



Minnesota Agricultural Water Quality Certification Program Legislative Report



Brad Jordahl Redlin, 651-201-6489
625 Robert St. N., St. Paul, MN 55155
www.mda.state.mn.us

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Executive Summary

The Minnesota Agricultural Water Quality Certification Program (MAWQCP) is a voluntary program that supports the adoption of agricultural best management practices that are protective of water quality. The program was signed into statute in 2013, piloted in 2014, and began statewide operations in July 2015.

In just over three and a half years the program has:

- Developed an innovative and comprehensive process for identifying and mitigating agricultural risks to water quality on a field-by-field, crop-by-crop basis;
- Partnered with Minnesota's soil and water conservation districts to create a statewide delivery system, ensuring the program is delivered by local conservation professionals;
- Pursued partnerships with industry leaders, such as Land O' Lakes Inc., to jointly promote the MAWQCP, leveraging the program's budget and allowing it to certify more farmers than it otherwise could;
- Implemented an outreach and engagement initiative to increase program awareness, secure program applications, and garner feedback from stakeholders.

As of December 31, 2016, the program had certified 306 farms, representing 175,000 acres of working lands. These 306 farms have generated 531 new best management practices that are keeping 14.7 million pounds of soil on Minnesota fields annually and keeping 9.7 million pounds of sediment and 6,086 pounds of phosphorous from entering our lakes, rivers, and streams annually.

In 2017 the MAWQCP looks to continue building on its legacy of robust growth and enroll more producers and landowners into the program to continue its work of protecting and improving Minnesota's most iconic natural resource.

Introduction

The Minnesota Agricultural Water Quality Certification Program (MAWQCP) is a first of its kind, voluntary program that supports the implementation of conservation practices on a field-by-field, whole farm basis. Through its innovative and nationally recognized process of identifying and mitigating agricultural risks to water quality, the MAWQCP delivers on-farm conservation that helps protect and restore Minnesota's lakes, rivers, streams, and groundwater. The MAWQCP is a national demonstration project that is operated as a federal-state partnership between the State of Minnesota, the United States Department of Agriculture, and Minnesota's 89 soil and water conservation districts. The certification program has also partnered with industry leaders including Land O' Lakes Inc., and GNP Company, to promote the program and enroll additional acreage. Farmers and landowners who treat all risks to water quality on their operation are certified and are deemed to be in compliance with any new water quality laws or rules for 10 years. Certification gives farmers and the public greater certainty about regulatory standards and assures the public Minnesota's farmers are doing their part to protect water quality. In its first year of statewide operation (July 2015-June 2016), the MAWQCP certified over two hundred farms, keeping millions of pounds of sediment and runoff from entering Minnesota's waters annually.

This report is submitted pursuant to Minnesota Statute §17.992:

The commissioner, in consultation with the Minnesota Agricultural Water Quality Certification Program Advisory Committee, commissioner of natural resources, commissioner of the Pollution Control Agency, and Board of Water and Soil Resources, shall issue a biennial report to the chairs and ranking minority members of the legislative committees with jurisdiction over agricultural policy on the status of the program.

Program Background

The MAWQCP was initially formed through a 2012 Memorandum of Understanding (MOU). The MOU was the culmination of talks led by Governor Mark Dayton, United States Department of Agriculture (USDA) Secretary Tom Vilsack, and then U.S. Environmental Protection Agency (EPA) Administrator Lisa Jackson. The MOU stated that Minnesota's state agencies responsible for overseeing issues at the nexus of agriculture and water quality, including the MDA, Pollution Control Agency (MPCA), Department of Natural Resources (DNR), and Board of Water and Soil Resources (BWSR), would jointly deliver the program with the MDA acting as the lead agency.

Under the MOU, the MDA, led by Commissioner David Frederickson, was tasked with convening an advisory committee of diverse agricultural stakeholders to design an agricultural water quality certification program. The advisory committee was comprised of fifteen members who represented a wide variety of interests. Members included representatives from the Minnesota Farm Bureau Federation, the Minnesota Farmers Union, county and municipal government, agribusiness, the environmental community, and diverse farm operations. Chief among the advisory committee's recommendations was piloting the program prior to statewide implementation and the creation of a new, innovative assessment process that would help field staff identify risks to water quality regardless of the crop being grown. These insights helped Governor Dayton, Commissioner Frederickson, and the state legislature author the MAWQCP's originating statute (Minn. Stat. § 17.9891-17.993), which was signed into law in the spring of 2013. Under the statute, once producers and landowners have mitigated all risks to water quality present on their operation, they are eligible to become certified and sign a contract with the State of Minnesota. The certification contract states certified producers and landowners will be deemed in compliance with any new state water laws or rules for 10 years.

In June 2013, the MAWQCP began designing its pilot phase and sought applicants from which to select four sub-watersheds, representing the state's distinct agricultural and geographic regions. The Middle Sauk River pilot area was coordinated by Stearns County SWCD. The Whiskey Creek and Whitewater River pilot areas were coordinated by the Buffalo-Red River Watershed District and Whitewater Joint Powers Board, respectively, but the day to day program operations were handled by local SWCDs. The Elm Creek pilot area was coordinated by the nonprofit organization, Rural Advantage. The pilot areas were successful where they were run by, or with help from, the local SWCDs and it failed to gain robust participation in the region where the pilot was led by Rural Advantage. Minnesota's SWCDs are historic providers of conservation services and are seen by Minnesota's farmers and landowners as trusted partners. So, when the program began implementing statewide operations in July 2015, it partnered with the SWCDs to deliver certification services.

In addition to the advisory committee, the MDA also created an interagency team to guide the program's development and implementation. This team was comprised of individuals from the MPCA, BWSR and the DNR. Each of these agencies brought their unique expertise to the table, ensuring the MAWQCP was designed and implemented in a manner that respects each agency's unique role in the state's agricultural arena.

The USDA Natural Resources Conservation Service (NRCS) has also been instrumental in developing the certification program. From the outset the MAWQCP has partnered with NRCS to fund the installation of on-farm conservation practices and in 2015 the MAWQCP received a competitive Regional Conservation Partnership Program (RCPP) award of \$9 million to be disbursed over a period of four years. Through this award the NRCS has worked seamlessly with MAWQCP staff to create processes and protocols to distribute financial assistance to farmers seeking certification and to jointly promote the program.

Of critical importance to the long-term success of the MAWQCP is the fact that the Minnesota interagency team and advisory committee are still active and continue to provide the MDA with key

insights on the day to day operations of the certification program. The NRCS also continues to play a primary role in delivering the program.

Assessment Process

The MAWQCP's nationally recognized method for identifying and mitigating agricultural risks to water quality has created a commonsense blueprint to recognize, reward, and incentivize farmers in their efforts to protect and improve Minnesota's waters. The MAWQCP's assessment process utilizes cutting-edge tools and traditional conservation delivery methods alike to deliver certification services, but the program's core service is putting landowners and producers in touch with conservation professionals to create individualized water-focused conservation plans that protect the environment.

The program's assessment process includes utilizing an online risk assessment tool. The tool was developed by MAWQCP staff as a first of its kind method for identifying risks to water quality in every field and on any cropping system. Specifically, the tool analyzes nutrient management, tillage management, pest management, irrigation and water drainage management, and existing conservation practices. Data collected by the tool informs subsequent on-site inspections, ensuring no risks are missed and all are properly mitigated. All farm-level data collected during the assessment process is private and per the MAWQCP's originating statute subject to the highest level of data privacy afforded by the State of Minnesota.

The certification process is straightforward and easy for interested producers to navigate.

- **Contact** – A producer seeking certification contacts their local SWCD and sets up an initial meeting.
- **Assess** – Local certification specialists meet with the producer to learn more about their operation and then begin identifying risks to water quality using the MAWQCP's online risk assessment tool.
- **Meet** – A certification specialist meets with the producer to go over the results of the initial baseline risk assessment and together the certification specialist and producer create a plan, which often includes financial and technical assistance components, to mitigate any risks to water quality identified in a manner that works for the producer and the environment.
- **Verify** – The certification specialist conducts a field assessment to verify the results of the online risk assessment and ensure that the plan the producer and certification specialist have created mitigates every risk to water quality.
- **Support** – The producer and the certification specialist stay in touch to ensure the producer is able to maintain their certification as they make changes to their operation.

The certification process is producer driven, occurring when a producer has time, and on average takes 4-5 hours for the producer. Importantly, there is no timeline for completing the process. Production agriculture is a complex and costly endeavor and the MAWQCP allows producers to mitigate risks to water quality at a pace, and in a manner, that makes sense for their operation. Most producers sign their certification contract within a few months of beginning the process but some have taken more than a year to complete the process.

Program Operations

The success of the program's pilot phase led the Legislature to recommend the program begin statewide implementation in 2015, one year ahead of schedule. Through the pilot phase the MAWQCP realized four crucial lessons:

1. Partnering with Minnesota's SWCDs is key to the MAWQCP's long-term success;
2. Each certification is different and needs to be tailored to the producer's goals and timeline;
3. Crop advisors and retailers are often important sources of information for producers who can also help with the certification process;
4. Motivations for pursuing certification vary from producer to producer and should be accounted for when developing outreach and engagement strategies.

When the MAWQCP began statewide operations in July 2015 its first order of business was creating a regional structure that allowed local SWCDs to take the lead in delivering certification services (Figure 1). Working in collaboration with BWSR and the Minnesota Association of Soil and Water Conservation Districts (MASWCD), the MAWQCP divided the state into eight regions. Each region consists of 10-12 counties. The regions each have a fiscal agent (either an SWCD manager or joint powers board manager) responsible for disbursing funds to local SWCDs and an Area Certification Specialist (ACS). The ACS is responsible for working with interested landowners and producers, and serving as the regional organizer for the MAWQCP. Each ACS is employed by an SWCD with pass-through funds from the MAWQCP's annual budget—65% of the MAWQCP's funding is passed directly to the program's SWCD partners. In addition to employing an ACS for each region, the MAWQCP is committed to working with every one of Minnesota's 89 SWCDs and every SWCD that participates in promoting or delivering the program may submit invoices for staff time and materials related to program delivery.

The MAWQCP's ACSs are the backbone of the program. In just over one and a half years of statewide operations, the ACSs have distinguished themselves as trusted advisors who work alongside producers to help them reach their goals.

The ACSs are directly responsible for conducting the MAWQCP's risk assessment and then working with each producer to find a pathway to certification that treats every risk to water quality identified in the baseline assessment, and makes economic and agronomic sense for the producer. ACSs also help producers seeking certification navigate the MAWQCP's dedicated pool of financial assistance from the USDA NRCS and the MDA's financial assistance grant. In 2016 the MDA began offering a financial assistance grant of up to \$5,000 to producers seeking to become certified. This secondary grant is designed to work in concert with the NRCS's financial assistance and provide producers with the

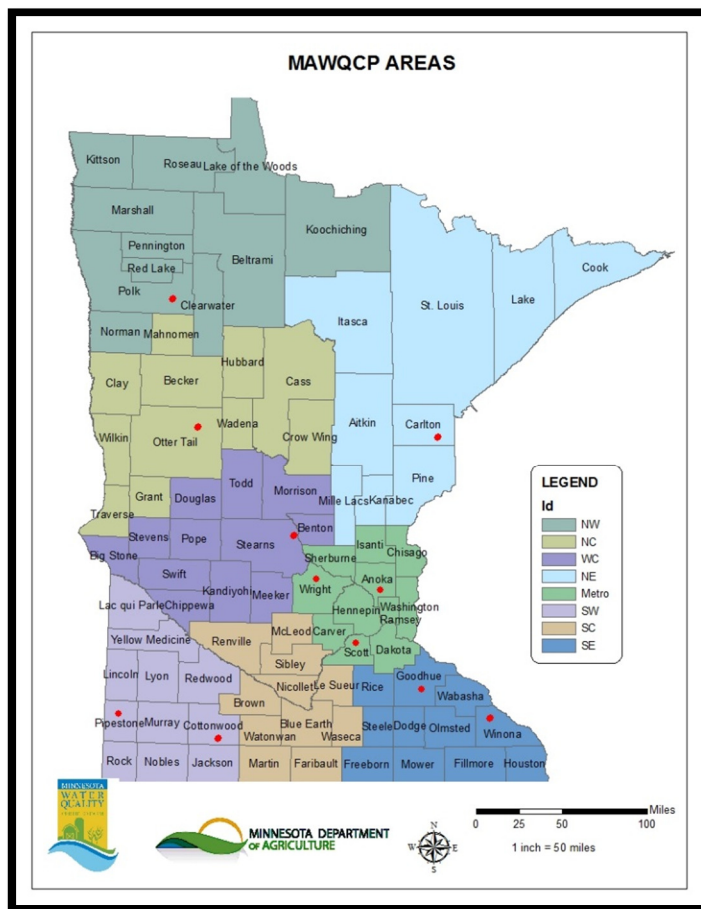


Figure 1: MAWQCP Regions

resources necessary to adopt best management practices that protect and improve water quality. Aside from their work with interested producers and landowners, the ACSs also coordinate program implementation for the SWCDs in their region. Some SWCDs have taken the lead and are operating the program on their own, while others have opted to take less active roles.

By partnering with Minnesota’s SWCDs and creating a risk identification and assessment process that recognizes producers’ existing stewardship, while still incentivizing producers to increase their stewardship, the MAWQCP has created a program that is being embraced by Minnesota’s agricultural community. As of December 31, 2016 the MAWQCP has certified 306 farms (Figure 2), representing 175,000 acres (Figure 3). In 2016 alone the MAWQCP certified 226 farms and nearly 130,000 acres, representing annual growth rates of 283% and 287%, respectively.

Figure 2: MAWQCP Certified Farms

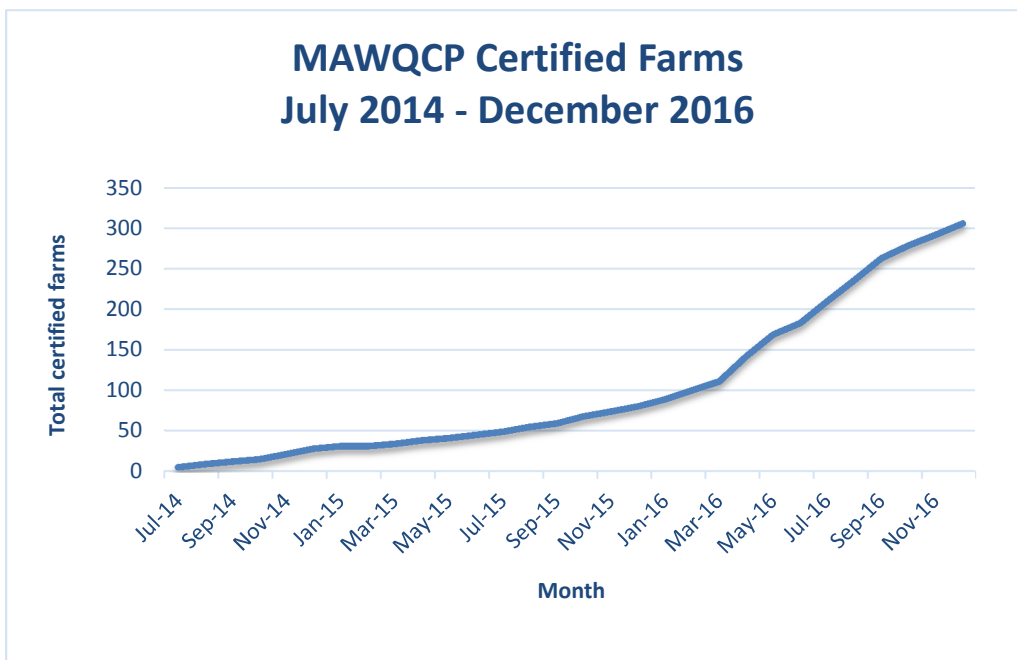
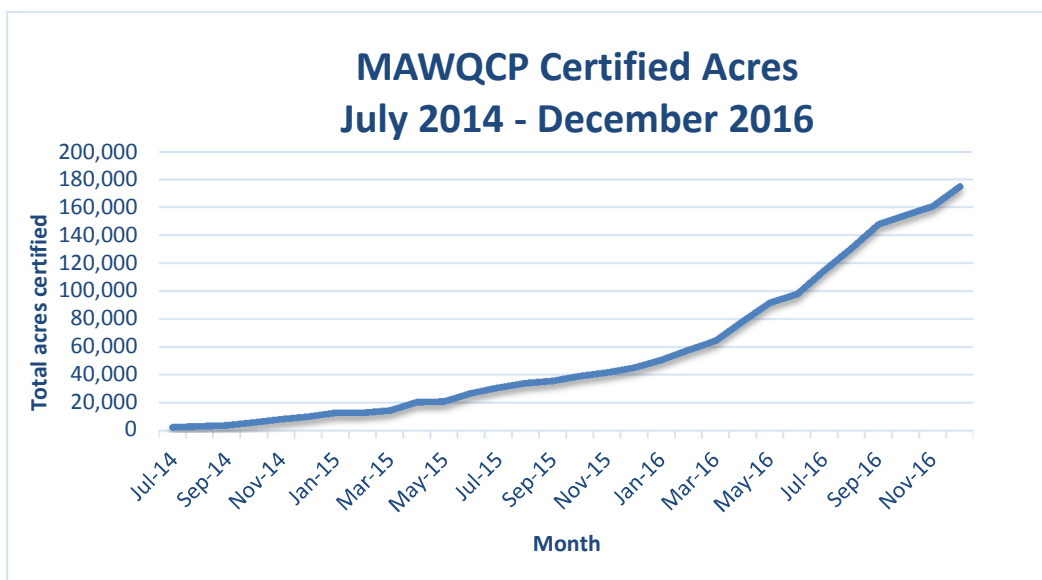
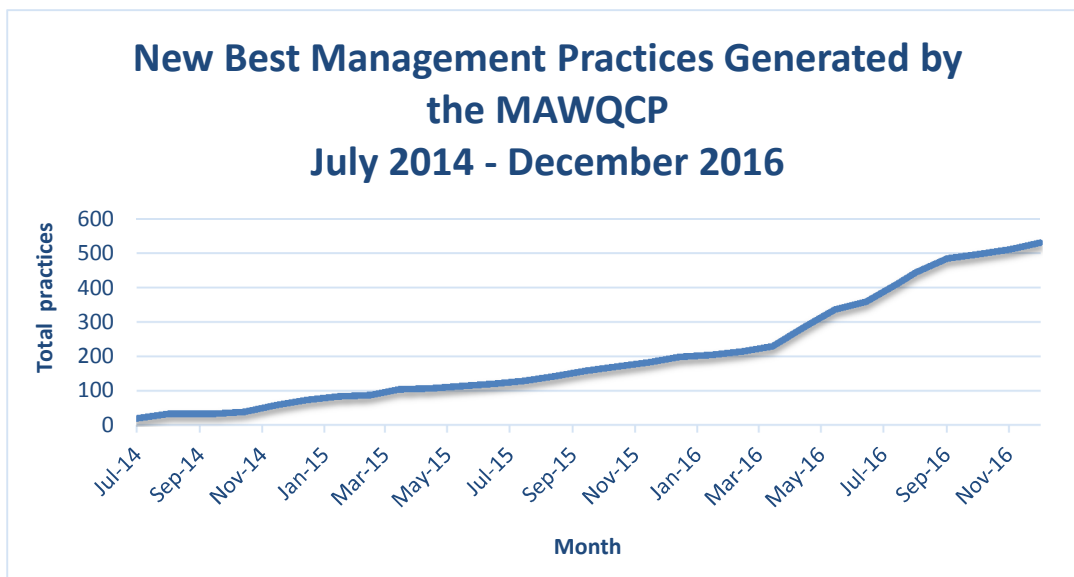


Figure 3: MAWQCP Certified Acres



In addition to tracking enrollment statistics, the MAWQCP also tracks the environmental benefits directly generated by certified farms. Almost every farm that participates in the MAWQCP must mitigate at least one agricultural risk to water quality (on average every farm mitigates 1.7 risks) by either making a change in farm management or installing a new structural conservation practice. The environmental benefits of the program are calculated by running each new best management practice through BWSR’s pollution reduction estimator¹. As of December 31, 2016, the MAWQCP has directly generated 531 new best management practices (Figure 4) and to date these practices are keeping 14.7 million pounds of soil on Minnesota fields annually, and keeping 9.7 million pounds of sediment and 6,086 pounds of phosphorous from entering Minnesota’s waters.

Figure 4: Best Management Practices Generated by the MAWQCP



Partnerships

Delivering the MAWQCP through Minnesota’s SWCDs has been the single most important act in standing up a robust, viable, and trusted program, but a program delivered through SWCDs alone does not have the capacity to help Minnesota meet the statewide water quality goals outlined in *The Minnesota Nutrient Reduction Strategy*. Not every farmer in the state utilizes their local SWCD and, as is common for governmental programs, SWCD staff time and funding is limited. MAWQCP program staff quickly realized during the statewide rollout that in order to have the ability to certify every interested producer and landowner in Minnesota, the program must be delivered through multiple channels and began aggressively pursuing partnerships with agribusinesses and independent crop consultants and certified crop advisors.

In May 2016, the State of Minnesota and Land O’ Lakes Inc. (LOL) signed an MOU establishing a formal partnership between the state and LOL to jointly promote the MAWQCP and work together to certify additional producers. By partnering with LOL, the MAWQCP is now working with a leading agricultural firm on a plan to begin touching the 25,000 Minnesota producers engaged by Land O’ Lakes. This partnership builds off of the MAWQCP’s previous partnership with GNP Company (formerly Gold’n Plump). In April 2015, the MAWQCP participated with GNP Company, and the local nonprofit organization, Environmental Initiative, in the creation of Field Stewards, a program that has created water quality offset credits that companies can use to verify water quality attributes in the supply chain.

¹ BWSR’s pollution reduction estimator is currently unable to calculate the water quality benefit of every best management and conservation practice utilized by the MAWQCP to mitigate agricultural risks to water quality, thus the environmental benefits reported in this section are likely underreported.

Under the Field Stewards program, participating farmers who are MAWQCP-certified are paid a premium by GNP to offset the quantity of feed consumed by the company's Just BARE® line of chicken.

Field Stewards is currently engaging other Minnesota agribusinesses and hopes to secure new partners in early 2017. The MAWQCP enjoys support from GNP Company, LOL, and Environmental Initiative, because each organization recognizes the importance of a water quality program that provides multiple benefits to farmers while also requiring farmers to meet a threshold of stewardship. The MAWQCP has also successfully partnered with industry because products that support improved water quality is a trend consumers and corporate sustainability plans alike are demanding.

The statewide rollout of the certification program also saw the creation of a pilot program to partner with crop advisors and crop consultants. Under the pilot program, certified crop advisors and independent crop consultants can be reimbursed for their work to help certify clients. Participating crop consultants and advisors can be compensated for running baseline water quality risk assessments for their clients. Baseline risk assessments completed by crop consultants and advisors are given to ACSs to conduct a quality assurance review and complete the certification process for the producer. Under the program, participating crop consultants and advisors are eligible to receive up to \$5,000 annually. In 2015-2016 there were six participants and based on the results of that yearlong effort, the pilot program was extended for another year; in 2016-2017 five crop advisors/consultants are participating.

Support among the MDA's MAWQCP-partner agencies also remains strong. For example, in April 2016, the MPCA began offering certified livestock producers the ability to jump to the head of the permitting line when applying for new feedlot permits. BWSR also remains a champion of the MAWQCP and in May 2016 the BWSR Board approved the program as an alternative practice for complying with Minnesota's new buffer law that requires all landowners to install or maintain a vegetative buffer between their fields and Minnesota's public waters and ditches. To date, the MAWQCP remains the only program to be officially designated as an alternative practice.

Outreach and Engagement

As a voluntary program, a robust outreach and engagement strategy has been essential to the MAWQCP's success. The MAWQCP has two target audiences—the primary audience is Minnesota's producers and landowners and the secondary audience is the program's partners including, its partner state agencies, and local SWCDs—and the program has dedicated significant time and resources in building an outreach and engagement operation that reaches both audiences. The MAWQCP outreach and engagement operation also works closely with the MDA's communications staff to generate press coverage for the certification program.

In 2016, MAWQCP staff held six on-farm field days, conducted three statewide trainings for SWCD field staff (including ACSs), gave more than twenty five presentations to various groups and had a booth or exhibit at eleven different trade shows/conferences². The on-farm field days provided members of the public and the media the opportunity to learn more about the program and tour a MAWQCP-certified farm. The trainings organized by the MDA have helped familiarize SWCD staff with the MAWQCP's risk identification and mitigation process and have provided opportunities for MDA staff to alter the program based on on-the-ground input. The trade show/conference exhibits allowed the MAWQCP to directly interact with producers, landowners, and members of the public, building program awareness.

This past year also saw the MAWQCP undertake a promotional effort, consisting of two elements, to secure additional applications. The first component of the promotional effort was the creation and distribution of a MAWQCP Promotional Grant. This grant was managed by BWSR and available to

² Please note these figures only track engagement and outreach efforts directly organized by MDA staff. Area Certification Specialists and partner SWCDs have also held their own engagement and outreach events that are not included here.

SWCDs who wished to participate. Participating SWCDs were eligible to receive grants of \$6,000 to cover expenses related to the local promotion of the certification program. Eligible expenses included print and radio advertisements, billboards, open houses, and staff time. As a result of the grant, the SWCDs garnered 445 additional applications for the MAWQCP. The second component of the promotional effort saw the MAWQCP create new promotional and branding materials and manage a statewide media-focused outreach campaign. This campaign was led by the MAWQCP, with help from Exponent PR, a nationally-recognized public relations firm based in Minneapolis, MN. As result of this campaign, which lasted from February 2016 through October 2016, the MAWQCP garnered 1.8 million media impressions from its paid media efforts (print and radio ads) and its earned media efforts (newspaper/magazine articles and television stories).

In 2016, 21 separate print publications ran at least one article on the MAWQCP: AgriNews, AgWeek, Albert Lea Tribune, Austin Daily Herald, The Daily Globe, Fargo Inforum, Lake County News Chronicle, Mankato Free Press, Marshall Independent, MN Farm Guide, Plainview News, Pipestone County Star, Northfield News, Red Wing Republican Eagle, The SC Times, Star Tribune, Successful Farming, The Farmer, The Land, Tri-State Neighbor, and the Wabasha County Herald.

In addition to print coverage, the MAWQCP has been successful at gaining radio exposure across the state and conducted interviews with the following 13 stations in 2016: Brownfield Ag News Network, KASM-FM, KARL-FM, KDAL-AM, KDHL-AM, KLGR-AM, KLOH-AM, KROC-AM, KYMN-AM, Linder Farm Network, Minnesota Public Radio, Red River Farm Network, and WTIP-FM. The MAWQCP was also covered by statewide and regional television stations in 2016: KARE 11 (statewide), KBJR (Northern Minnesota) and KEYC (Southern Minnesota).

Calculating the exact impact of individual engagement efforts is difficult but the aggregate impacts of these engagement efforts have manifested in other ways. Notably, producers are now beginning to seek out certification staff to begin the assessment process, whereas in the program's pilot phase and early statewide rollout the MAWQCP had to actively seek out each and every applicant.

Looking Forward

The MAWQCP is poised for another year of expansive growth in 2017. Currently, the MAWQCP is working with Land O' Lakes to further develop its joint promotional efforts. Additionally, the program is looking forward to working with BWSR to promote the MAWQCP's status as an officially approved alternative practice for complying with the buffer law. The MAWQCP will also continue to support Conservis, a Minneapolis-based provider of farm management software, as the company continues to work through its commitment to enroll 100,000 acres into the MAWQCP in 2017.

The MAWQCP will release an online version of the Minnesota Nutrient Management Planner (NMP) in 2017. Originally an NRCS and University of Minnesota Extension product, MAWQCP staff has transferred the NMP into an online platform to increase user access. Problems with the old Microsoft Access version prompted the creation of the online version. This work was completed in response to the MAWQCP field staff's need for a tool that could be used to assist producers with developing nutrient management strategies. The MAWQCP is currently working with BWSR, MPCA, NRCS, and Extension to test the NMP in advance of the statewide release.

The MAWQCP will also use 2017 to further its commitment to reducing the per acre average cost of certification. Agricultural conservation, like agricultural production, is expensive but the MAWQCP has been able to decrease the average per acre cost of certifying a farm every year it has operated. During Fiscal Year 2014 (FY14) through FY15 it cost the State of Minnesota \$97.02 per acre, on average, to certify a farm. From FY14 through FY16 the average cost to certify an acre dropped to \$56.15. The in-year certification cost for the State was \$29.35 per acre in FY16. These costs are well below the average costs for several prominent USDA NRCS programs operating in Minnesota.

The USDA spends more than \$200 million annually in Minnesota on conservation. In 2015, the NRCS spent over \$100 million for rent payments to farmers enrolled in the Conservation Reserve Program (\$88.43 per acre). The NRCS' Environmental Quality Incentives Program cost \$154 per acre in 2015 in Minnesota.

In addition to providing conservation services at a lower cost, the MAWQCP also overcomes two traditional shortcomings of traditional conservation programs. The majority of agricultural conservation programs in the U.S. provide farmers limited-duration payments to employ a particular practice and do not require a firm commitment on the part of the farmer to maintain the practice when the short-term payments conclude. These programs also typically address conservation in a fashion that fails to address the need for whole-farm conservation treatment and allow for situations where one field of a farm treats agricultural runoff but another does not.

As a program that provides certified farms with 10 years of regulatory certainty, the MAWQCP was compelled to create a program that systematically identifies and then mitigates risks to water quality on a field-by-field basis—each and every field in a farm, and each crop grown on each field, must meet the MAWQCP's criteria to become certified. The certification program's regulatory certainty provision has also created the opportunity to provide conservation in a more efficient manner. Certified producers are provided with the necessary financial and technical assistance needed to mitigate risks to water quality, but do not receive ongoing payments. Instead, their contractually committed assurance of regulatory certainty simultaneously commits them to maintaining all the conservation management and practices that have earned them MAWQCP certification.