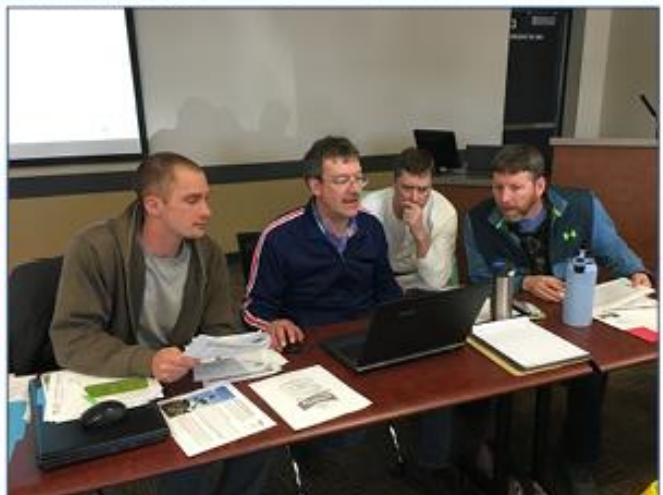


— Technical Training and Certification Program —

## Technical Training and Certification Strategy: 2015-2020 Implementation Evaluation



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## Executive Summary

The Technical Training and Certification Program (TTCP) is a collaborative effort between MASWCD, MACDE, NRCS and BWSR, and is designed to efficiently provide training to develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting the conservation delivery needs of Minnesota.

The partnership was primarily created to address input from SWCDs and NRCS, which indicated technical training needs were not being met. The following input was taken from a 2012 TAA inventory and survey with SWCDs, a 2014 MCEA workshop discussion on technical training opportunities, and a 2014 Technical Assistance Summit attended by NRCS and MACDE:

**Key findings from these formal and informal reviews include:**

- 73% of SWCDs have a desire to increase their levels of JAA
- 82% of the participants at the MECA workshop indicated their technical skills/conservation practice training needs were not currently being met
- 78% of the MECA workshop participants cited a lack of offerings and lack of available mentoring/on-the-job trainings as barriers.
- SWCD Technical Service Areas (TSAs) are very important for providing shared engineering and technical assistance support. Summit participants recommend using TSAs as vehicles for additional shared services beyond the current engineering assistance.
- In regard to JAA, state strategies should be developed for establishing an enhanced local/state/federal JAA process that provides training and increased technical capacity for conservation professionals

The partnership, established in 2015 to address these findings, created a renewed commitment for technical training in Minnesota and provides resources and leadership to achieve program goals, including:

- A streamlined and coordinated approach to assessing needs and delivering training
- Increased opportunities for obtaining job approval authority for conservation practices

In order to achieve these goals, the partnership created a [Technical Training and Certification Strategy](#) (pdf), which was designed to provide a framework for development of training and credentialing for local conservation professionals.

The purpose of this evaluation is to document progress in implementing the Technical Training and Certification Strategy, evaluate how and where the program has met the objectives outlined in the Strategy, determine the impact the program has had, and to identify areas where continued improvement or additional activities are needed.

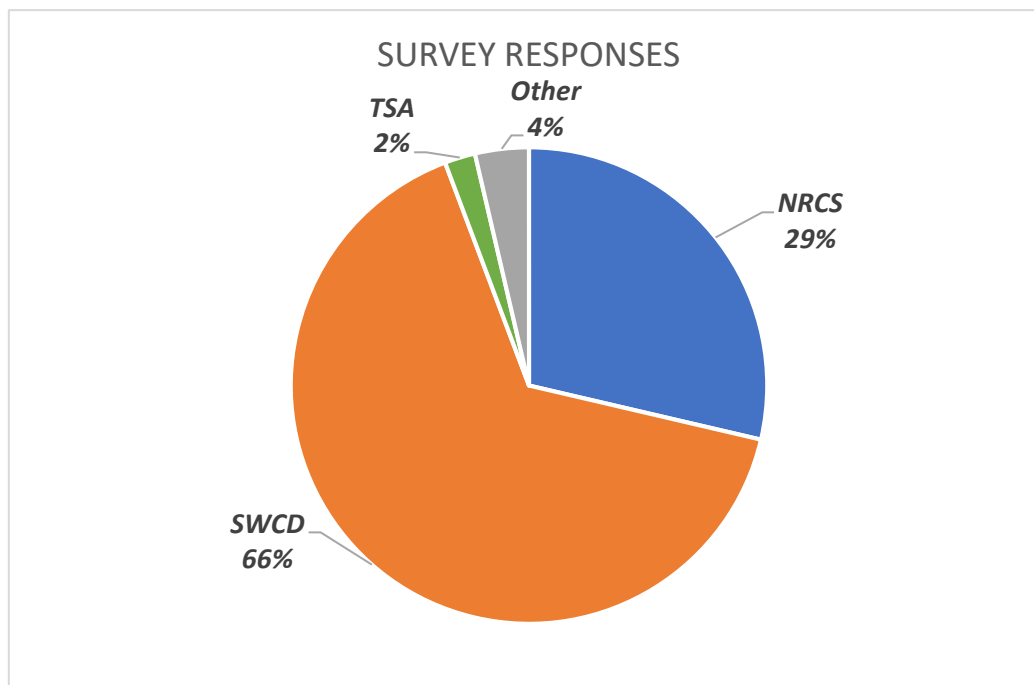
Key findings from this evaluation report include:

- TTCP has made good progress towards meeting the goals in the strategy, however, there are some areas, such as on-the-job training, where additional efforts are needed. The foundation of a training program was established, and a library of in-person and online training sessions have been developed.
- Email is the preferred communication method both among trainers and with field staff. Breakdowns in this communication at times has reduced the awareness of technical training activities.
- Individual Development Plan (IDP) completion is trending upwards but could still be improved. Continued outreach should occur for how to complete IDPs based on priority resource concerns and practices.
- The quantity and quality of technical training in Minnesota has increased dramatically since this Program started. Technical staff indicate they are satisfied with the training content being provided by TTCP, but that they would like to see more sessions offered.

- Technical staff have not yet developed confidence in the availability of future training offerings. Finding ways to make training offerings more predictable would be beneficial.
- The majority of technical staff report increases in their technical abilities to identify and treat resource concerns.
- 88% of technical staff either obtained or are working to obtain Job Approval Authority (JAA).
- 71% of technical staff are certified planners or are working towards certification.
- Since 2018 TTCP has provided 244 trainings to 5,154 attendees.
- The Partnership has been successful in increasing communication and collaboration, which has greatly improved technical training delivery.
- The development and launch of the Individual Development Plan tool in eLINK has improved the collection and assessment of technical training needs, resulting in an increase in applicable and timely training opportunities.
- Development of the Core Competency trainings for Soils, Water Quality, and Conservation Planning will provide foundational training to all conservation staff throughout Minnesota.

## Scope and Methodology

This evaluation is focused on reviewing the progress and impact of program administration efforts and implementation of the Technical Training and Certification Strategy as a whole. It is not intended to provide information related to the evaluation of individual training sessions. Data was collected using existing website analytics, existing training evaluation surveys, new qualitative surveys, and quantitative and qualitative information submitted through eLINK. Specific feedback was also gathered from focus groups consisting of NRCS Area Resource Conservationists (ARCs), Area Engineers (AEs), and State Office Engineering and Ecological staff, as well as Technical Trainers from the TTCP.



Much of the information contained in this report was gathered using an online survey that was distributed to all NRCS and SWCD employees in April 2020. The survey was also advertised to NRCS and SWCDs using Train Tracks (BWSR's monthly training newsletter). The survey was completed by 193 people. Figure 1 shows the distribution of responses by organization. The questions used in the evaluation survey can be found in [Appendix A](#).



## PROGRAM ADMINISTRATION

### Background

To coordinate consistent training, the Partnership established the Minnesota Technical Training Committee and Area Technical Training Teams. The Minnesota Technical Training Committee and Area Technical Training Teams consist of NRCS, BWSR, MASWCD, and MACDE staff at local and state levels.

#### Minnesota Technical Training Committee

The Minnesota Technical Training Committee (MTTC) was established to provide a program administration role and guide the implementation of the Technical Training and Certification Program (TTCP). MTTC membership consists of representatives from each of the agencies or associations from the Partnership, and is a resource for guidance, setting priorities, and making decisions.

#### Area Technical Training Teams

Area Technical Training Teams (ATTTs) are made up of NRCS, SWCD, TSA, and BWSR representatives, with TTCP trainers serving in an advisory capacity. The ATTTs meet regularly to review training needs, evaluate completed training, set priorities, and plan local training sessions. The ATTT charter designates the Chair to serve as a liaison with MTTC. In place of this the BWSR Technical Trainers have been serving in this capacity.

Area training needs are primarily identified using data from IDPs, but Team members also provide a conduit for other local training needs to be identified. ATTTs compare local training needs against statewide training offerings to determine gaps in necessary learning opportunities. These outstanding training needs are then prioritized based on need, and the ATTTs develop plans to address them using available grant funds, on-the-job training, or by working with other ATTTs to leverage resources.

Originally, the ATTTs were established along the six NRCS Area boundaries. As NRCS progressed towards four Areas, the ATTTs were modified to match the eight MASWCD/TSA Area boundaries. This change increased the number of ATTTs from the original six to eight starting in late 2018. ATTTs provide crucial functions at the local level for: communication between partner agencies/organizations, identification and prioritization of training needs, promotion of on-the-job training/mentoring, and the organization and delivery of local training.



## Program Objectives

This Evaluation Report, as a whole, contains the comprehensive considerations for the degree to which TTCP has met the objectives outlined in the 2015 [Technical Training and Certification Strategy \(pdf\)](#) for conservation delivery in Minnesota. The Evaluation Survey contained a section specific to some of these objectives and the progress the TTCP has made in meeting them. The table below contains a summary of the survey responses.

Program Objective	No Progress	Slight Progress	Moderate Progress	Significant Progress	Objective Completed
Develop an enhanced program for technical training and certification for conservation technical assistance in Minnesota	1%	25%	40%	31%	4%
Increase opportunities for obtaining Job Approval Authority for conservation Practices	4%	28%	33%	32%	4%
Increase opportunities for obtaining conservation certifications	2%	27%	42%	27%	2%
Provide training opportunities to address technical skill and conservation practice needs	1%	23%	30%	42%	4%
Provide opportunities for mentoring and on-the-job training needs	16%	36%	31%	16%	2%
Assessment of technical training needs	2%	23%	42%	31%	2%
Develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting Minnesota's conservation delivery needs	4%	28%	40%	27%	2%

## Conclusions

Responses indicate that SWCD and NRCS staff believe considerable progress has been made in the development and implementation of a program that provides the framework for the assessment of training needs and delivery of high priority training. Most survey participants indicated this has resulted in increased opportunities to attend technical trainings, obtain JAA and planner certification, and develop/maintain technically skilled employees. The sole area where respondents indicated that little-to-no progress has been made is in on-the-job training (OJT).

## Recommendation

Increase communication between technical staff, ATTTs, trainers, and credentialed employees to begin development of an on-the-job training system.

## Program Coordination

### Minnesota Technical Training Committee

In order for the partnership to develop and maintain a highly trained, technically skilled workforce, coordination is needed at the state level. The MTTC was established to provide that coordination by setting priorities, making decisions, and providing guidance for overall program implementation. Input on the effectiveness of MTTC to provide coordination was obtained through a survey and group discussion.

The MTTC Charter outlines the roles and responsibilities for the MTTC membership. Feedback indicates that the current Charter adequately describes the focus of MTTC, allows meetings to be productive, and that members receive enough information to set priorities and make decisions.

When asked what areas the MTTC has been most effective, the development of an annual training calendar and the overall increase in training delivery were identified. Also noted was in the increase in communication and coordination between the partners, at all levels, to communicate training needs and opportunities, promote and educate on the Job Approval Authority (JAA) process, and implement the Program objectives.

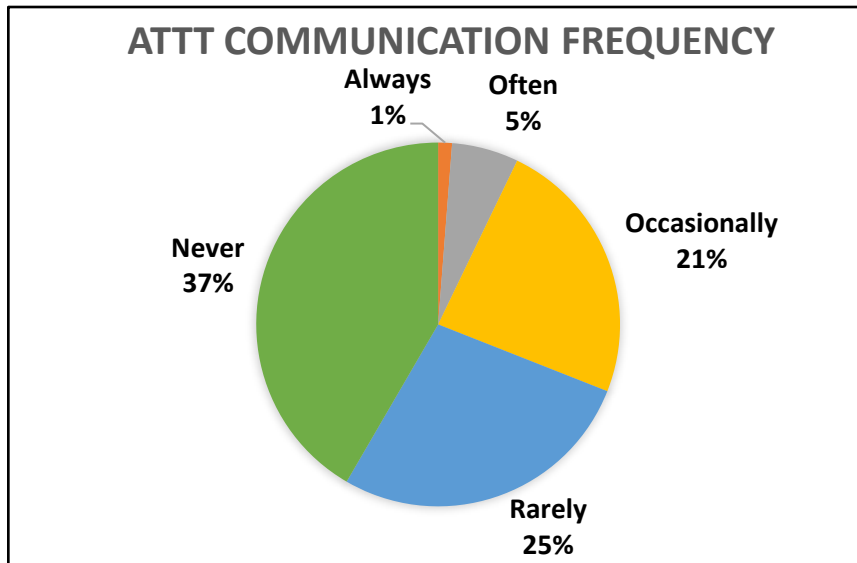
When asked if there are areas where the MTTC could be more effective, several opportunities were identified. Increasing opportunities for on-the-job training (OJT), increasing technical staff obtaining Job Approval Authority (JAA), and working with NRCS Team Leads and SWCD Managers to improve employee development at the local level were noted.

MTTC members were asked to rate the progress TTCP has made in meeting the Program's objectives. The table below summarizes this feedback.

Program Objective	Progress Towards Meeting
Develop an enhanced program for technical training and certification for conservation technical assistance in Minnesota	Significant Progress
Increase opportunities for obtaining Job Approval Authority for conservation Practices	Moderate Progress
Increase opportunities for obtaining conservation certifications	Moderate Progress
Provide training opportunities to address technical skill and conservation practice needs	Significant Progress
Provide opportunities for mentoring and on-the-job training needs	Slight Progress
Assessment of technical training needs	Significant Progress
Develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting Minnesota's conservation delivery needs	Moderate Progress

### Area Technical Training Teams

Evaluating how the administrative pieces of the TTCP are functioning and understood by partners and participants is an important step in determining how effective the program itself has been. Survey respondents were asked about their awareness of the ATTTs as well as how often they hear about ATTT progress and activities.



32% of survey respondents indicated they knew who the members of their local Area Technical Training Team Were. We also asked how frequently people communicated their training needs to the ATTTs. 62% of respondents indicated they never, or rarely, communicate with the ATTTs.

To find out about the perceived productivity of these teams, several survey questions were directed specifically to current and former member of ATTTs. 67% of current or former ATTT members rated their teams as productive or very productive.

In addition to the survey, feedback was also gathered from focus groups. NRCS ARCs and ENGAs that serve, or have served, on ATTTs stated they had a greater awareness of technical training activities, whereas those who have been a member indicated a lack of communication.

### Conclusions

The ATTTs play a vital role in identifying and prioritizing technical training needs. In addition to providing key insights into the local training needs, they also analyze statewide training priorities, which allows them to identify the gaps between what training is being offered statewide and local training needs. The unmet local training needs become the highest priority for the ATTTs to address. The local training grants have been a valuable tool in addressing these priority training needs.

However, while these survey responses indicate that ATTT members feel the teams are productive, NRCS and SWCD technical staff who are not on these teams have little awareness of what purpose these teams serve. NRCS ARCs and AEs that have been members of an ATTT indicate a greater awareness of technical training activities, while those not serving on a team indicated a lack of communication or unawareness of technical training prioritization and delivery.

### Recommendations

#### Minnesota Technical Training Committee:

- The current membership is adequate, but an NRCS Team Lead should be added to provide local insight and input. Continue to review membership moving forward, making adjustments as needed.
- MTTC should play a greater role in facilitating OJT to increase opportunities.
- Increase coordination, messaging, and leadership regarding JAA with the overall goal of increasing technical staff obtaining JAA after attending training.
- Take steps to increase coordination between NRCS Team Leads and SWCD Managers to improve employee development.

#### Area Technical Training Teams:

- The ATTT Charter should be reviewed, and the Roles and Purpose should be updated based on feedback from ATTT members. More interaction regarding training prioritization and delivery is needed between ATTTs and the MTTC.
- TTCP should provide all ATTTs with refresher training on ATTT roles, responsibilities, and functions of the Teams.
- ATTTs need to communicate regularly with NRCS and SWCD technical staff within their respective Areas regarding training needs and opportunities.



- Actions should be taken to ensure that ATTTs are productive. This could include establishing a quarterly meeting schedule, disseminating notes from meetings, and additional coordination with the MTTC.

## Communication

### External Communication

We asked survey participants to rate how effectively TTCP shares information about different topics related to the program.

	Not Effective	Slightly Effective	Moderately Effective	Significantly Effective	Extremely Effective
Upcoming training opportunities	3%	11%	35%	37%	9%
Online learning opportunities	3%	17%	38%	29%	7%
Job Approval Authority process and requirements	12%	33%	33%	15%	1%
Conservation planning certification process and requirements	8%	29%	39%	14%	3%
Opportunities to provide feedback and input	4%	19%	30%	27%	13%
Importance of and instructions to complete Individual Development Plans	9%	23%	32%	27%	1%
Program accomplishments	6%	24%	37%	21%	1%

The survey responses indicate that the TTCP has been most effective in communicating information about upcoming training opportunities – with 46% of respondents rating the efforts in this area as significantly or extremely effective, and 14% of responses rating efforts as not effective or slightly effective.

Conversely, the communication in the areas of Job Approval Authority process and requirements and Conservation Planning Certification process and requirements received the lowest ratings, with just 16% and 17% of respondents ranking those communication efforts as significantly or extremely effective, and 45% and 37% of responses rating those efforts as not effective or slightly effective, respectively.



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To learn more about the best way to communicate with our partners, we asked survey respondents to rate tools commonly used by program staff to provide information on upcoming training opportunities, accomplishments, and resources for conservation staff.

Communication Tool	Not Effective	Slightly Effective	Moderately Effective	Significantly Effective	Extremely Effective
Training Calendar on the BWSR website	9%	24%	26%	27%	4%
Program information on the BWSR website	10%	19%	35%	23%	2%
Train Tracks newsletter	7%	11%	27%	30%	13%
Direct emails from TTCP	1%	5%	19%	28%	39%

While none of the responses labeled any of the communication methods as “not effective,” a majority of respondents noted that direct emails from TTCP staff have been the most effective method to share information related to the program.

### Internal Communication

Input on the effectiveness of how program partners are communicating with each other was assessed through focus groups with NRCS and BWSR Technical Trainers. When asked how well BWSR and NRCS trainers coordinate to review training needs and determine priorities, in general the groups felt that the annual meeting to review IDP data to identify training priorities and begin development of the annual training calendar was effective.

However, input from these groups did identify inconsistencies with how technical training opportunities are being communicated to field staff. While some trainers pass this information along to all NRCS and SWCD employees in their Area, others either do not forward it or only send it to NRCS staff.

### Conclusions

**Internal:** The annual meeting to review IDP data and determine priorities has been effective. A connection with an ATTT provides greater insight into technical training activities including training needs, prioritization, delivery, and available technical resources. Feedback from the focus groups also indicated a need to annually communicate a refresher on the TTCP agreement to employees within the Partnership.

**External Communications:** The most effective tool for communicating training opportunities, certification requirements, and increasing participation in the use of the IDP tool is by email. Maintaining and improving this method of communication is vital to the success of TTCP.

### Recommendations

#### Internal Communications:

- Increased communication and coordination is needed between NRCS and BWSR in the development and promotion of technical trainings. TTCP trainers should be included in monthly ARC and AE calls to coordinate technical training.

#### External Communications:

- Take steps to improve how technical training opportunities are shared with NRCS. This could be accomplished by developing a statewide email distribution list, or identifying specific NRCS individuals responsible for notifying technical staff of upcoming training opportunities.
- MTTC should annually communicate a refresher on the purpose and objectives of TTCP to everyone in the Partnership.

## Core Competencies

During the development of the overarching TTCP strategy, the MTTC identified the core competencies as forming the foundation for all technical activities, and determined that all NRCS, SWCD, and BWSR employees will benefit from an understanding of these fundamental functions of conservation delivery regardless of their position. The core competencies consist of 18 modules covering three subject areas: Soils, Water Quality, and Conservation Planning. Module content, generated primarily by TTCP, is highly specific to Minnesota.

Work on the core competencies began in June of 2017. TTCP is working with the contractor to develop content and finalize the modules by December 2020.

No evaluation information was collected about the modules because they were under development at the time of this evaluation.

## Recommendations: Program Administration

### Program Objectives:

- Increase communication between technical staff, ATTTs, trainers, and credentialed employees to begin development of an on-the-job training system.

### Minnesota Technical Training Committee:

- The current membership is adequate, but an NRCS Team Lead should be added to provide local insight and input. Continue to review membership moving forward, and make adjustments as needed.
- MTTC should play a greater role in facilitating OJT to increase opportunities.
- Increase coordination, messaging, and leadership regarding JAA with the overall goal of increasing technical staff obtaining JAA after attending training.
- Take steps to increase coordination between NRCS Team Leads and SWCD Managers to improve employee development.

### Area Technical Training Teams:

- The ATTT Charter should be reviewed, and the Roles and Purpose should be updated based on feedback from ATTT members. More interaction for training prioritization and delivery is needed between ATTTs and the MTTC.
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- ATTTs need to communicate regularly with NRCS and SWCD technical staff within their respective Areas regarding training needs and opportunities.
- Actions should be taken to ensure that ATTTs are productive. This could include establishing a quarterly meeting schedule, disseminating notes from meetings, and additional coordination with the MTTC.

### Communication:

#### Internal:

- Increased communication and coordination is needed between NRCS and BWSR in the development and promotion of technical trainings. TTCP trainers should be included in monthly ARC and AE calls to coordinate technical training.

#### External:

- Take steps to improve how technical training opportunities are shared with NRCS. This could be accomplished by developing a statewide email distribution list, or identifying specific NRCS individuals responsible for notifying technical staff of upcoming training opportunities.
- MTTC should annually communicate a refresher on the purpose and objectives of TTCP to everyone in the Partnership.

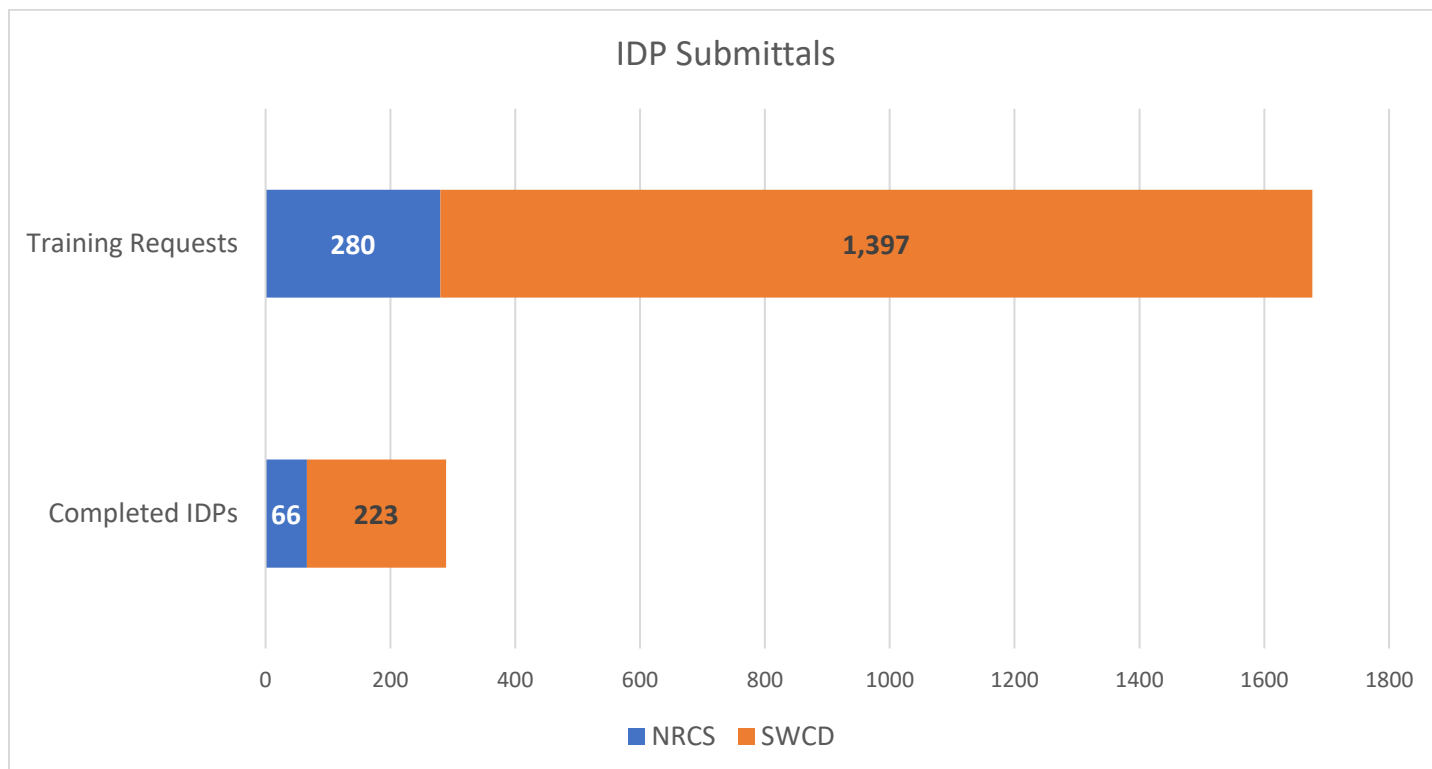
## TRAINING NEEDS

### Background: Individual Development Plans

In order to gather information pertaining to training needs and credential goals, the TTCP developed the Individual Development Plan (IDP) tool. The data collected from completed IDPs provides the basis for the annual technical training needs assessment, and drives decisions on local and statewide training delivery. The original IDP tool, built using Excel, was used to gather this data in the 2018 statewide inventory. In total, 95 offices requested training on 477 technical skills or conservation practices in 2018.

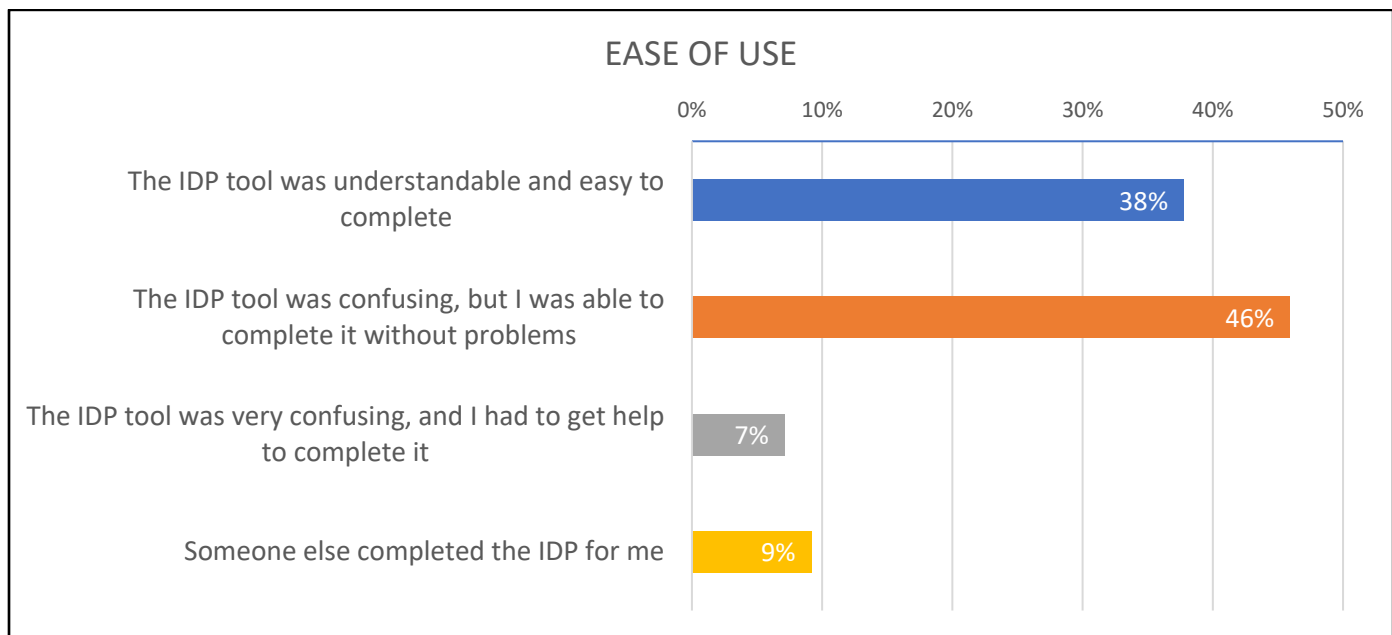
The current Individual Development Plan (IDP) tool was finalized in 2019 and is embedded in BWSR's eLINK system. This online system is accessible to all partnership staff by requesting an account. In September of 2019, three live webinars were conducted by TTCP to provide training and guidance on use of the IDP tool. These webinars, with information for managers or staff, were recorded and are available on the BWSR website along with a number of other tools, guidance documents, and resources. TTCP has provided additional one-on-one follow up training, when requested, on the use of the IDP tool.

The new IDP tool allows managers to identify, by county, the priority resource concerns and the conservation practices to treat them. The IDP tool also enables conservation staff to identify their technical training needs, document their credentials and certifications, and find others with conservation skills for peer-to-peer assistance/on-the-job training. Using the IDP tool in 2019, 289 individuals submitted 1,677 training requests for technical skills or conservation practices.

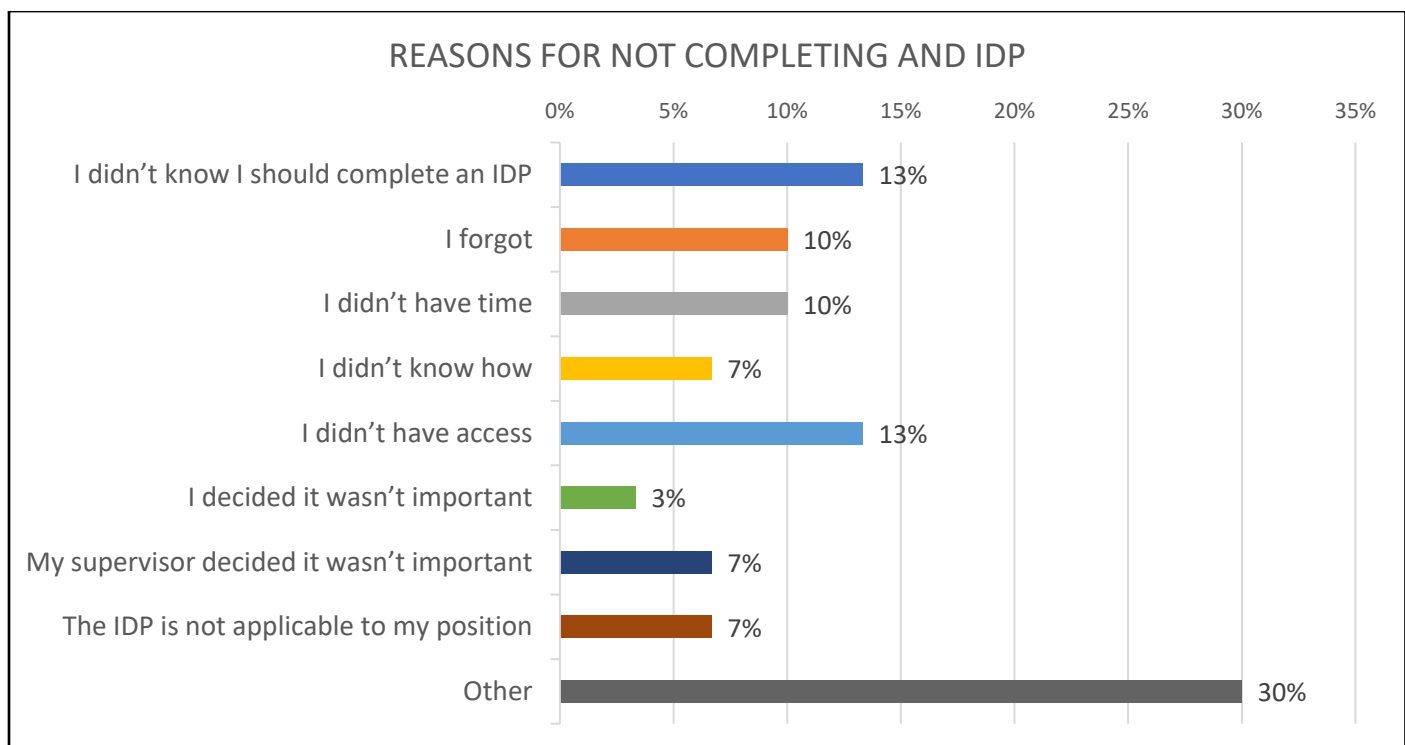


### IDP Training Needs Assessment and Local Priorities

78% of survey respondents indicated they completed an IDP, or had one completed for them by their supervisor. We asked those that completed an IDP to provide feedback on the ease of use of the tool. Most respondents indicated that the tool was easy to use and/or they were able to complete their IDP without additional assistance.



The 2019 IDP Participation Maps ([Appendix B](#)) show a statewide distribution of IDP use to collect local technical training needs. Participation was higher among SWCDs when compared to NRCS offices.



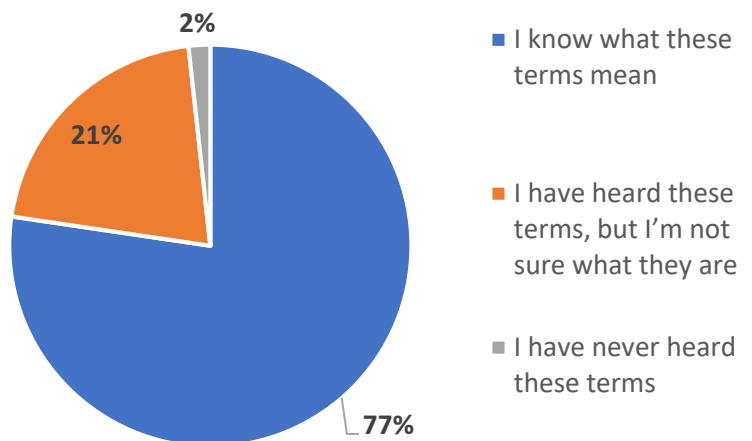
Of the 22% of respondents who indicated they did **not** complete an IDP in 2019, the most common response (30%) fell into the “Other” category. Many of these participants indicated they did not think the IDP was necessary because they had completed their IDP in NRCS’s AgLearn system. Not having access (13%) and not having time (10%) were other commonly cited explanations.



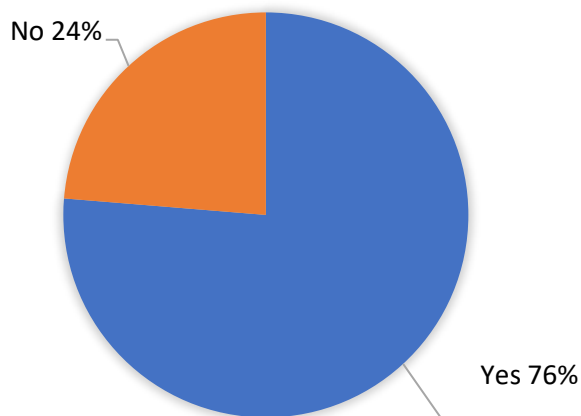
### Terminology and Definitions

During local meetings to discuss conservation issues, such as Local Work Group or One Watershed, One Plan meetings, managers identify the local priority resource concerns and conservation practices that will address them. These priorities form the basis for technical training needs. In order to maintain consistency in terminology and definitions, the decision was made to use the NRCS system of resource concerns and conservation practices. These terms were built into the IDP tool, and training was provided for local staff to understand what these terms mean and how they were integrated into the IDP tool and training needs identification process.

#### Priority Resource Concern and Conservation Practice Terminology



#### Do You Know Your Local Priorities?

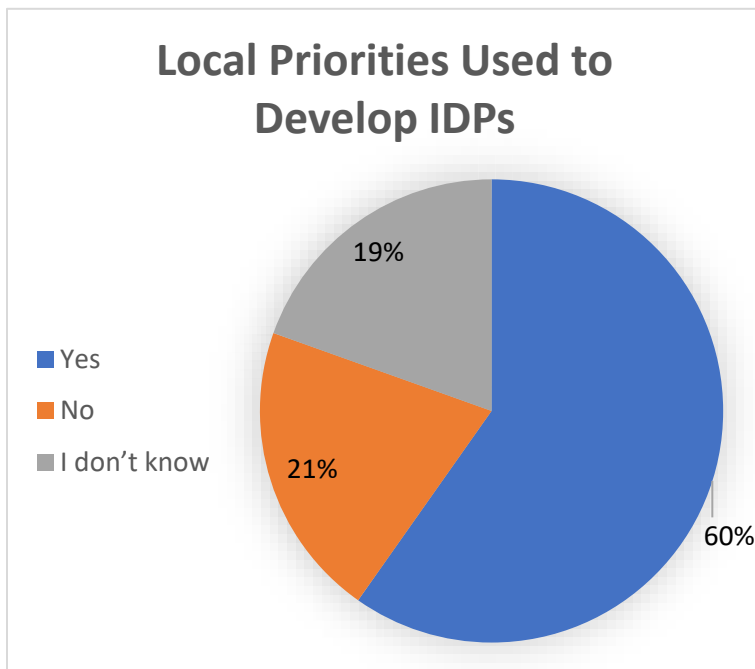


77% of survey respondents reported knowing what these terms mean, and 76% responded that they knew the priority resource concerns and practices for their work area.

### Local Priorities and IDPs

Training and information was provided to managers and technical staff on how to identify priority resource concerns and the different conservation practices used to treat them. In 2019, 64 SWCD or NRCS offices used the IDP tool to identify 927 local priorities.

As previously noted, local priority resource concerns and the conservation practices to treat them should dictate local training needs. Technical training needs should be identified based on an analysis of local priority resource concerns, the conservation practices used in the work area, and the ability of staff to implement those practices. The gap between existing and needed abilities should be identified as the local priority training need.



We asked participants if they or their manager used the priority resource concerns and conservation practices for their work area to prioritize their training needs, and 60% of the respondents indicated that they had been used. However, 40% indicated the local priorities had either not been used or they were unsure.

Despite nearly half of respondents indicating they were unsure if the local priorities were used in the identification of their training needs, there was a strong correlation between these items in the IDP. Eight SWCD or NRCS offices where managers entered priority resource concerns and practices were compared with the training requests from their staff. In every sample the majority of the training requests matched one or more priority resource concern and conservation practice.

## Conclusions

**IDPs:** While the 2019 IDP cycle showed a dramatic increase in participation and training requests from 2018, it is evident that many offices are still not utilizing the IDP tool to identify their training needs ([see Appendix B – 2019 IDP Participation Maps](#)). Extensive training provided to technical staff and managers, along with online resources, when the IDP tool was released allowed the majority of users to complete their IDP without additional assistance.

**Training Needs:** The IDP has been a successful and effective tool to gather local training needs from around the state. Participation from NRCS employees was lower, where only 60% of respondents completed an IDP. The primary reason NRCS employees cited for why they didn't complete the TTCP IDP is because they completed one in AgLearn. Despite being a new application with several steps, few respondents indicated they had much trouble completing the process on their own.

**Local Priorities:** Understanding of what priority resource concerns and conservation practice are is good, but there is room for improvement. While many managers are identifying the priority resource concerns and practices for their office/county, nearly half of survey respondents are not aware if they were used in the identification of their training needs.

## Recommendations: Training Needs

### Individual Development Plans: Training Needs and Local Priorities

#### IDP Training Needs:

- Increased outreach and training should be provided to improve participation in the IDP process, particularly for NRCS technical staff.
- Continued training should be provided on how to use the tool to identify local priorities and training needs, and on how to track credentialing and training history.
- As shown in the 2019 IDP Participation Maps ([Appendix B](#)) many offices did not use the IDP tool to identify local priorities and training needs. Additional messaging should be directed towards the manager and staff audiences regarding the importance of completing the training needs assessment and how TTCP uses this information to develop a schedule of offered training.

**IDP Local Priorities:**

- Additional training and messaging should be provided to aid in the understanding of how local priorities should be used in the IDP process. This prioritization helps clearly identify “training needs” and reduce “training wants.” NRCS and SWCD staff should be encouraged to participate together in local conservation prioritization efforts such as Local Work Group and One Watershed One Plan meetings, to improve consistency in the identification of priority resource concerns and practices.



*Image: Soil and gravel samples arranged for student use at Soil Mechanics 1 (SM-1) training.*

## TRAINING DELIVERY

### Background

Using data collected through the IDP tool, trainers from NRCS and BWSR met with members of the MTTC to review training needs, including the location where the need came from, and determine statewide training priorities. The result of this process is the annual training calendar – a working document that identifies potential dates and locations to hold priority training sessions. In the weeks and months preceding a training session, trainers from NRCS and BWSR develop curriculum, finalize dates, and get participants registered.

### Training Delivery

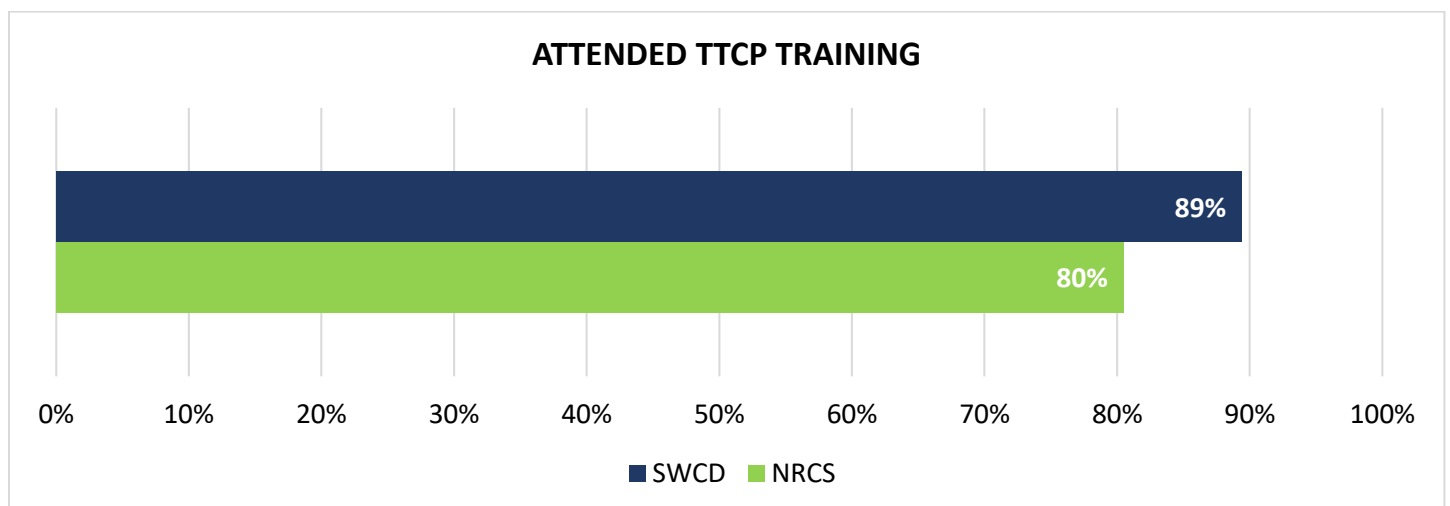
This table summarizes trainings provided through TTCP by calendar year for 2018 and 2019.

Year	Training Sessions	NRCS Attendees	SWCD Attendees	Total Attendees	Total Hours of Training
2018	57	452	907	1,359	7,370
2019	61	324	779	1,103	8,240

The table below reflects four months of training in 2020, which was impacted by social distancing requirements associated with COVID-19. In-person training was stopped in late March, and some of these courses were converted for delivery in an online environment. Starting on April 6 the TTCP also started Tech Talks, weekly webinar trainings held every Monday.

January 1 to April 30, 2020	Training Sessions	Attendees			Total Hours of Training
In-Person Training	8	NRCS: 98	SWCD: 173	Total: 271	1,530
Online Training	4	Live: 67	Replay: 131	Total: 198	211

87% of survey respondents reported attending training provided by TTCP in the last three years, and 90% of those attendees reported that attending that training will help them improve job performance.



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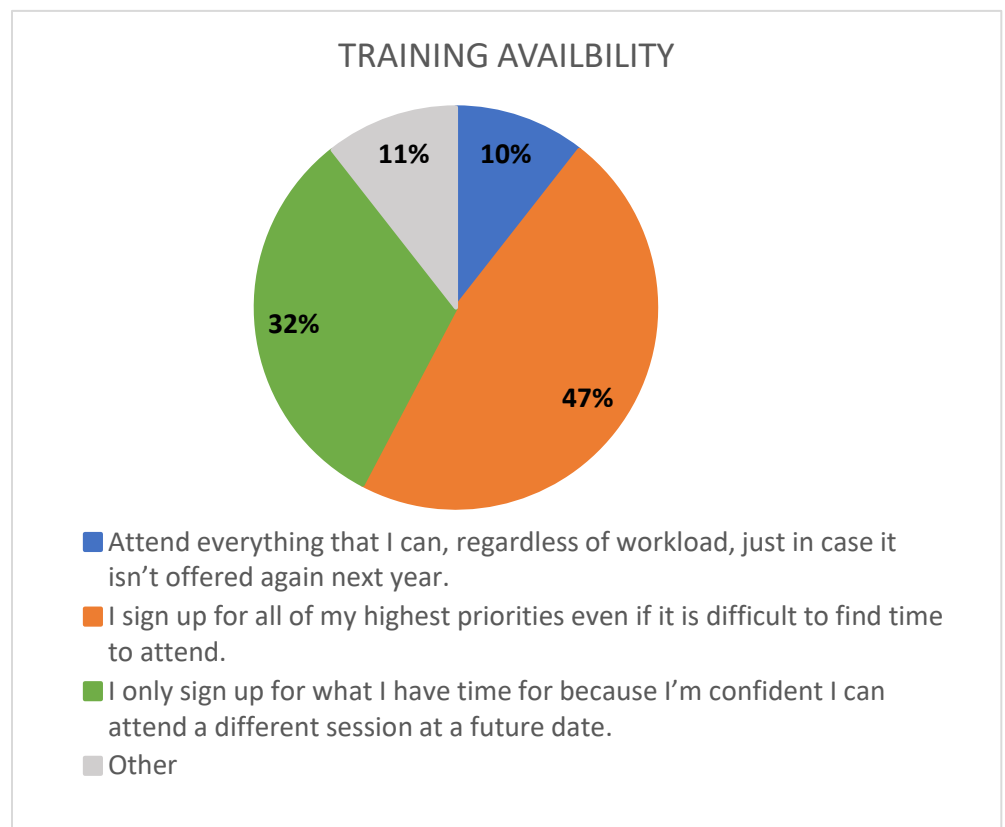
We asked technical staff to rate their level of agreement for each of the statements below regarding TTCP training sessions they attended. 81% or more of respondents indicated they agreed or strongly agreed with each of these statements.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
The training sessions will help me perform my job better.	0%	0%	8%	68%	22%	2%
The training sessions were well organized.	0%	1%	11%	68%	20%	0%
The training instructors demonstrated content knowledge.	0%	1%	6%	62%	31%	0%
The training instructors engaged my participation and interest.	0%	3%	14%	61%	21%	1%
The training instructors answered my questions thoughtfully.	1%	2%	10%	59%	28%	1%
The training location was within a reasonable driving distance from my office.	1%	4%	15%	61%	20%	0%

### Training Availability

One goal of the Technical Training and Certification Program is to offer a suite of core training opportunities on a predictable basis. Technical staff responding to the survey were asked to share how they decide which training offerings to sign up for.

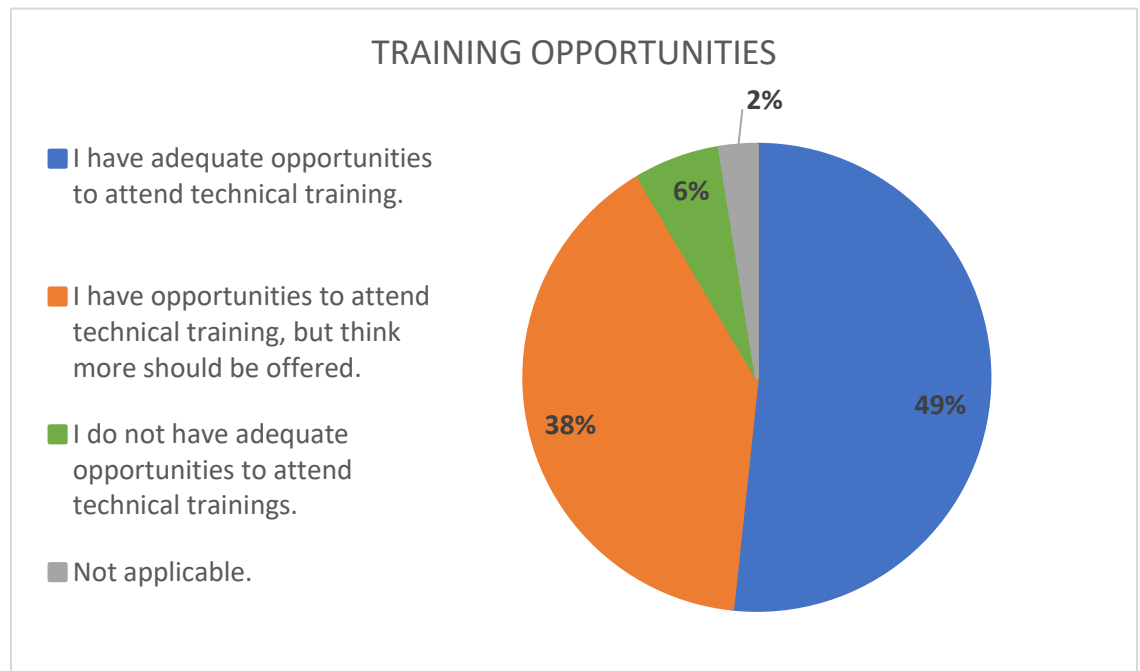
In addition to in-person training, TTCP has also assembled a collection of online training materials. This growing library of nearly 250 trainings, located in the [Online Learning](#) section of BWSR's website, provides unlimited access to: pre-recorded sessions, recorded webinars, videos, and reference material. This training material is searchable by keyword, subject, skill, or format, and is available year-round.





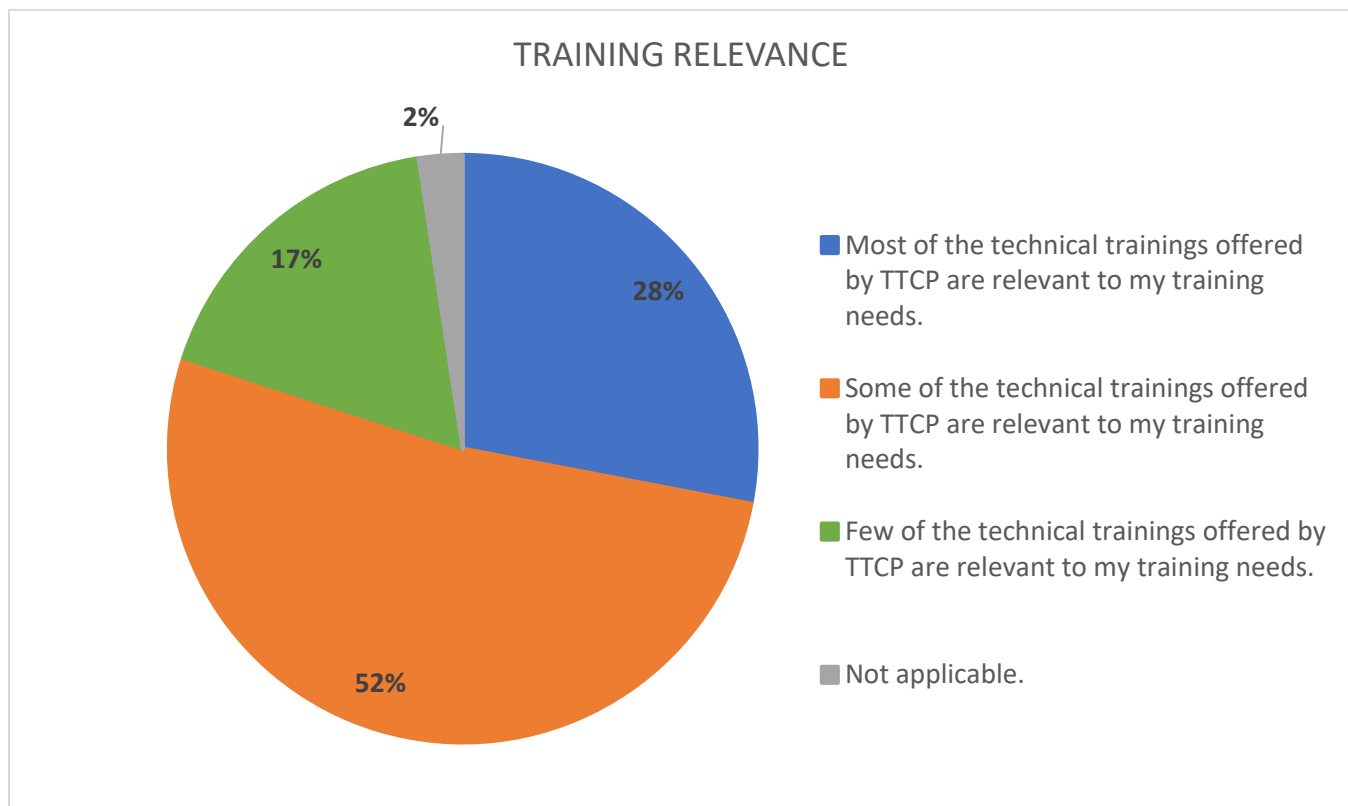
### Training Opportunities

We wanted to know if TTCP was providing enough training opportunities for technical staff, so we asked them to rate the adequacy of training opportunities. 49% of respondents reported they have adequate opportunities to attend training while 6% did not.



### Training Relevance

In addition to having adequate opportunities to attend technical training, we wanted to know if the trainings being provided were reflective of the priority training needs for technical staff. 80% of respondents reported that some or most of the trainings offered by TTCP were relevant to their training needs.



### Continuing Education

Continuing education and training are essential to maintaining technical skills and Job Approval Authority, and it is a requirement for maintaining conservation planning certifications. Respondents were asked to indicate the availability of training opportunities for continuing education provided by TTCP for the topics listed below.

	No Opportunities	Few Opportunities	Some Opportunities	Adequate Opportunities	N/A
Changes to conservation practice standards	11%	28%	41%	11%	9%
Changes to resource concerns	6%	36%	40%	7%	12%
New and emerging technology	8%	42%	36%	8%	6%
Basic technical skills (i.e. plant ID)	2%	28%	33%	31%	5%
Advanced technical skills (i.e. electronic surveying)	7%	35%	40%	10%	9%
New or updated technical tools (i.e. WEPP)	5%	43%	30%	8%	14%
New or updated software	8%	41%	26%	12%	12%

### Conclusions

Training records show excellent participation in courses offered through the TTCP. 87% of survey respondents report having the opportunity to attend training, 80% report that training offered is relevant to their training needs, and 90% agree or strongly agree that these courses will help them do their job better.

Overall, a high level of satisfaction and participation in training provided by TTCP indicates that formal training needs are being met throughout the state. Training participants indicate adequacy of training opportunities, relevant training sessions, and improved job performance.

However, in addition to traditional training, learning opportunities including on-the-job training, mentoring, and/or peer-to-peer learning are essential to bridging the gap between technical staff knowing (attending training) and doing (having JAA/credentialing). As discussed in the Program Objectives section on page 6, 50% of respondents reported that the TTCP has made no, or slight progress in improving opportunities for this type of learning.

Having adequate opportunities to attend training is essential for maintaining technical skills and staying current on developing technology, science, and conservation standards. As the Minnesota conservation workforce continues to gain experience and increase credentialing, additional opportunities for continuing education will be needed.



## Recommendations

- Guidance, resources, and facilitation should be provided to develop an OJT program. Creative, outside-the-box solutions will likely be needed.
- Messaging and publication of training schedules should be improved to meet the strategy goal of having “a complete suite of training predictably and consistently available.” Only 32% of survey respondents expressed confidence in the future of offered trainings, but comments suggested that this is improving. Messaging should reiterate the commitment to providing training beyond the currently scheduled sessions, such as the following season or year. A year-long training calendar should be published and updated as soon as practical to allow potential attendees to plan their attendance, complete pre-requisites, and attend introductory sessions. The goal of this messaging is to increase the percentage of people expressing confidence in the predictability and consistency of training being provided to 60% within two years (May 2022).

## Training Repository and Online Library

Over the past few years the TTCP has developed, or helped in the development of, more than 50 training curriculums for in person trainings. Many of these trainings are “shelf ready,” and when repeat sessions are necessary, the training material is ready to go with little-to-no modification necessary. Many of these curriculums have only been used once, but some have been used more than five times. Curriculum development is an ongoing process, and updates to training materials will always be needed, so the existing repository of developed training continues to grow.

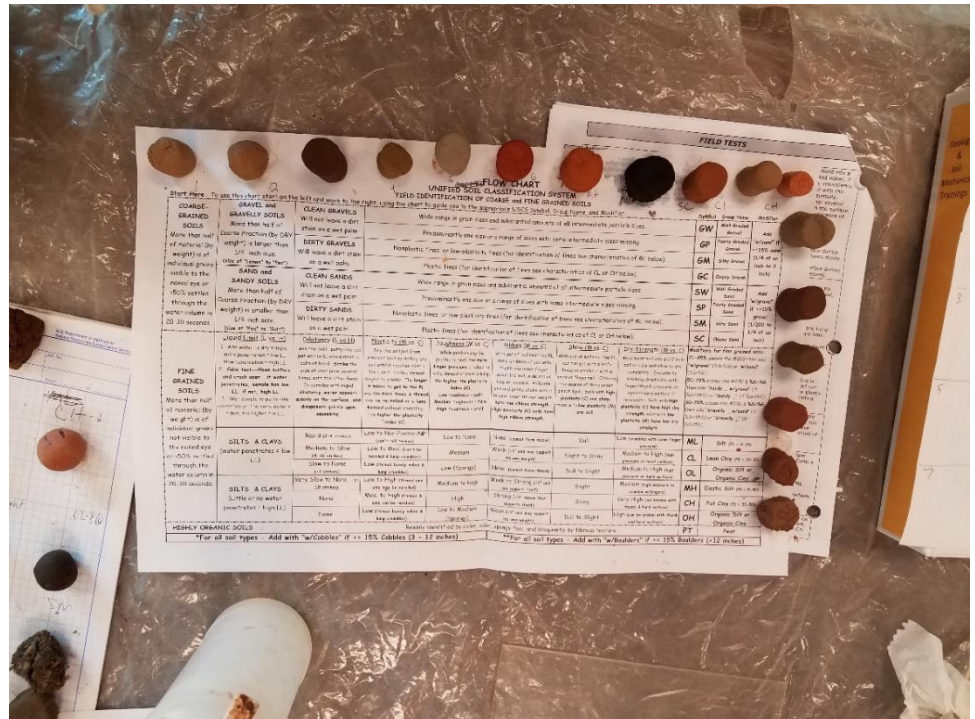
As previously mentioned, the growing library of online trainings, located in the [Online Learning](#) section of the BWSR website, is an asset to the partnership. Once established these training opportunities require little maintenance, and as the collection grows so does its prominence and use.

## Conclusions

Initial investments in developing training curriculum is already reducing time and resources needed when repeat sessions are held. Continued sharing of training curriculum and resources between NRCS and BWSR trainers ensures consistency in training standards and long-term efficiency in training delivery. Website analysis of the TTCP pages on the BWSR website show a continuous growth in use, which is most evident in the Online Learning section (see [Appendix C](#)).

## Recommendations

- Communication and coordination between NRCS and BWSR trainers should be encouraged to enhance shelf-ready curriculum.
- Establish a platform and mechanism for training to store and share curriculum. This system must be capable of moving large files in many different formats, and have a storage capacity to house webinar replays, pre-recorded trainings, training videos, and resource materials.

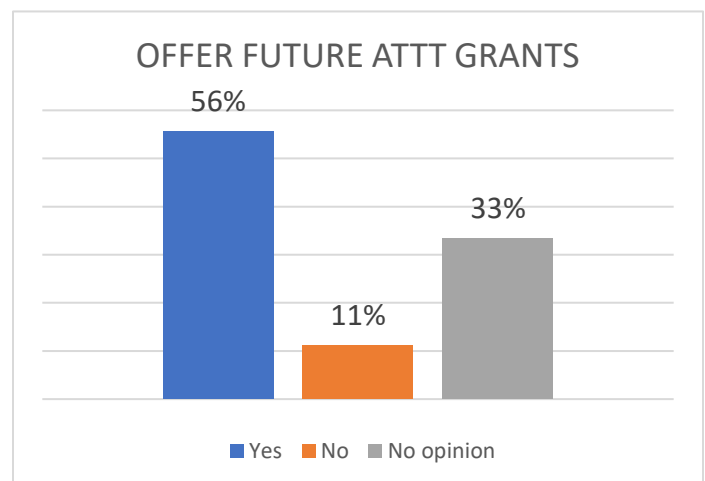
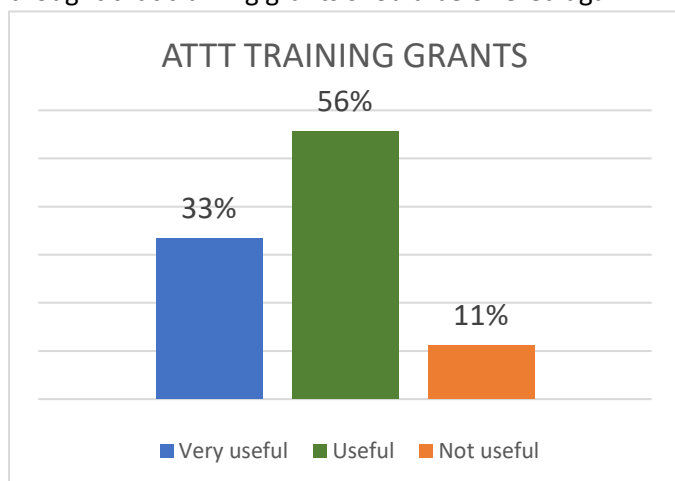


## ATTT Grant Funded Training

As previously described, ATTTs regularly meet to identify and prioritize local training needs. In 2018 grant funds were made available to each of the six Teams to address priority local training needs. In total, \$59,445 in grant funds, plus \$18,222 in local match was used to provide local, priority training to 450 attendees during 23 different training sessions. Training topics were prioritized based on the 2018 IDP training requests, compared against state offerings. Priority training needs are also identified through regular discussions within the local Partnership. These word-of-mouth training needs identify new training needs that arise after IDP submittal, or other needs not adequately reflected by the IDP process.

1		<b>Area 1</b> 6 Trainings, 151 Participants Advanced Survey, Critical Area Planting, Rain Garden, Side Water Inlets, Soil Health, WASCOB
2		<b>Area 2</b> 5 Trainings, 97 Participants Rain Garden, Basic Survey, Intermediate Survey, Cover Crops, Shoreline Protection
3		<b>Area 3</b> 3 Trainings, 76 Participants Forest Ecology and Management, Shoreline Protection, Riparian Forest Buffer
4		<b>Area 4</b> 3 Trainings, 52 Participants Basics of Construction Plan Preparation, Bioretention and MIDS Calculator (offered twice),
5		<b>Area 5</b> 1 Training, 25 Participants Cover Crop Field Day, 14 Cover Crop Displays
6		<b>Area 6</b> 5 Trainings, 93 Participants Construction Inspection, Electronic Survey (offered twice), Basics of Construction Inspection, Grazing School

We asked current and former ATTT members to rate the usefulness of those training grants in meeting local technical training needs, and 89% of respondents indicated those grants were useful or very useful. 56% of ATTT members thought that training grants should be offered again.



## Conclusions

Grant funded training is an effective method to address local priority training needs that are unique to an Area and/or are not addressed by statewide training. The needs inventory, assessment, and prioritization is completed by each ATTT during regular meetings, and is especially effective in addressing immediate, recently emerged, and/or unique training priorities.

## Recommendation

Training grant funds should continue to be provided to ATTTs to address local priority training needs. These optional funds allow for Area specific training to be offered with a quick turnaround.

## Recommendations: Training Delivery

### Training Delivery

- Guidance, resources, and facilitation should be provided to develop an OJT program. Creative, outside-the-box solutions will likely be needed.
- Messaging and publication of training schedules should be improved to meet the strategy goal of having “a complete suite of training predictably and consistently available.” Only 32% of survey respondents expressed confidence in the future of offered trainings, but comments suggested that this is improving. Messaging should reiterate the commitment to providing training beyond the currently scheduled sessions, such as the following season or year. A year-long training calendar should be published and updated as soon as practical to allow potential attendees to plan their attendance, complete pre-requisites, and attend introductory sessions. The goal of this messaging is to increase the percent of people expressing confidence in the predictability and consistency of training being provided to 60% within two years (May 2022).

### Training Repository and Online Library

- Communication and coordination between NRCS and BWSR trainers should be encouraged to enhance shelf-ready curriculum.
- Establish a platform and mechanism for training to store and share curriculum. This system must be capable of moving large files in many different formats, and have a storage capacity to house webinar replays, pre-recorded trainings, training videos, and resource materials.

### ATTT Grant Funded Training

- Training grant funds should continue to be provided to ATTTs to address local priority training needs. These optional funds allow for Area specific training to be offered with a quick turnaround.



## CREDENTIALS, CERTIFICATION, AND SKILL DEVELOPMENT

### Background

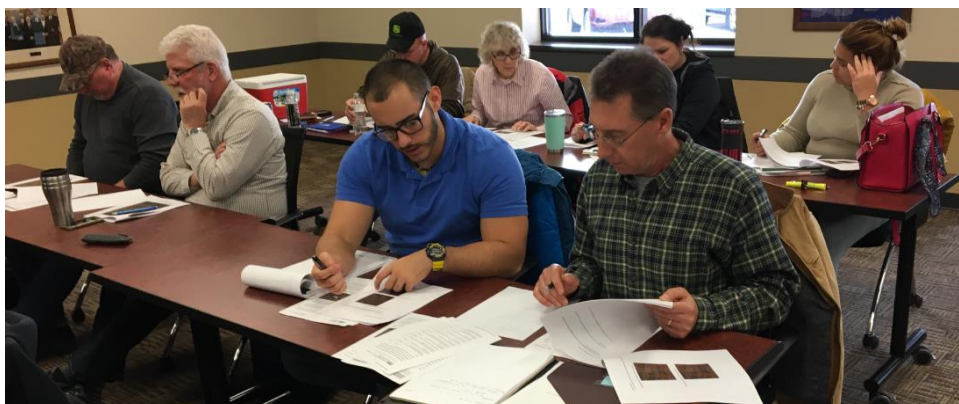
The overarching goal of the TTCP, as outlined in the [Technical Training and Certification Strategy \(pdf\)](#), is “to develop and maintain a highly trained, technically skilled workforce of natural resource professionals to meet Minnesota’s conservation delivery needs.” Under this system, NRCS, SWCDs, and BWSR use the Job Approval Authority (JAA) credentialing system for planning, design, and installation of standard conservation practices.

The development of basic and advanced skills are critical steps for technical staff to obtain JAA, which allows them to independently plan, design, and install individual practices. Technical staff continue to develop their abilities to obtain JAA for additional practices, work with different land uses and livestock, and hone their ability to work on a larger scale as they progress towards planner certification. Continuing education as a refresher and for technical updates is essential for maintaining these high-level technical skills.

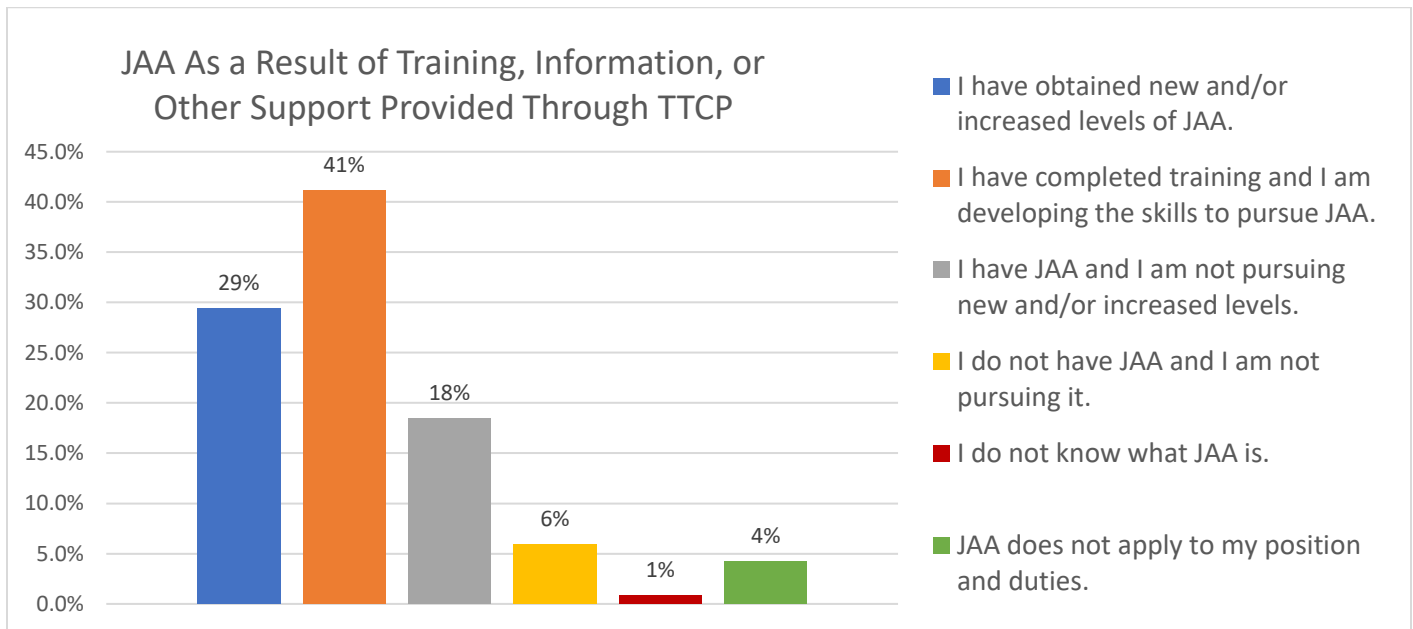
### Job Approval Authority

Job Approval Authority was developed by the Soil Conservation Service (SCS, now NRCS) in 1969 to provide consistency in technical ability assessment between offices, counties, and states. Survey respondents were asked to rate their level of agreement with each of the statements below, and the results demonstrate that SWCD and NRCS technical staff have a strong knowledge of what JAA is and why it is important.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
I understand what JAA is.	3%	1%	6%	42%	47%	1%
I think having JAA is important for my work.	4%	6%	11%	41%	34%	4%
My manager thinks it is important for staff to have JAA.	4%	3%	9%	36%	44%	4%
My Board of Supervisors understands what JAA is.	4%	9%	23%	37%	17%	10%
My Board of Supervisors supports technical staff getting JAA.	3%	2%	13%	46%	25%	11%



Accelerating SWCD and NRCS staff obtaining JAA was a keystone goal when the TTCP was established. Technical staff responding to the survey were asked about their Job Approval Authority as a result of training, information, or other support provided through the TTCP. 70% of respondents indicated they obtained or are working to obtain JAA, while an additional 18% indicated they already have a sufficient level of JAA.



Staff with JAA in the NRCS Database August 2020	
<b>NRCS</b>	210
<b>SWCD</b>	169
<b>Total</b>	379

Quantifiable JAA data is not available from before NRCS established the current database in 2019. This chart shows the number of technical employees with JAA in the NRCS database as of August 2020.

In addition to the survey, feedback regarding JAA certification was solicited from the NRCS Area Resource Conservationists (ARCs) and Area Engineers (AEs). This feedback identified a few barriers to JAA delegation:

- Changes to the ARC/AE staffing, including new hires and opposing Acting assignments, created periods of time where JAA was not being adequately considered or approved.
- Large work areas, and changes to those work areas, have resulted in limited contact with field staff requesting JAA.
- Field staff attending training yet struggling to demonstrate the competence required for JAA delegation.

## Conclusions

Developing a highly skilled workforce continues to be the goal of the TTCP and it is evident from the survey that technical staff, managers, and SWCD Board Members have a firm understanding of what JAA is and why it is important. However, due to the variability caused by individuals entering and exiting the workforce, the number of individuals with JAA at any one time should not be used as the sole measure of success for the program. The percent of technical staff obtaining or working to obtain JAA are equally important factors, as are responses about training and certification opportunities, and skill development.

### Recommendations

- Establish baseline parameters to measure JAA increases.
- Work to identify and eliminate barriers to JAA delegation.
- MTTC should determine the appropriate metrics for determining Program success in regard to JAA.

## Technical Skills, Abilities

One section of the Evaluation Survey asked employees to rate their abilities to complete a variety of technical tasks as a result of training, information, or support provided through the TTCP. As expected, staff with more experience reported less impact from the TTCP. The table below summarizes the ratings for technical staff with 10 years or less of experience.

Respondents Reporting and Increase in Abilities	
Complete the nine-step conservation planning process	70%
Assist landowners to address resource concerns	86%
Use resource assessment tools (i.e. RUSLE2, WEPS, IET, PCS, WHEG, SVAP2)	67%
Reference, understand, and utilize NRCS conservation practice standards	89%
Complete job sheets/implementation requirement worksheets	71%
Conduct surveying	51%
Calculate hydrology	52%
Use practice design tools (i.e. seed calculators, EFT, ArcMap Engineering Tools/GIS)	75%
Plan conservation practices that treat identified resource concerns to the planning criteria level	77%
Design conservation practices	74%
Install/implement conservation practices	76%

### Conclusions

Most respondents with less than 10 years of experience reported an increase in their technical abilities as a result of training, information, or other support provided by TTCP. In the future, this data collection should be modified to account for those not seeking an increase in abilities, those seeking an increase that did not occur, and the level of improvement for those who increased their abilities.

### Recommendation

- Continue to offer training that will assist in obtaining and maintaining JAA and certifications.

## Certifications

Conservation planning is the process used to identify and evaluate resource concerns, analyze information, and recommended conservation practices alternatives to treat identified problems. Technical staff who obtain the status of Certified Conservation Planner are able to complete this planning process for all resource concerns on all local landuses and recommend local variations of conservation practices to adequately treat problems.

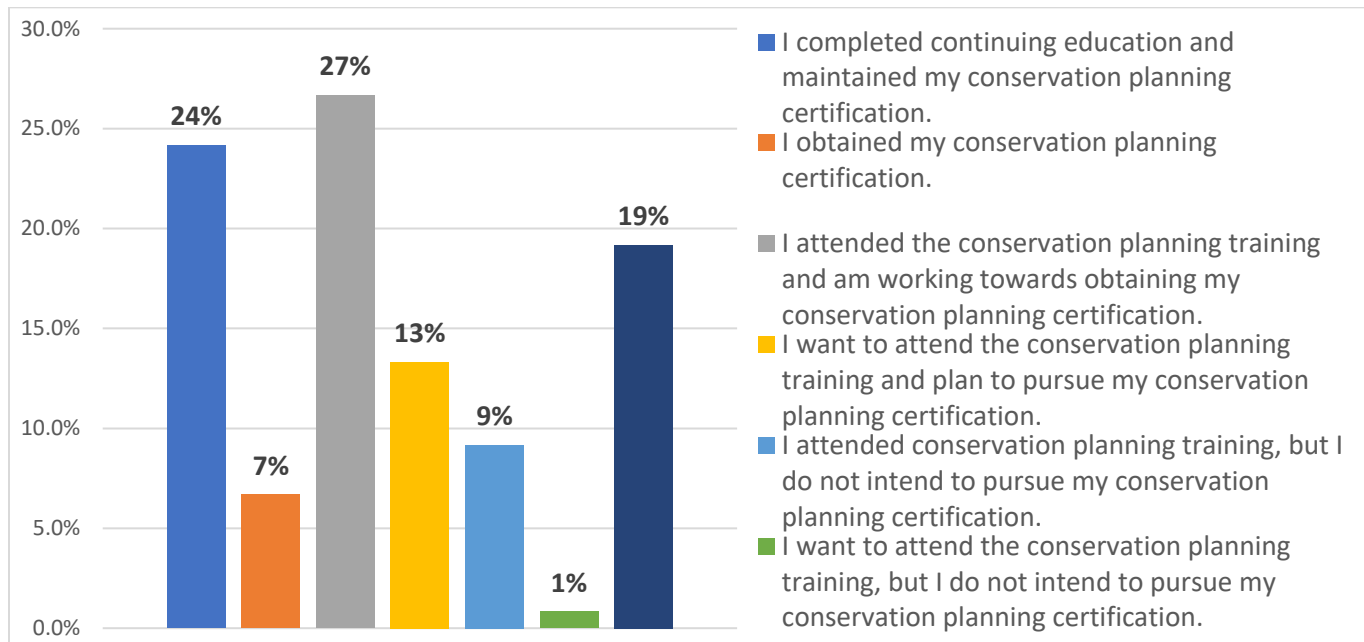
In Minnesota, conservation planners write more than 10,000 conservation plans for nearly 2 million acres each year. These conservation plans adhere to NRCS standards and specifications to address resource concerns and meet landowner objectives.

## 2020 TTCP Evaluation Report, Page 27

As of August 2020 there were 179 active conservation planners in the NRCS database.

	Apprentice	Certified	Master	Total
<b>Conservation Planners</b>	7	170	2	179
<b>NRCS</b>	5	127	2	134
<b>SWCD</b>	2	43	0	45

When asked about their conservation planning certification, 58% of technical staff reported maintaining, obtaining, or working to obtain their certification. An additional 13% indicated their desire to attend training with the intention of pursuing the conservation planning certification.



### Conclusions

There is a strong demand for technical staff to attend conservation planning training to retain or become certified conservation planners. 71% of respondents reported they are certified, are working to become certified, or would like to become certified conservation planners.

### Recommendation

- Establish baseline parameters to measure certification increases.

## Recommendations: Credentials, Certification, and Skill Development

### Job Approval Authority

- Establish baseline parameters to measure JAA increases.
- Work to identify and eliminate barriers to JAA delegation.
- MTTC should determine the appropriate metrics for determining Program success regarding JAA.

### Technical Skills, Abilities

- Continue to offer training that will assist in obtaining and maintaining JAA and certifications.

### Certifications

- Establish baseline parameters to measure certification increases.

## RECOMMENDATION SUMMARY

### PROGRAM ADMINISTRATION

#### Program Objectives:

- Increase communication between technical staff, ATTTs, trainers, and credentialed employees to begin development of an on-the-job training system.

#### Minnesota Technical Training Committee:

- The current membership is adequate, but an NRCS Team Lead should be added to provide local insight and input. Continue to review membership moving forward, and make adjustments as needed.
- MTTC should play a greater role in facilitating OJT to increase opportunities.
- Increase coordination, messaging, and leadership regarding JAA with the overall goal of increasing technical staff obtaining JAA after attending training.
- Take steps to increase coordination between NRCS Team Leads and SWCD Managers to improve employee development.

#### Area Technical Training Teams:

- The ATTT Charter should be reviewed, and the Roles and Purpose should be updated based on feedback from ATTT members. More interaction for training prioritization and delivery is needed between ATTTs and the MTTC.
- TTCP should provide all ATTTs with refresher training on ATTT roles, responsibilities, and team functions.
- ATTTs need to communicate regularly with NRCS and SWCD technical staff within their respective Areas regarding training needs and opportunities.
- Actions should be taken to ensure that ATTTs are productive. This could include establishing a quarterly meeting schedule, disseminating notes from meetings, and additional coordination with the MTTC.

#### Communication:

##### Internal:

- Increased communication and coordination is needed between NRCS and BWSR in the development and promotion of technical trainings. TTCP trainers should be included in monthly ARC and AE calls to coordinate technical training.

##### External:

- Take steps to improve how technical training opportunities are shared with NRCS. This could be accomplished by developing a statewide email distribution list, or identifying specific NRCS individuals responsible for notifying technical staff of upcoming training opportunities.
- MTTC should annually communicate a refresher on the purpose and objectives of TTCP to everyone in the Partnership.

## TRAINING NEEDS

#### Individual Development Plans: Training Needs and Local Priorities

##### IDP Training Needs:

- Increased outreach and training should be provided to improve participation in the IDP process, particularly for NRCS technical staff.
- Continued training should be provided on how to use the tool to identify local priorities and training needs, and on how to track credentialing and training history.

- As shown in the 2019 IDP Participation Maps ([Appendix B](#)) many offices did not use the IDP tool to identify local priorities and training needs. Additional messaging should be directed towards the manager and staff audiences regarding the importance of completing the training needs assessment and how TTCP uses this information to develop a schedule of offered training.

### IDP Local Priorities:

- Additional training and messaging should be provided to aid in the understanding of how local priorities should be used in the IDP process. This prioritization helps clearly identify “training needs” and reduce “training wants.” NRCS and SWCD staff should be encouraged to participate together in local conservation prioritization efforts such as Local Work Group and One Watershed One Plan meetings, to improve consistency in the identification of priority resource concerns and practices.

## TRAINING DELIVERY

### Training Delivery

- Guidance, resources, and facilitation should be provided to develop an OJT program. Creative, outside-the-box solutions will likely be needed.
- Messaging and publication of training schedules should be improved to meet the strategy goal of having “a complete suite of training predictably and consistently available.” Only 32% of survey respondents expressed confidence in the future of offered trainings, but comments suggested that this is improving. Messaging should reiterate the commitment to providing training beyond the currently scheduled sessions, such as the following season or year. A year-long training calendar should be published and updated as soon as practical to allow potential attendees to plan their attendance, complete pre-requisites, and attend introductory sessions. The goal of this messaging is to increase the percent of people expressing confidence in the predictability and consistency of training being provided to 60% within two years (May 2022).

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### ATTT Grant Funded Training

- Training grant funds should continue to be provided to ATTTs to address local priority training needs. These optional funds allow for Area specific training to be offered with a quick turnaround.

## CREDENTIALS, CERTIFICATIONS, AND SKILL DEVELOPMENT

### Job Approval Authority

- Establish baseline parameters to measure JAA increases.
- Work to identify and eliminate barriers to JAA delegation.
- MTTC should determine the appropriate metrics for determining Program success regarding JAA.

### Technical Skills, Abilities

- Continue to offer training that will assist in obtaining and maintaining JAA and certifications.



**Certifications**

- Establish baseline parameters to measure certification increases.

## APPENDIX A: EVALUATION SURVEY QUESTIONS

### Standard Survey Items

#### Introduction:

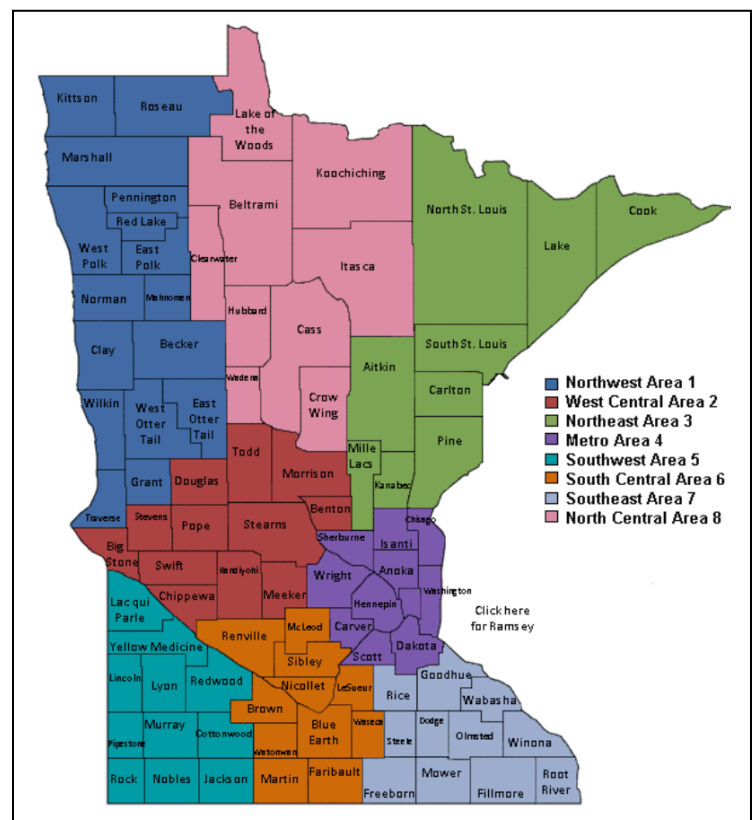
The Technical Training and Certification Program is a collaborative effort between MASWCD, MACDE, NRCS and BWSR, and is designed to efficiently provide training to develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting the conservation delivery needs of Minnesota.

In order to achieve these goals, the partnership created a [Technical Training and Certification Strategy \(pdf\)](#) designed to provide a framework for development of training and credentialing for local conservation professionals.

The purpose of this survey is to document progress in implementing the Technical Training and Certification Strategy, evaluate how and where the program has met the objectives outlined in the Strategy, what the impact of the program has been, and to identify areas where continued improvement or additional activities are needed.

This survey consist of 30 questions and will take approximately half an hour to complete. Your feedback is vital both in determining the success of this program and in shaping its future.

- 1) Who do you work for?
  - a. NRCS
  - b. SWCD
  - c. TSA
  - d. Other: *narrative*
- 2) Which MASWCD Area do you work in?
  - a. Area 1
  - b. Area 2
  - c. Area 3
  - d. Area 4
  - e. Area 5
  - f. Area 6
  - g. Area 7
  - h. Area 8
  - i. Other: (Specify – i.e. State Office)
- 3) Are your job duties predominantly:
  - a. Technical
  - b. Clerical
  - c. Outreach
  - d. Administrative
  - e. Other: *narrative*
- 4) How long have you worked in the conservation field?
  - a. Less than a year
  - b. One to three years
  - c. Three to five years
  - d. Five to ten years
  - e. More than 10 years



## Individual Development Plans:

An IDP is a written plan that can be used by employees and managers to reach long and short term professional development goals. The information from these Individual Development Plans is used as the foundation for the annual training needs inventory.

- 5) How familiar are you with the terms Priority Resource Concern and Priority Conservation Practice?
  - a. I know what these terms mean
  - b. I have heard these terms, but I'm not sure what they are
  - c. I have never heard these terms
- 6) Do you know the priority resource concern(s) and practice(s) identified for your work area?
  - a. Yes
  - b. No
- 7) Have you or your manager used the priority resource concerns and conservation practices for your work area to prioritize your training needs?
  - a. Yes
  - b. No
  - c. I don't know
- 8) Please rate your level of agreement/disagreement with the following statement: I understand how the TTCP program uses data collected through the IDP process.

1-Strongly Disagree 2-Disagree 3-Neither Agree nor Disagree 4-Agree 5-Strongly Agree NA/Unknown

- 9) We asked that technical staff enter the top five priority training needs. Please select the responses below that apply and/or provide additional information. Select all that apply.
  - a. My priority training needs reflect my office's priority resource concerns.
  - b. My priority training needs reflect my office's priority conservation practices.
  - c. My priority training needs are based on an assessment of my existing versus needed technical skills.
  - d. My priority training needs are based on my interests and may/may not reflect my office's priority resource concerns and/or priority conservation practices.
  - e. Other: *narrative*
- 10) Did you complete, or have someone complete for you, your Individual Development Plan (IDP) in eLINK?
  - a. Yes – Please select the best response regarding use of the IDP tool:
    - i. The IDP tool was understandable and easy to complete.
    - ii. The IDP tool was confusing, but I was able to complete it without problems.
    - iii. The IDP tool was very confusing, and I had to get help to complete it.
    - iv. Someone else completed the IDP for me.
  - b. No – Please select the best response as to why you didn't complete an IDP:
    - i. I didn't know I should complete an IDP.
    - ii. I forgot.
    - iii. I didn't have time.
    - iv. I didn't know how.
    - v. I didn't have access.
    - vi. I decided it wasn't important.
    - vii. My supervisor decided it wasn't important.
    - viii. I am not looking to attend technical training and/or an IDP is not applicable to me.
    - ix. Other: *specify*

## Training:

Information from the IDPs are assessed through the Training Needs Inventory process. Using the results from this Inventory NRCS, BWSR, MASWCD, and MACDE, working in partnership, identify and develop material for a complete suite of training courses. Training needs are addressed based on prioritization.

11) Please select the best response below regarding your opportunities to attend technical training sessions.

- a. I have adequate opportunities to attend technical training.
- b. I have opportunities to attend technical training, but think more should be offered.
- c. I do not have adequate opportunities to attend technical trainings.
- d. Not applicable.
- e. Other: *narrative*

12) Please select the best response below regarding the relevance of technical trainings offered.

- a. Most of the technical trainings offered by TTCP are relevant to my training needs.
- b. Some of the technical trainings offered by TTCP are relevant to my training needs.
- c. Few of the technical trainings offered by TTCP are relevant to my training needs.
- d. Not applicable.
- e. Other: *narrative*

13) How do you learn about upcoming technical training opportunities? Select all that apply.

- a. Email distribution
- b. Train Tracks (BWSR training newsletter)
- c. Training Calendar (on the BWSR website)
- d. Co-workers
- e. Other: *narrative*

14) In the past three years have you attended training provided by the TTCP?

- a. Yes

Please rate each statement below regarding TTCP training(s) that you have attended:

1-Strongly Disagree 2-Disagree 3-Neither Agree nor Disagree 4-Agree 5-Strongly Agree NA/Unknown

- i. The training sessions will help me perform my job better.
  - ii. The training sessions were well organized.
  - iii. The training instructors demonstrated content knowledge.
  - iv. The training instructors engaged my participation and interest.
  - v. The training instructors answered my questions thoughtfully.
  - vi. The training location was within a reasonable driving distance from my office.
- b. No

Please select the response(s) below regarding why you haven't attended TTCP training. Select all that apply.

- i. I was not aware these trainings were available.
  - ii. The trainings offered are not relevant to my training needs.
  - iii. The trainings offered are too basic.
  - iv. I don't have time to take training.
  - v. I am not interested in taking training at this time.
  - vi. Other: *narrative*

- 15) Have you used the Training Calendar on the BWSR website to:
- Learn about upcoming training opportunities? Yes/No/NA
  - Register for training(s)? Yes/No/NA
- 16) Have you used the Online Learning page on the BWSR website to:
- Complete a self-paced training? Yes/No/NA
  - Watch a webinar or replay as a refresher on a topic or tool? Yes/No/NA
  - Access specific information about a practice or skill? Yes/No/NA
- 17) One goal of the Technical Training and Certification Program is to offer a suite of core training opportunities on a predictable basis. Please select the answer that best describes your confidence that your training needs will be met in the next three years.

When trainings are offered I:

- Attend everything that I can, regardless of workload, just in case it isn't offered again next year.
  - I sign up for all of my highest priorities even if it is going to be difficult to find time to attend.
  - I only sign up for what I have time for because I'm confident I can attend a different session at a future date.
  - Other: *narrative*
- 18) In order to improve the predictability of training we would like to hear from you about how often core trainings should be offered. Please indicate how often you think each of the trainings listed below could occur and still meet the training needs for technical staff in Minnesota. Keep in mind that TTCP does not have the capacity to offer all trainings every year.

1-Every Year      2-Every Two Years      3-Every Three Years      Don't know/no opinion

- Conservation Planning.
- Engineering Boot Camp.
- Soil Health and Sustainability.
- Basic Prescribed Grazing.
- Advanced Prescribed Grazing.
- Basic Nutrient Management.
- Advanced Nutrient Management.
- Pest Management.
- Soil Loss Evaluation.
- Soil Mechanics 1 (SM-1).
- Basic Hydrology.
- Wildlife Habitat Assessment.
- Plant ID.
- Pollinator Habitat.
- Vegetation Establishment.
- Forestry.
- Other: *narrative*
- Other: *narrative*
- Other: *narrative*
- Other: *narrative*

- 19) Continuing education and training can help with maintaining technical skills and Job Approval Authority, and it is a requirement for maintaining conservation planning certifications. Please indicate the availability of training opportunities for continuing education provided by TTCP for the topics listed below.

1-No Opportunities 2- Few Opportunities 3-Some Opportunities 4-Adequate Opportunities NA/Unknown

- a. Changes to conservation practice standards
- b. Changes to resource concerns
- c. New and emerging technology
- d. Basic technical skills (i.e. plant ID)
- e. Advanced technical skills (i.e. electronic surveying)
- f. New or updated technical tools (i.e. WinPST)
- g. New or updated software

- 20) Do you have any recommended changes for TTCP to improve the development and delivery of technical training?

- h. Narrative

## Credentialing:

The system to ensure employees providing technical services in Minnesota are qualified to implement conservation practices and activities includes certification, Job Approval Authority, and/or other credentialing.

- 21) Job Approval Authority is the standard used to ensure technical staff have the competency to plan, design, and install conservation practices. Please indicate your level of agreement or disagreement with the statements below.

1-Strongly Disagree 2-Disagree 3-Neither Agree nor Disagree 4-Agree 5-Strongly Agree NA/Unknown

- a. I understand what JAA is.
- b. I think having JAA is important for my work.
- c. My manager thinks it is important for staff to have JAA.
- d. My Board of Supervisors understands what JAA is.
- e. My Board of Supervisors supports technical staff getting JAA.

- 22) As the result of training, information, or other support provided through the TTCP, please select the best response regarding your Job Approval Authority.

- a. I have obtained new and/or increased levels of JAA.
- b. I have completed training and I am developing the skills to pursue JAA.
- c. I have JAA and I am not pursuing new and/or increased levels.
- d. I do not have JAA and I am not pursuing it.
- e. I do not know what JAA is.
- f. JAA does not apply to my position and duties.



23) As the result of training, information, or other support provided through the TTCP, please indicate the overall degree of improvement in your ability to:

1-No change 2-Slight Improvement 3-Moderate Improvement 4-Significant Improvement 5-Extreme Improvement NA

- a. Complete the nine-step conservation planning process
- b. Assist landowners to address resource concerns
- c. Use resource assessment tools (i.e. RUSLE2, WEPS, IET, PCS, WHEG, SVAP2)
- d. Reference, understand, and utilize NRCS conservation practice standards
- e. Complete job sheets/implementation requirement worksheets
- f. Conduct surveying
- g. Calculate hydrology
- h. Use practice design tools (i.e. seed calculators, EFT, ArcMap Engineering Tools/GIS)
- i. Plan conservation practices that treat identified resource concerns to the planning criteria level
- j. Design conservation practices
- k. Install/implement conservation practices
- l. Other: *narrative*
- m. Other: *narrative*

24) Conservation planning is the process used to identify and evaluate resource concerns, analyze information, and recommended conservation practice alternatives to treat identified problems. As the result of training, information, or other support provided through the TTCP, please select the response below that best reflects your conservation planning certification or skills.

- a. I completed continuing education and maintained my conservation planning certification.
- b. I obtained my conservation planning certification.
- c. I attended the conservation planning training and am working towards obtaining my conservation planning certification.
- d. I attended conservation planning training, but I do not intend to pursue my conservation planning certification.
- e. I want to attend the conservation planning training and plan to pursue my conservation planning certification.
- f. I want to attend the conservation planning training, but I do not intend to pursue my conservation planning certification.
- g. I do not intend to attend the conservation planning training or pursue my conservation planning certification.

## The Technical Training and Certification Program:

The Technical Training and Certification Program is a collaborative effort between MASWCD, MACDE, NRCS and BWSR, and is designed to efficiently provide training to develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting the conservation delivery needs of Minnesota.

25) In your opinion, please indicate how well the program has met each objective listed below.

1 – No progress towards meeting 3 – Some progress towards meeting 5 – Objective completed NA/UNK

- a. Develop an enhanced program for technical training and certification for conservation technical assistance in Minnesota.
- b. Increase opportunities for obtaining Job Approval Authority for conservation Practices.
- c. Increase opportunities for obtaining conservation certifications.
- d. Provide training opportunities to address technical skill and conservation practice needs.
- e. Provide opportunities for mentoring and on-the-job training needs.
- f. Assessment of technical training needs.
- g. Develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting Minnesota's conservation delivery needs.

26) Please rate the effectiveness of the TTCP efforts to share the following information:

1-Not Effective 2-Slightly Effective 3-Somewhat Effective 4-Very Effective 5-Extremely Effective NA/Unknown

- a. Upcoming training opportunities
- b. Online learning opportunities
- c. Job Approval Authority process and requirements
- d. Conservation planning certification process and requirements
- e. Opportunities to provide feedback and input
- f. Importance of and instructions to complete Individual Development Plans
- g. Program accomplishments

27) TTCP uses a variety of tools to communicate information on upcoming training opportunities, accomplishments, and resources for conservation staff. Based on your interaction with TTCP please rate the effectiveness of each of these tools:

1 – Not effective                      3 – Effective                      5 – Very Effective                      NA/Unknown

- a. Upcoming training opportunities in the Training Calendar on the BWSR website
- b. Program information on the BWSR website
- c. Train Tracks newsletter
- d. Direct emails from TTCP
- e. Other: *How do you receive information about TTCP?*

28) Are you a current or former member of an Area Technical Training Team?

a. Yes

i. How long have you been/were you a member?

1. One year
2. Two years
3. Three or more years

ii. Please rate how productive you feel your ATTT is. Please provide a short explanation for your answer.

1. Very productive
2. Productive
3. Somewhat productive
4. Not productive
5. Explain:

iii. Did the ATTT you are a part of receive a local grant for training?

1. Yes
2. No
3. I don't know

iv. Please rate the usefulness of local training grants and provide a brief explanation for your answer.

1. Very useful
2. Useful
3. Not useful
4. Explain:

v. Do you think the TTCP should offer training grants to ATTTs again in the future? Please tell us why/why not.

1. Yes
2. No
3. No opinion
4. Explain:

vi. What do you think the primary function or responsibility of an ATTT is?

1. Narrative.

b. No.

i. Are you aware of what an ATTT is?

1. Yes
2. No

ii. Do you know who the members of your ATTT are?

1. Yes
2. No

iii. Please rate the frequency of your interactions with your ATTT to communicate training needs.

1 – Never      2 – Rarely      3 – Occasionally      4 – Often      5 – Always      NA

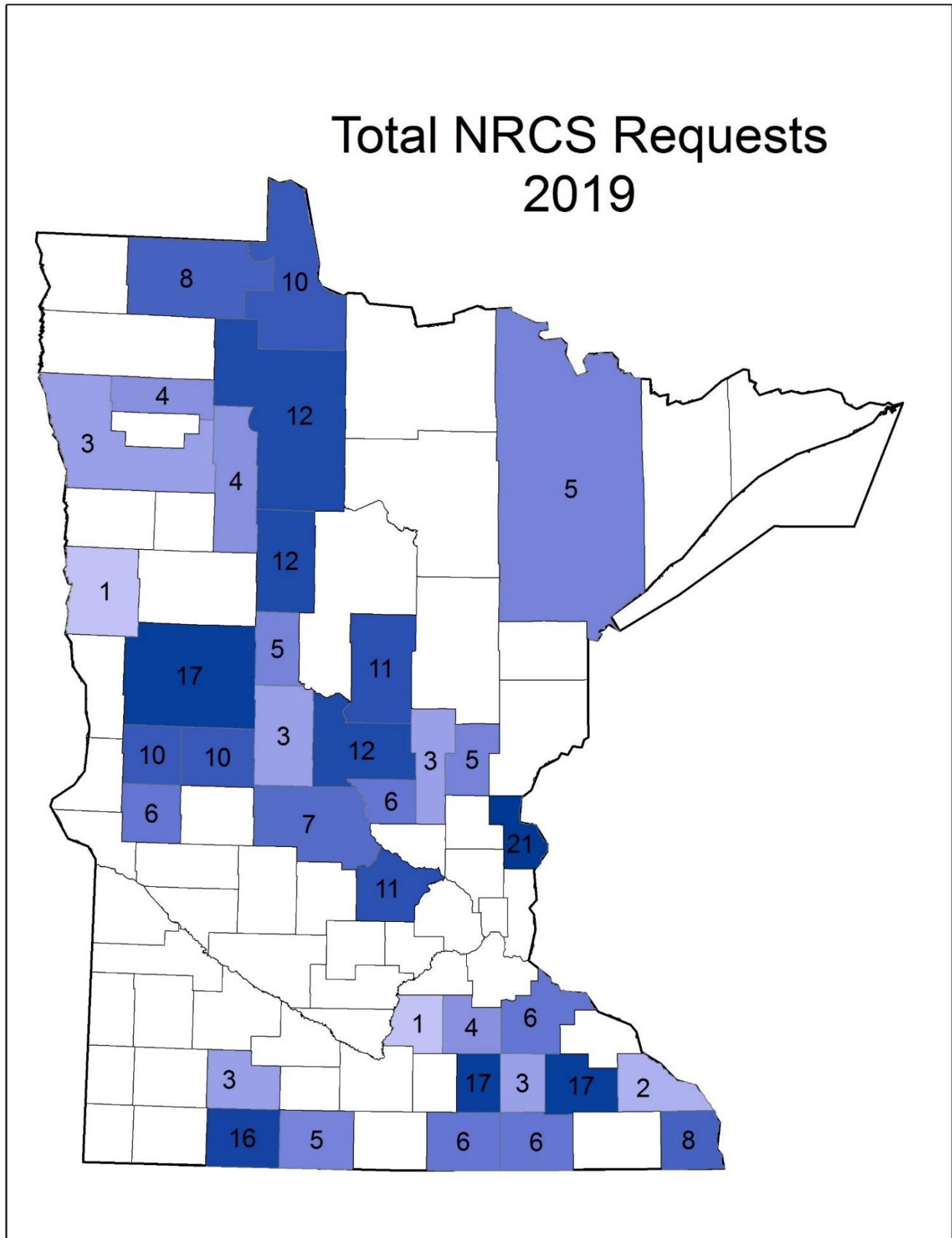
29) In your experience, in what area(s) has the TTCP been the most effective?

a. Narrative

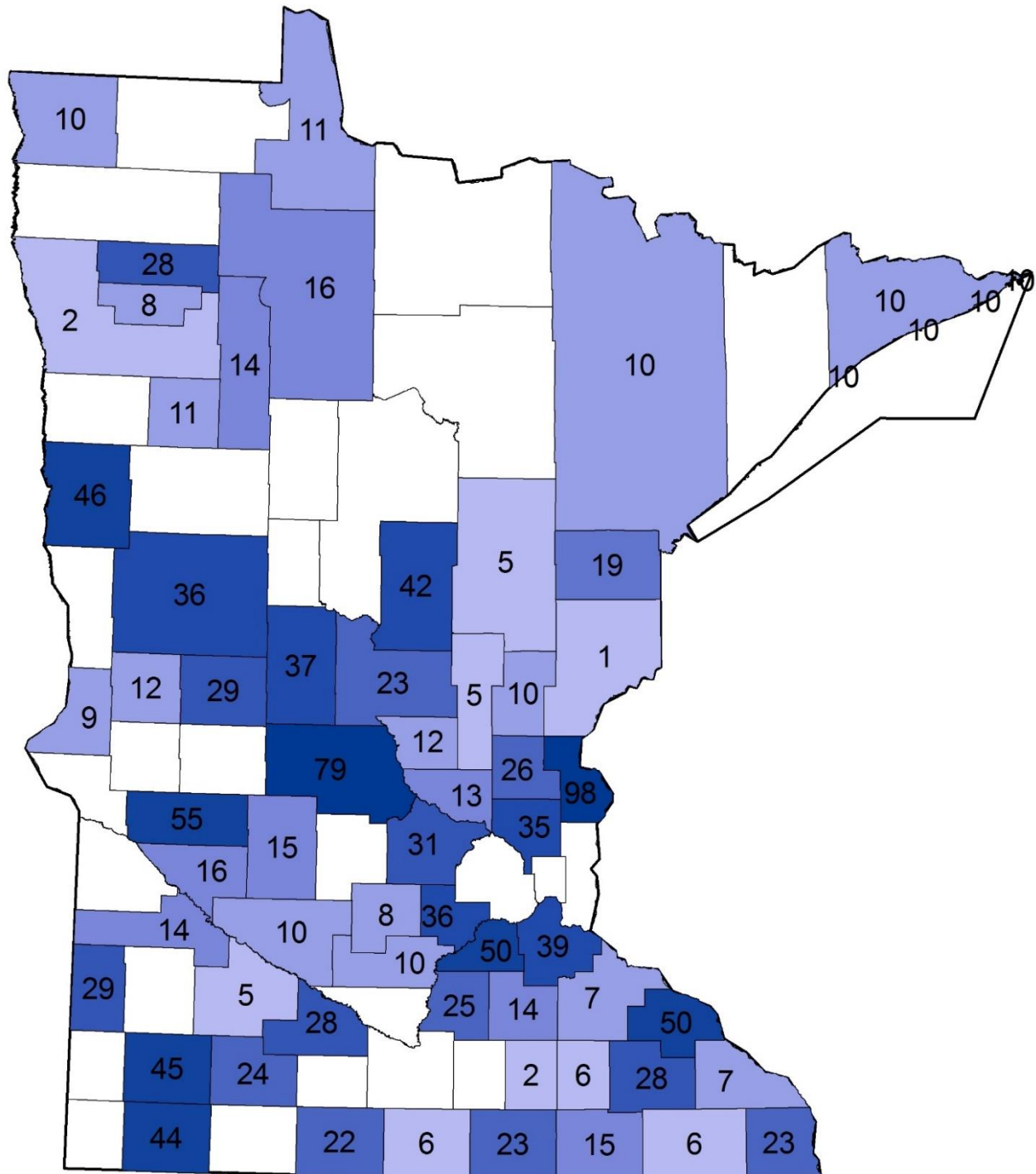
30) Are there any area(s) where the TTCP could be more effective? Please be specific.

b. Narrative

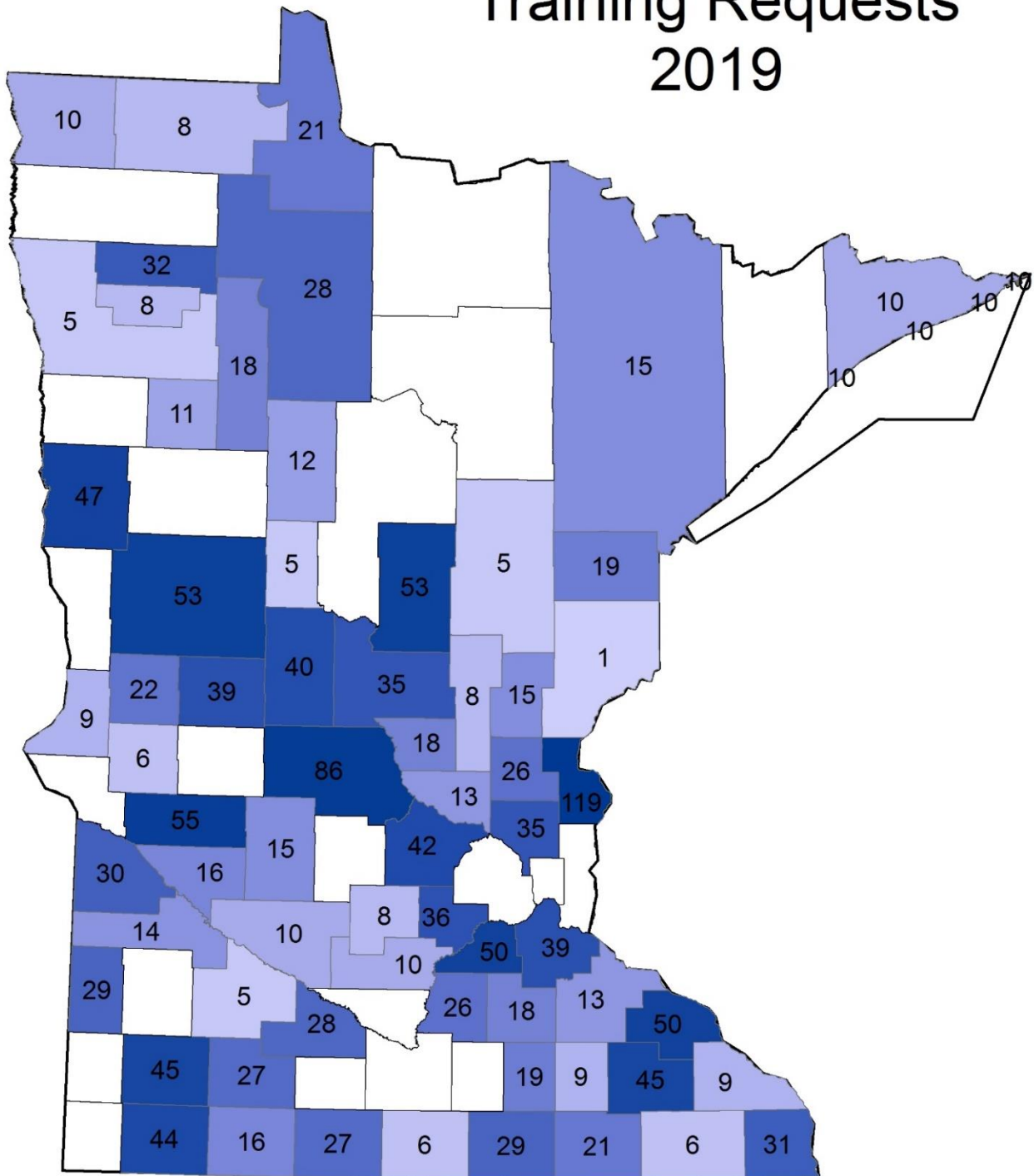
APPENDIX B: 2019 IDP PARTICIPATION MAPS



## SWCD Total Requests 2019



# Total County Training Requests 2019





## APPENDIX C: WEBSITE ANALYTICS

The TTCP pages on BWSR's website were launched in late April 2019, and analysis focused on the three main pages: Technical Training and Certification Program main page, the Training Calendar, and Online Learning. TTCP is the main landing page for those visiting BWSR's website to learning about technical training opportunities. As visitors return to the website it is assumed that they create shortcuts to access other pages, thereby bypassing the TTCP main page. The Training Calendar is regularly updated to announce upcoming training opportunities, and listings include registration forms, additional resource material, and/or course details. The Online Learning portal contains virtual trainings, reference material, pre-recorded trainings, and recorded training replays. It is continuously updated, and offers a growing repository of technical training opportunities.

Analysis of these pages focused on the page visits over a set timeframe. These timeframes included:

- The first year: May 1, 2019 to May 1, 2020
- The first six months: May 1, 2019 to October 31, 2019
- The last six months: November 1, 2019 to May 1, 2020
- The last 60 days (nine weeks): March 16, 2020 to May 15, 2020

### TTCP Main Page:

- First year: 3,320 total, 63.9 views per week
- First 6 months: 1,631 total, 62.7 views per week
- Last 6 months: 1,689 total, 65 views per week
- Last 60 days: 774, total 86 views per week

### Training Calendar:

- First year: 4,676 total, 89.9 views per week
- First 6 months: 2,497 total, 96 views per week
- Last 6 months: 2,179 total, 83.8 views per week
- Last 60 days: 517 total, 57.4 views per week

### Online learning:

- First year: 3,556 total, 68.4 views per week
- First 6 months: 1,254 total, 48.2 views per week
- Last 6 months: 2,302 total, 88.5 views per week
- Last 60 days: 1,388 total, 154.2 views per week

## APPENDIX D: TRAINING DELIVERY INFOGRAPHICS

### TRAINING STATS

For the Technical Training and Certification Program

In December 2015, BWSR partnered with the USDA's Natural Resources Conservation Service, the Minnesota Association of Conservation Districts and the Minnesota Association of Conservation District Employees to sign a five-year agreement to launch the program. Annual training delivery is based on priority needs gathered using the individual Development Plan (IDP) tool.

Since its inception, the Technical Training and Certification program (TTCP) has provided 244 training sessions benefiting more than 5,000 trainees.

JANUARY 2018-SEPTEMBER 15, 2020

**5,154**

Number of training attendees

**PARTICIPANTS**



**TRAINING SESSIONS**



**244**

Trainings opportunities delivered

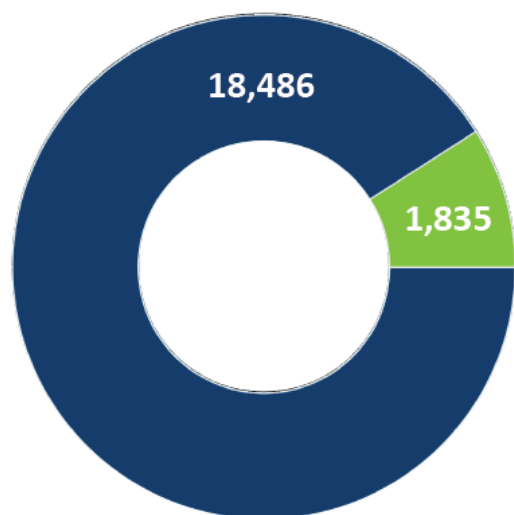
**20,321**

Hours of training multiplied by number of participants

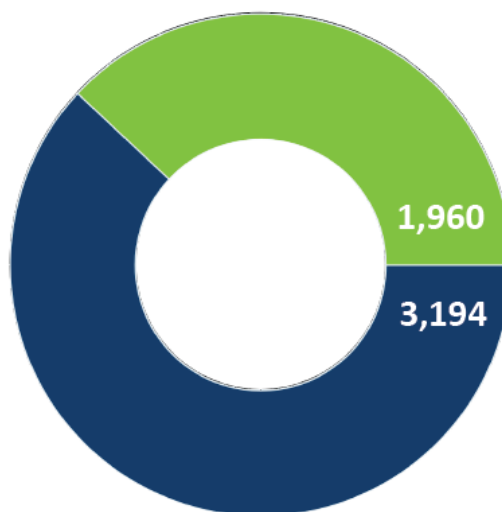
**TRAINING HOURS**



### Training Stats for the TTCP Program to date



- In-Person Training Hours
- Online Training Hours



- In-Person Participants
- Online Participants

## 2020 Virtual Training & COVID-19 Response

### Technical Training and Certification Program

Most trainings offered in 2020 by the Technical Training and Certification Program (TTCP) were held online to reduce risks associated with the COVID-19 pandemic. Virtual training sessions help the TTCP reach a broader geographical audience and provide more flexibility for participants. Trainees can view recorded sessions if they are unable to attend live webinars.

In April, the TTCP partnership launched Tech Talks, a weekly online training series that aims to provide additional training opportunities to Minnesota conservation workers seeking Job Approval Authority. Tech Talks is presented live every Monday at 1 p.m., with trainings running between 60 and 90 minutes. The online format allows conservation staff to interact with trainers as they would in field trainings. All Tech Talks are recorded and available to watch on BWSR's Online Learning Portal.



*The majority of TTCP trainings (60%) were held online this year.*

#### TECH TALKS: APRIL 6-SEPTEMBER 15, 2020

**1,029**

Number of training attendees

#### PARTICIPANTS



#### TRAINING SESSIONS



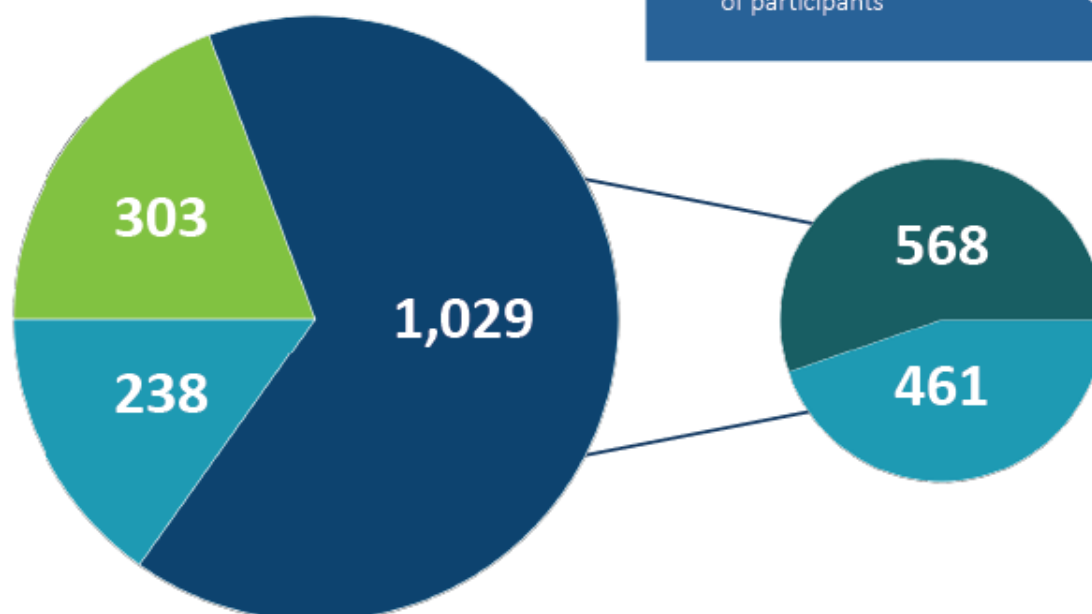
**24**

Trainings opportunities delivered

**1,132**

Hours of training multiplied by number of participants

#### TRAINING HOURS



● 2020 Tech Talks Training Participants

● 2020 Traditional Webinar Training Participants (excludes Tech Talks)

● 2020 Total In-Person Training Participants

● 2020 Tech Talks Live Training Participants

● 2020 Tech Talks Live Training Participants