendix G: List of Responses

Please give the name of a speaker that you really liked (2/2)

Speakers' names not remembered

Outreach person with the Mississippi River watershed organization in Minneapolis.

?? Nechanicky, farmer somewhere around Vinton Iowa, I believe.

I cannot remember her name, and I don't have the materials with me, but she talked of mycorrhizal fungi and how important they are for soil health and conservation.

Sorry I don't remember the name, but it was the farmer from Iowa, regenerative ag topic

I don't remember her name, but they had someone from Pioneer (I think). Any time someone from ag industry speaks, its interesting. Its a different perspective than the agency ones we always get.

Don't remember his name. He spoke about the mussel production.

It's been awhile but really all the farmers who presented at the annual meeting. It's important to hear from them and in this scenario, they were willing to talk, as advocates.

Other

My favorite training event did not have a speaker, it had a highly-skilled facilitator who brought out critical points from a hand-picked audience of stakeholders. This was done through simulations, real-time attitude surveys, and rotating small group interaction. The facilitator worked for a company called Future IQ.

Local farmers that have helped gain better understanding of individual planning goals

Any of the producer speakers are effective.

I like speakers who communicate the big picture understanding of the scale we need to be working but balance it out with practical advice for getting work done in watersheds. (e.g., Rebecca Power)

The best part is that it a facilitated discussion of attendees - everyone contributes. The facilitators do an amazing job guiding the conversations.

Appendix H: List of Responses

If a professional certification program for watershed coordinators existed, would you want to become certified? (1/2)

Yes

I am 100% in-favor of certification programs, I myself am a Certified Crop Advisor - I don't use the skills every day, but I feel like it makes me more of a leader in farmer groups

I think some kind of standardized training and certification would be a big help

I currently don't have any on-boarding for my position, so a certification course would give me a better frame of reference for completing projects and understanding watershed management

I feel the professional development of our person situations is extremely import to project confidence from the public, agencies and peers.

Maybe

Depends on what it looks like and how much it would cost to participate. The level of turn over in Iowa leads me to say it might not be worth it unless the state steps up and provides the necessary benefits to attract and maintain coordinators.

Maybe? Not sure what the value of this would be? I have numerous certifications, and they each apply for legal, engineering, or similar reasons. Not sure why a certification would be needed to be a coordinator?

I presently see many young conservation professionals coming out of college with more focus on how computer models solve problems rather than being trained on systems thinking and making ongoing observations of field activities. Many mid-level managers have not moved on from this elementary approach to resource management either. So I am concerned that like the MN Watershed Specialist Training, people with the certificate may falsely feel they know all there is to know about water resources management while in fact have very little experience let alone interest in real problem-solving efforts needed by society.

I current position is a dual role and would not take on this sort of responsibility exactly. But otherwise I would be very interested in something like this.

Wouldn't change my pay, not really into credentials

I would be interested, but also concerned that creating such a certification program would make another hoop for someone hoping to enter the field to jump through. It would be a nice thing to expand upon current knowledge for current watershed coordinators, but hopefully would not become some 'unknown' requirement for future careers. Relatable example being the Wildlife Biologist Certification through The Wildlife Society.

Depends on the course material

Would have to see what the benefits of taking the time to become certified

This is a very qualified "maybe." The program must be driven by practitioners not academics and other "knowledge vendors" selling their wares. It also has the potential to become political, burdensome, or irrelevant. I've seen it happen in other fields I have worked in. Additionally, without the support of policy and the majority of farmers, the seeds of expertise fall on dry ground. So if this occurs, please make it relevant - and please do all you can to create an environment in which we can be successful. (I do not require our knowledge deficits to be the major limiting factor.)

It depends on how applicable it would be to my work.

Always interested in learning more to do the best job possible.

I think training is definitely helpful. Maybe certification could provide more training opportunities, but certifications programs are not always helpful. Each watershed is too unique.

Appendix H: List of Responses

If a professional certification program for watershed coordinators existed, would you want to become certified? (2/2)

Maybe

I don't need certification but would possibly be interested in the information provided by a training.

I would be interested in a program that helped planners, not focused on field-work-related skills

What value would it add? Most watershed coordinator positions are low level and low paid. How would a certification program change that?

I might, depending on the requirements to do so and what the benefit of it would be.....what exactly would one be certified in? I hear certified watershed coordinator and think what the heck is that...whereas I hear certified farm manager and I don't question what that is.

Would depend on person job requirements, but I think having this certification would be wonderful for hiring staff / contractors

Time & Cost Dependent

If it might lead to paid employment

I am a volunteer, and maybe it would help to have some sort of credential - I'm not sure.

I can see the value in a certification program, not for the certification itself, but rather for the training it would likely provide. The other thing that comes to mind is that watershed project coordinators seem to (for the most part) be rather ephemeral. Whereas there are a few long-time watershed project coordinators out there, there is also a ton of turnover. Off the top of my head, I can only think of about half a dozen project coordinators who are still in the same roles as when I met them 7 years ago. The majority of the others have transitioned to state and federal positions (with more job security) as opportunities have come up.

No

This would just add more barriers to getting a job as a watershed coordinator. On the job training would be more helpful.

You only really learn how to do this job by gaining experience.

Before certifications are available, equal pay needs to be addressed. In Iowa, too many watershed positions are used as steppingstones to either NRCS or DNR. Hired by SWCDs, salaries are all over the board and benefits are scarce. NRCS is certifying planners, and frankly I think we did a better job planning 15 years ago and planned more. Conservation has become a game of paperwork and forms and training.

Many technical certifications exist; on the job learning within watershed context (social, political) cannot be book learned

Certifications will not help receive funding for cost share in which farmers are needing

I would if I was younger

too many other things going on

Might be fine for someone new in the field, but wouldn't make any difference for me

I would send staff/program director for this

No need in my role

A piece of paper does not translate to clean water - the job is dependent upon the actions of others

Appendix I: List of Responses

If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming? (1/2)

Mentee

I am a newer coordinator, and my project is newer. It would be nice to be paired with someone to help figure out the next steps or process as the project moves forward.

I think it's valuable to be both.

Learning from other experiences, developing a relationship, and being held accountable to someone all help me develop and grow when face with challenging tasks.

I would want to be a mentee before becoming a mentor. Another comment: do we get to pick a mentor? I worked as a teacher in a district that mandated mentor-mentee arrangements for the first year of teaching. It was a good concept, but a lousy practice. We could not choose, and no extra time was given to either party to engage in the process. They don't do it anymore.

I think everyone needs both. I have issues in my watershed that I did not expect even though I have been trained in many other aspects of watershed coordination. I could teach others about my experiences, but I also need help from others. Categorizing like this may actually lead to more hesitancy to seek help if someone feels like they need to be the expert.

I'm a relatively new coordinator

I would want to be "qualified" first, and then be interested in being a mentor.

Again too many other things going on. but if someone could help in balancing that while getting some guidance, I could be interested

Have a lot to learn in this subject, currently have a very broad knowledge of everything

I am not a true watershed professional other than I was involved with watershed scale planning for a new water plan through BWSR's one watershed one plan program so that local government agencies can remain eligible to receive state funding.

Both- I would also be willing to mentor a brand-new person but willing to learn from someone who has done it for a longer time than me

As an ED how I might learn from more seasoned folks in the field

I'm probably past this point now, but I think I would have really benefited from a mentoring program when I first started.

Mentor

If i could mark both mentee and mentor I would. I personally was trained by a watershed coordinator for 4 years before I became a coordinator myself. There is a much better connection with coordinators than say a NRCS employee. Much more passion for the job, plus we understand we have to put out work or else could have our project eliminated. I believe I can always learn more, but I also know I can train others to be a successful watershed coordinator.

Again, I don't have any onboarding and there aren't many coordinators in my office for me to ask questions to. I began in January and am playing a lot of catch-up to get going

I've been a very successful watershed coordinator in Iowa for 5+ years now

I have mentored several interns including IDALS, District and NRCS Pathways. Sharing our knowledge with the next generation is important plus to advance their career choices in the water quality profession.

Appendix I: List of Responses

If a mentoring program for watershed coordinators existed, which of these would you have interest in becoming? (2/2)

Mentor

Probably both but this may be the more important of the two options at this point in time.

Great idea. We need more pro's giving back on the experience they have gained

I have 7 years of experience to share

Especially for those in MN with questions/interest in 1W1P

I've been working on watershed issues for over 12 years now, so I feel I do have some knowledge to share.

I kind of already do this.

Outreach

Neither

I don't feel qualified to be a mentor, but I am not at the beginning either, so a mentee might not be appropriate either.

Iowa had an informal mentoring program, but most new coordinators don't last long enough for it to have a tangible impact.

I have been on both sides of this coin. A good coordinator often doesn't have the time to mentor.

I prefer to learn from a wide range, not sure this relationship would benefit me.

I'd like to be both

Appendix J: List of Responses

Do you have any other thoughts to share? (1/2)

I know there is a ton of resources that could be tapped into as a coordinator but for the workload in our office it is hard to step away at times. This is an awesome job, but I feel not many know about it or feel comfortable being "temporary full time". I also believe there need to be more benefits for the position such as health insurance. This time and age professionals need that service or else they may move on and find other opportunities. This can be one of the most rewarding and satisfying jobs, we just need to find the passionate folks out there looking for it and willing.

I really enjoyed the talk last year by the farm credit representative and the talk with the American Farmland Trust & Land Stewardship Project.

I feel that all of the events I have attended have been beneficial. There is always something new to learn.

I have found some valuable but attended far too many that were "preaching to the choir" and offered little benefit for the time taken away from working with farmers and local partners. I do appreciate events and learning, but local obligations are always going to come first.

The sooner we apply true economic principles to our implementation strategies, the sooner our water resources will see greatly reduced impacts in addition to seeing increased farmer profits as well as reducing costs to taxpayers.

I may only retain a few key concepts from a watershed event that I've attended, but I always remember the quality of the refreshments. For example, the Scheman lasagna is lousy but its been served at all but two of the Iowa Water Conferences that I've attended.

I like to be up to date with the newest research, technology, or conservation methods because I am able to better converse with producers. I feel watershed events help with that.

I love the LMW conferences. I'd like to continue to attend. I'd also like to know more about the Farmers and Fishers conference and hope that it would be made available to Wisconsin LCD employees.

The biggest change I have seen is the lack of local funding and grants, and projects devoted to smaller watersheds. When NRCS and the EQIP, RCPP, MRBI, etc. projects took over, we lost control of local fund distribution and by the time funding is ranked and procured, months to actual years go by. Local interest wanes when the projects become so large and impersonal. Farmers and landowners took pride in their watersheds. It is hard to find that anymore.

It's hard to specialize in one particular area in this job, need to be a jack of all trades to be helpful to clients and in a small office.

I like the idea of doing a standard online agronomy course for those of us promoting agronomy practices - a lot of us come from a non-agronomy background and have learned everything on the job. Something formal would be useful!

I liked at the last LMW meeting to write down follow up on post cards and get it sent back to you. I liked that.

Too many agency/government attendees, and not enough farmers at farmer-focused field days. How do we reach the target audience better, and get them to engage?

A big part of the job satisfaction and professional development relies on regular attendance of watershed related events, trainings and conferences. The networking available at such events is well worth and cost of attendance. Hopefully the social distancing will be short lived and reach it's goal of flattening the curve so we can resume in person events soon.

Appendix J: List of Responses

Do you have any other thoughts to share? (2/2)

Thank you for putting this together, results will be helpful for filling the gaps in watershed projects around the region!

I have made great connections with people and concepts at the watershed track of the Driftless Area Symposium held in La Crosse each February by Trout Unlimited.

Social media marketing training

All the training I've been to has been helpful. Seeing what's new is great, but sometimes its important to review the basics again, too.

Being able to get farmers seen as leaders in conservation

Strategies for adapting to the new COVID-19 circumstances would be helpful. I'm working hard to figure that our right now. I would also appreciate advice on how to deal with politics in my watershed. Leaders in my county are quick to reject ideas simply out of concern of public perception. I'm working through that, but any advice would be helpful.

For whatever it's worth, I have seen so much time, money and concern put into surveying and metrics when it's obvious that the results of these efforts do not give an accurate picture overall. It seems more of these things are done to please the process or what people think they need to do instead of it actually being valuable. Surveys are done and then sit on a shelf. Studies are done and people are excited about it, but the makeup of the professionals is not representative enough to make it useful.

I enjoy the LMW meetings and look forward to them every year; I appreciate the networking the most.

Watershed Planning in Minnesota right now is about building or improving relationships with those neighbors that traditionally haven't been a partner. There is some cost to having more meetings and travel, but I think partners are starting to see the benefits of improved relationships between partners

The Minnesota River Board used to hold annual conferences and research forums. They don't do it anymore. Now we're expected to attend UofM three-day water conferences that are expensive to attend and use too much time. With all the research done in the MN Basin, shouldn't these researchers and state agencies bring the findings to the people in the field?

Continuing to offer these gatherings is very important. It is very helpful for us all to be able to network and share ideas. But we also need to not shy away from the real issues - adoption of practices is abysmally low and with the current farm economy it is not clear how this will change. Until industry starts to pay farmers for products produced sustainably (beyond just pilot programs) then it is doubtful we will see meaningful change.

I feel that I've shared most of my thoughts in the comments (and thank you for providing an opportunity to explain answers), but I'll just end by saying that I appreciate that LMW is seeking feedback from (and listening to) watershed professionals.

Keep them coming

I hope LMW conference can continue in some capacity in the future... perhaps integrating climate-mitigation as an aspect to the work we're all doing already might help with funding opportunities and be able to broaden the appeal of this convening.