

NS-AWWA Board Meeting Minutes

Meeting Date: **March 11, 2019**

Location: Miller and Associates, 1111 Central Ave, Kearney, NE

Call in Number and Participation Code: (800) 704-9804, Code 83795334#

Milo Rust called the meeting to order at 9:32 AM.

ROLL CALL:

Board members present:

Board Chairman: Milo Rust

Directors: Bruce Dvorak

Chair Elect: Brittany Travers (via conf. call)

Teresa Konda

Vice Chair: Mary Poe (later)

Past Chair: Eric Melcher (later)

Treasurer: John Keith (via conf. call)

Trustee: Brian Gongol (later, via conf. call)

Secretary: Craig Reinsch

Trustee: Ryan Hurst

Trustee: Mike Koenig (via conf. call)

Trustee: Marc Rosso

Board members absent: None!

Committee Chairs present: Rich Koenig, Dale Jacobson, Rob Pierce, Hayden Delay (via conf. call), Joe Roberts (via conf. call), Chad Roberts

Others present: Sam Radford and Carla McCullough (later on)

Approval of January Board of Directors meeting minutes:

Electronic copies were submitted for review. Motion made by Marc Rosso and Seconded by Bruce Dvorak to approve the amended board of directors meeting minutes. The motion carried with all present voting aye.

Chairman's Report:

Milo stated that he went through all of the committee chairs and talked with each of them. There are a few committees such as, Archives and History (Tony), Education (John), that don't have prospects for new committee chairs. The other committee chairs agreed to continue serving throughout the next year. Milo asked that the Board consider suggestions or recommendations of potential chairs for these two committees. There is a lot of business on the agenda that will follow.

Director's Report:

Bruce included a report, but will not revisit too many of the included items. There were several items of note from the Association Board Meeting in Vancouver, BC earlier in the year.

- Sam Radford from NDEQ will be here today to discuss source water protection endeavors in Nebraska. The AWWA Washington office has been working to increase the importance of source water protection in the Farm Bill. The Association has been encouraging Sections to reach out to state conservationists to discuss how funding implementation could occur within Nebraska for these endeavors. Interaction on drinking water issues are new for NDEQ, and NSAWWA can discuss their current and proposed involvement.
- New board member elections occurred, and some of these representatives could come and visit our Section.
- RMSO in April. New business item for discussion/consideration for attendance.
- The Association has been successful with educational grant endeavors.
- Membership growth has been occurring in smaller systems, which is anticipated to be from the previously mentioned grants.
- Outreach and education, including a White Board Explainer related to lead. These would be good to share with systems.

Report is attached.

Treasurer's Report:

John Keith discussed the information provided in the packet. The January and February 2019 statements were reviewed, and were included in the enclosed packets. The total of all accounts, as of February 28, 2019, was \$136,286.49. The Stifel Investment account is nearly back to where we started, with an account total of \$79,998.79 as of February 28, 2019.

In February, there was a Google YouTube charge in the amount of \$12.65 that looks to be suspect. Another item of discussion is the Visa charge for the Arkadin service for last month (January)'s conference call. That seems to be high. If anyone calls in, they are counted as being in attendance for the entire conference call, even when only on for a brief time. This then adds to the total charge. The normal charge is in the range of \$15 to 20 per call. The most recent charge was over \$86. A clarification was asked regarding if people call in a couple of times, if that counted as a double charge. This may be the case.

John is in the process of getting a Paypal account set up for events (primarily Water For People or conferences). This will be tied to the Section's account. A credit card reader is also being procured.

Finally, the annual budget is up for approval today. A few updates have been requested. John stated that the budget should be ready for approval during today's meeting. A question was asked by Hayden Delay about access to the card reader for other events.

John will need to be contacted to access the card reader (Bluetooth). Teresa has a couple manual card readers that could also be used.

Motion by Brittany Travers, second by Brian Gongol to accept the treasurer's report. Motion carried.

A question was asked about public information budget and the fall conference items associated with that committee. The public information budget was reduced by half, which prompted the discussion. Individual events held at the Fall Conference, such as the water taste testing, children's poster competition, and others were discussed. These budget figures were discussed and it was confirmed that public information budgets were correctly moved to the Fall Conference category. The public information budget was requested to be amended to \$400.

A motion by Marc Rosso, with a second by Bruce Dvorak, was made to accept the annual budget. Motion carried.

Reports are attached.

Committee Reports:

Archives & History: No report provided. It was suggested to have someone who is retired or semi-retired, and it was suggested that Jerry Obrist could be contacted as an option for consideration.

Audit: Nothing to discuss beyond New Business item.

Awards: No report provided. Awardees need to be suggested and recommended by others and these should be sent to Dennis Watts and Chad Roberts.

Budget: Report Provided (includes January and February 2019 statements)

Cross Connection: Report is attached. The March 6th meeting didn't occur due to lack of attendance. A conference call will be held.

Education: A report was provided. Mike Wentink and John Keith will be working on the May small system workshop. 3 or 4 people have already signed up without information posted. Similar to Bruce Dvorak, the small system grant and USDA grants will be used as part of the Fall Conference for training and backup to small systems, as needed. In addition, 3 League of Nebraska Municipalities (LONM) workshops were held last week with 46 attendees, for a total of 185 (more than the 139 submitted in the report).

Fall Conference: Brittany Travers provided information for consideration. The first joint meeting will be at the Great Plains conference on April 18, 2019 (Embassy Suites in La Vista, NE). A time has yet to be confirmed. Information will be sent out for consideration. Anticipated attendance will be Marc Rosso, Brittany Travers, Mary Poe, and John Keith. No report provided. John Keith and Mike Wentink confirmed that they will be providing the pre-conference.

Fuller Award: No report provided. Teresa Konda is planning to go to ACE 2019 in Denver, CO for the Fuller Award breakfast. Mary Poe provided the necessary report to the Association.

Manufacturers/Associates Council: No report provided. Looking for new chair.

Membership Engagement & Development: Marc Rosso submitted a report for consideration. The continued trend is that retirements continue to slow membership growth. The AWWA membership summit was attended. A membership on-boarding guide was suggested for Marc to put together. Marc will be looking to seek out a new chair in the next year or two as part of the transition. One name mentioned was Brittni Stevens-Yates (Olsson).

Report is attached.

Nominations: Not much new to add. Committee members will be contacted by email. A preliminary set of nominations will be provided in June for consideration and ready for final approval in July. Plan on meeting after the May 2019 board meeting to discuss.

Public Information: Mary Poe confirmed the Governor's proclamation for April 8, 2019 at 10:30 am (this is included on the main agenda). A reminder notice was distributed, and will be available at NDHHS' Rural Water conference booth. Generally 8 to 10 people are there. It is good to have plenty of attendees. Mary will be there. Normally a speech is provided by a member. Milo doesn't anticipate being in attendance. A volunteer (Brittany?) may be assigned for a 2-3 minute presentation. Report is attached.

Publications: Report is attached.

Research and Student Activities: No report provided. The students have been engaged in different activities. Approximately 30 attendees were at the Platte West YP event on Friday, March 8th. An E-week booth was also staffed.

Safety: No report provided. Similar to before. There are some safety trainings planned, but details are still being worked out. There will be awards at the Fall Conference banquet. Plaques have not yet been ordered.

Scholarship: No report provided. Working to get the word out.

Small Systems: No report provided. Adam Darbro worked with Rob Pierce to develop additional trainings. One was completed in Kearney and another planned for Aurora.

Top Ops: The committee will get together within the next couple of week to improve participation in the event. Research has been done on what other sections are doing. 3 individuals (Steve Kelley, Tom Menke, and Eric Lee) are going to ACE 2019 to compete.

Total Water Solutions: A report was provided. Dale Jacobson provided a background of Total Water Solutions (TWS), outlining the ad hoc committee and roots. From the AWWA perspective, TWS has been around for 5-6 years. A brochure was demonstrated. AWWA has recognized that water is water. WEF and AWWA are encroaching (in a friendly way) to account for different water uses and approach. In order to not encroach too far, AWWA is starting to focus more on reuse. Reuse may not be very applicable in Nebraska right now. After one year of committee function/operation, additional recruitment has occurred, and the committee is currently constituted as outlined in the committee report. The first meeting was held during the 2018 Fall Conference. The next question for the committee is, what are things that could be done to benefit Nebraska? Supporting the University of Nebraska extension, The LONM's utility division, supporting the Farm Bill approaches to source water, and contacting other interested agencies will be the focus of the committee. Have patience with the committee, who is still learning and growing. The goal is to get the committee going, and then potentially transition the chair to another committee member. This is a major focus for the Association, which encourages Sections to determine how TWS is best approached. Adding a member from NDEQ would be beneficial to the committee, as would an NRD board member. Rich Koenig and Milo Rust will be providing potential names of potential committee members. There is a presentation after today's Board meeting with Sam Radford (NDEQ), which will be a first step in this process.

Water for People: Report is attached. The next event will be wine tasting event in Omaha on April 2. A flyer was included in the committee packet. Hayden Delay (co-chair) was present at the meeting via conference call to provide additional information. The invitations for the wine testing event will be sent out. The golf event date has been set, and information will be sent out. Information will be provided to add to the website. The committee workshop is in July. They are working to determine who may be attending from the committee. The shotgun benefit is planned for the fall (September 27).

Water Utility Council: No report was provided. Chad shared that all of the attendees [Tom Menke and Jim Shields/Rick Kubalt (both MUD)] are ready to go. National would like to discuss support for funding, Farm Bill conservation, source water protection, and PFAS/PFOS considerations. Are there other things that should be discussed with the Nebraska delegation? Provide suggestions to Chad via email. Is PFOS a concern in the state from potential testing? Not much has been found locally, though several questions have been made to the University Extension. Perhaps more data will need to be collected regarding this topic. NDEQ/NDHHS have developed a team to discuss PFOS, and Sue Dempsey would be a good resource.

Young Professionals: Report is attached. Joe added with a correction that the MUD tour was rescheduled for March 8th. The next event is a tour of Lincoln's Theresa Street WRRF on March 29, 2019 at 3 pm, followed by a social event (after 5 pm?) at Spike's. "Seasoned" professionals were also invited to attend.

Community Engineering Corps: Bruce Dvorak stated that he has a team of students that is working to assist Liberty, NE for this project to allow them to abandon their water tower and install pressure tanks. Others may be used for a review of the design.

Unfinished Business:

1. Fall Conference Memorandum of Understanding Review/Discussion (Travers). A copy of the updated MOU is in the packet with “track changes”. After review, the suggested modifications have been included. Brittany requested a review and comment by the Board. This will be approved at the joint meeting in April 2019.
2. Request current committee chairs to serve / find own replacements (Rust). All have agreed to continue. Still working on *Education* and *Archives/History* chairs. Jerry Obrist’s name was suggested for Archives and History, as mentioned previously.
3. NSAWWA to provide the fall conference pre-conference workshop annually, regardless of which organization is lead (Rust). Milo is opened the floor for discussion on this item, this could be a suggested discussion at the joint fall conference meeting. This will be a discussion item at the May board meeting. It is written into the current version of the MOU that March 1 is listed as the deadline for other organization’s opportunities to provide a pre-conference option. This shouldn’t affect the annual AWWA training grant application, which is an on-going submission, and doesn’t affect the pre-conference.

The note from the January board meeting minutes was “*Recommendation to the MOU is that the lead organization will need to decide by March 1 of each year if they are going to do a pre-conference workshop. If other organizations (NWEA or APWA) do not wish to hold a pre-conference, then NSAWWA will take the lead. This will need to be reviewed as an agenda item at the **March** meeting.*”

4. Ratify online vote for the motion to that the board fund both young professionals to attend the YP Summit in Nashville, TN. Scott Seelhoff’s attendance would be funded via last year’s (2018) OAOS scholarship, which requires that he submits the scholarship application for consideration (Travers, second by Rosso online). A motion was made by Bruce Dvorak and seconded by Craig Reinsch. With all present voting aye, the motion was accepted.

New Business:

1. Membership management (i.e. <https://www.starchapter.com/>) discussion (Rosso).

Marc mentioned NWEA’s use of the system, and also knows that the Missouri section does not like it. NWEA will launch their system at the Great Plain’s conference. Marc suggested that the Board should wait and see how NWEA likes it before moving forward. Transfer to unfinished business in **May**, and possibly subsequent meetings.

2. Review AWWA webinars and potentially approve for use as accredited training (Rosso).

Marc asked if anyone has tried the AWWA webinars. Chad Roberts mentioned that he had, and said that it worked well. Mike Wentink will need to provide approval so that credits can be provided. The next step will be to coordinate with Mike and will be coordinated by Marc. The greatest challenge is verification of training attendance. A quiz and AWWA membership was required for verification. This would need to be an individual training.

3. NRCS State Conservationist and Farm Bill – Source Water Protection involvement (Dvorak).

Will continue discussion with Sam Radford and Carla McCullough after the board meeting is adjourned.

How can NSAWWA help represent/reach out to potentially affected communities:

- Put together a session at the Fall conference to highlight what can be done, and what examples are out there for consideration (project/product presentation).
- Could be someone from Univ. extension to discuss conservation practices & research. Understanding farming practices can help communication better/easier to help encourage change.
- Beatrice approach. One of their operator's on the NRD board, has provided lunch for training opportunities, grant funding for moisture sensors in fields. This could also be a part of a conference roundtable discussion.
- The goal is to getting more people comfortable with suggestions, as well as getting organizations to work together on the same goals. Statewide unified approach.
- How can we better coordinate? Communities/consultants need to be more proactive in reaching out to farmers/producers to make sure that information is shared about potential rural/municipal impacts.

Scanned copies of handouts provided as part of the presentation will be included with the meeting minutes.

4. Nebraska Section potential involvement in United Nations Sustainable Development Goals (SDG) (Jacobson).

Dale provided a presentation to the Board. It was a 5 minute summary of a 60 minute presentation. The 8 Millennium Development Goals (MDGs) were introduced and discussed. Nothing in these goals directly mentions water, though it may have been intended in Goal 7. Sustainable Development Goals (SDGs) were adopted in 2015 as the next 15 year program (complete by 2030), which includes 17 interconnected goals. Water is related to part of all of these goals, with the major focus within SDG #6 – Clean Water and Sanitation.

How this applies to those of us living in Nebraska has to do with the “triple bottom line” approach to projects. The 100 largest metro areas in the United States were “graded” in relation to the 2015 SDGs as part of a desktop study.

The results show a color-coded grading assessment, with the point that there work to do here. When industries are looking at a place to relocate, they are looking at these metrics within potential municipalities. This is not something that we do not need to consider.

Of note, Dale authored an article the January 2019 AWWA Journal on this topic.

5. Discussion regarding audit and tax return preparation (Keith).

5. John mentioned that this is more of a committee issue. The Board should know that Crouch & Company LLC is not available anymore to complete the Section's audits, but has recommended others for this work. The separation between the audit and tax preparers is beneficial. John asked that the Board proceed in this direction to start tax preparation with the current provider. An auditor can be selected after that time. A motion by Milo Rust, and seconded by Eric Melcher. With all present voting aye, the motion was accepted.

6. Populating Section website events calendar (Reinsch).

This is a general comment to make sure that events, even as placeholders, are posted on the Section website. This will help potential participants to plan better to support Section endeavors.

7. Laptop/projector discussion and/or purchase for conferences/presentations (Keith).

John reported that a generic projector will cost approximately \$250 to \$300 per unit. Storage of purchased equipment may be a concern. Volunteers have brought them in the past. It is good to consider this, but with the amount of use (i.e. once per year), it may be a concern for the Section to purchase projectors. Technology becomes obsolete quickly. Perhaps a subcommittee within the Fall Conference could be responsible for coordinating projectors and backups, if that is the primary reason for the discussion. The conference center has them for \$100 to \$125 per day, and could be a "fall back" if needed. This should be discussed as part of the fall conference joint meeting as an action item in April. Motion to table for another year made by Milo Rust, seconded by Bruce Dvorak. All who were present voted aye.

8. Miscellaneous / Announcements

- ◆ Governor's Water Week Proclamation – Monday, April 8, 2019 at 10:30 AM.
- ◆ Discuss AWWA 2020 at the **May** 2019 Board meeting.
- ◆ Discuss affiliation agreement and AWWA 2020 goals at a board meeting. Add these to the **May** 2019 agenda.
- ◆ RMSO attendance (April 12-13): The deadline for hotel reservations is getting close. There may not be representation this year from NSAWWA.
- ◆ At the Section's PO Box, a thank you card and induction into the '1881 Society' was sent from the Association. A pin and info was provided to Eric Melcher.
- ◆ Draft board Liaison assignments were included with these minutes for reference.

Adjournment: At approximately 11:16 AM, Bruce Dvorak made a motion to adjourn, seconded by Mary Poe, with all in attendance voting aye, motion carried.

Next Meetings:

Dates and Locations:

May 10, 2019, 9:00 am at Woodland Hills Golf Course, near Eagle, NE. Conference call options may be limited, but possible. Milo to bring Chadron's conference calling system.

July 8 to 17 (range), conference call, retreat, TBD (**SOP review/update**)

September 20, 2019, 9:30 am at Olsson; 201 E. Second Street, Grand Island, NE

November: Fall Conference

2019 NSAWWA Board Liaisons (for reference):

Committee	Chair	Liaison
Archives and History	Tony Bilek	Ryan Hurst
Audit	Milo Rust	-
Awards	Dennis Watts	Brittany Travers
Budget	John Keith	-
Cross Connections	Rich Koenig	Ryan Hurst
Education	John Keith	-
Fall Conference	Brittany Travers	-
Fuller Award	Kevin Tobin	Teresa Konda
MAC	Tony Bilek	Brittany Travers
Membership	Marc Rosso	-
Nominations	Eric Melcher	-
Public Information	Mary Poe	-
Publications	Brian Gongol	-
Research and Student Activities	Dr. Xu Li	Craig Reinsch
Safety	Rob Pierce	Mary Poe
Scholarship	Craig Reinsch	-
Small Systems	Adam Darbro	Eric Melcher
Top Ops	Chad Roberts	John Keith
Total Water Solutions	Dale Jacobsen	Craig Reinsch
Water for People	Ann Williams	Brittany Travers
Water Utility Council	Chad Roberts	Milo Rust
Young Professionals	Joe Roberts	Ryan Hurst
Community Engineering Corps	Bruce Dvorak	-

~~~~~

Respectfully submitted by: Craig Reinsch, Nebraska Section AWWA Secretary



## 1881 Society

Nebraska Section AWWA  
is recognized for its generosity to  
AWWA Water Equation

November 2018  
With membership in the 2018 1881 Society



**Water Equation**  
*Funding the Future of Water*



## AWWA and the UN Sustainable Development Goals

**T**his article is intended to familiarize AWWA members with the United Nation's (UN's) Sustainable Development Goals (SDGs; UN 2018a) and their relevance to the association's vision ("a better world through better water") and mission ("providing solutions to effectively manage water, the world's most important resource"). In terms of global aspirations, one of AWWA's strategic objectives is to increase the relevance of the association's knowledge resources for water professionals worldwide. Taken together, AWWA's strategic drivers frame the association's aspirational worldview, while providing a tangible connection between the UN SDGs and the work of AWWA and its members.

### THE MILLENNIUM DEVELOPMENT GOALS

The Millennium Development Goals (MDGs), which preceded the SDGs, were eight international development goals that were intended to be achieved by the year 2015 (UN 2018b). They were established following the Millennium Summit of the UN in 2000, after the UN Millennium Declaration was adopted. All 191 UN member states at that time, and at least 22 international organizations, committed to help achieve the MDGs by 2015.

Drinking water and sanitation were addressed in MDG 7: Ensure Environmental Sustainability, Target 7.C (UN 2018c), which had the primary objective of halving the proportion of the global population without

sustainable access to safe drinking water and basic sanitation by 2015. The world achieved mixed results, as reported by the UN (UN 2018c):

- The world met the target of halving the proportion of people without access to improved sources of water five years ahead of schedule.
- Between 1990 and 2015, 2.6 billion people gained access to improved drinking water sources.
- Worldwide, 2.1 billion people gained access to improved sanitation. Despite this progress, 2.4 billion were still using unimproved sanitation facilities, including 946 million people practicing open defecation.

### SDGs

An overview of the SDGs, as provided by the UN (UN 2018d), states the following:

On 1 January, 2016, the 17 [SDGs] of the 2030 Agenda for Sustainable Development—adopted by world leaders in September 2015 at an historic UN Summit—will officially come into force. Over the next fifteen years, with these new Goals that universally apply to all, countries will mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind.

The SDGs build on the success of the [MDGs] and aim to go further to end all forms of poverty. The new Goals are unique in that they call for action by all countries,

poor, rich and middle-income to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and addresses a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.

While the SDGs are not legally binding, governments are expected to take ownership and establish national frameworks for the achievement of the 17 Goals. Countries have the primary responsibility for follow-up and review of the progress made in implementing the Goals, which will require quality, accessible and timely data collection. Regional follow-up and review will be based on national-level analyses and contribute to follow-up and review at the global level.

The broad SDGs, shown in Figure 1 in icon format, are interrelated; however, each goal has its own targets. There are 169 targets for the 17 goals.

**SDG 6: Clean Water and Sanitation.** The international water community was delighted that a specific goal, SDG 6, was established related to clean water and sanitation. This goal focuses on the measurement of basic access to services and water resource

management. The following from the United Nations website provides an overview of SDG 6 (UN 2018e):

Clean, accessible water for all is an essential part of the world we want to live in and there is sufficient fresh water on the planet to achieve this. However, due to bad economics or poor infrastructure, millions of people including children die every year from diseases associated with inadequate water supply, sanitation and hygiene.

Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. . . . Drought in specific afflicts some of the world's poorest countries, worsening hunger and malnutrition.

By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of freshwater (UN 2018e). The following further explains the importance of achieving SDG 6 (UNDP 2018):

- 2.6 billion people have gained access to improved drinking water sources since 1990, but 663 million people are still without.
- At least 1.8 billion people globally use a source of drinking water that is fecally contaminated.

**FIGURE 1** United Nations Sustainable Development Goals

# SUSTAINABLE DEVELOPMENT GOALS



Source: United Nations

- Between 1990 and 2015, the proportion of the global population using an improved drinking water source has increased from 76 to 91%.
- Water scarcity affects more than 40% of the global population and is projected to increase. More than 1.7 billion people are currently living in river basins where water use exceeds recharge.
- A total of 2.4 billion people lack access to basic sanitation services, such as toilets or latrines.
- More than 80% of wastewater resulting from human activities is discharged into rivers or seas without any pollution removal.
- Each day, nearly 1,000 children die as a result of preventable water- and sanitation-related diarrheal diseases.
- Hydropower is the most important and widely used renewable source of energy, and as of 2011 represented 16% of total electricity production worldwide.
- Approximately 70% of all water abstracted from rivers, lakes, and aquifers is used for irrigation.
- Floods and other water-related disasters account for 70% of all deaths related to natural disasters.

**Targets.** The UN website states the following targets for SDG 6 (UN 2018e).

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

---

One of AWWA's strategic objectives is to increase the relevance of the association's knowledge resources for water professionals worldwide.

---

- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
- By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

- By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
- By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.
- Support and strengthen the participation of local communities in improving water and sanitation management.

---

“While the SDGs are not legally binding, governments are expected to take ownership and establish national frameworks for the achievement of the 17 Goals.”

---

#### PROGRESS TOWARD THE SDGs IN 2018

The Economic and Social Council of the UN recently provided an update on progress toward the SDGs for use at the 2018 High Level Political Forum (ECOSOC 2018), during which SDG 6 was one of several goals that were evaluated in depth. The following sections are extracted from the 2018 progress report, “Goal 6. Ensure availability and sustainable management of water and sanitation for all” (UN 2018f).

Too many people still lack access to safely managed water supplies and sanitation facilities. Water scarcity, flooding, and lack of proper wastewater management also hinder social and economic development. Increasing water efficiency and improving water management are critical to balancing the competing and growing water demands from various sectors and users. . . .

In 2015, 5.2 billion people (71 per cent of the global population) used safely managed drinking water services—that is, an improved water source located on the premises, available when needed and free from contamination. An additional 1.3 billion people (17% of the population) used a basic drinking water service—an improved water source not more than 30 minutes away. This means that 844 million people still lacked even a basic level of service.

Based on estimates from 84 countries in 2015, 39 per cent of the global population used safely managed sanitation services—basic facilities that safely dispose of human waste. An additional 29 per cent of the global population used a basic sanitation service—an improved facility that is not shared. That year, 2.3 billion people still lacked even a basic level of service and 892 million people continued to practise



open defecation [resulting in a decline from 20% in 2000 to 12% in 2015]. Only 27 per cent of the population in the least developed countries had basic handwashing facilities.

Untreated wastewater degrades water quality, posing risks to public health, contaminates drinking water sources, and limits opportunities for safe and productive reuse of water. Additional details from the report (UN 2018f) include the following:

- Preliminary estimates from household data of 79 mostly high- and high-middle-income countries (excluding much of Africa and Asia) show that 59% of all wastewater flows are safely treated, 76% of flows are safely treated in households with a sewer connection and 18% of flows are safely collected and treated for those with on-site facilities only.
- In 22 countries (mostly in Northern Africa, Western Asia, and in Central and Southern Asia), water stress—defined as the ratio of freshwater withdrawn to total renewable freshwater resources—is above 70%, which indicates a strong probability of future water scarcity. In 15 of these countries, withdrawals totaled more than 100% of the renewable freshwater resources in the country.
- In the period 2017–2018, 157 countries reported an average implementation of integrated water resources management of 48%.
- According to data from 62 out of 153 countries sharing transboundary waters, the average percentage of national transboundary basins covered by an operational arrangement was 59% in the period 2017–2018, and only 17 countries reported that all their transboundary basins were covered by such arrangements.
- Official Development Assistance (ODA) for the water sector was \$9 billion in 2016. While disbursements from 2011 to 2016 increased, as commitments fell, disbursements may also decrease in the future. Any reduction in external aid is likely to hamper progress toward SDG 6, as a 2017 survey found that more than 80% of countries reported insufficient finances to attain national water, sanitation, and hygiene targets.

## POTENTIAL AWWA ENGAGEMENT FOR SDG 6

The targets related to SDG 6 raise an important question for AWWA: namely, how can the association directly engage and collaboratively address specific elements of SDG 6? Among AWWA's activities and strategic initiatives, there are three broad areas in which AWWA can support the SDG efforts.

First, AWWA can participate in awareness-raising with communities, schools, and youth groups on the

SDG process and the commitments of the United States, Canada, and Mexico; track SDG 6 indicator achievement across water users in North America; and provide technical assistance to utilities that are unable to meet compliance standards with technical publications and networking opportunities afforded by AWWA. This is a new area for AWWA that has been undertaken by AWWA's International Council. For example, through AWWA's India initiative, the International Council has written and delivered on-site technical training to operators in India. The International Council is also working with the World Bank to explore opportunities for technical training in other international regions that can benefit from information exchange and AWWA volunteers' technical expertise.

Second, AWWA can respond to the association vision of “A better world through better water” and, building on previous efforts, AWWA can support other countries outside of North America to achieve their own SDG 6 targets. This can be accomplished through activities such as

- promoting knowledge exchange through AWWA standards, Manuals of Practice, and other publications;
- expanding water operator and management competency through increased use of AWWA training materials;
- working with nongovernmental organizations and international partners and, where it makes sense, facilitating twinning arrangements between utilities in different countries; and
- more actively engaging in international water events to showcase AWWA's successful model and results, as well as to contribute to the global dialogue on the SDG targets.

---

The international water community was delighted that a specific goal, SDG 6, was established related to clean water and sanitation.

---

Third, AWWA can learn lessons from the implementation of SDGs in other developed regions. This includes understanding how best to leverage new technologies, innovative financing mechanisms, and strategies to help remote or disadvantaged small systems. AWWA has a long and meritorious legacy of contribution to and accomplishment of the eradication of waterborne disease, technological advancement in the water sector, and the exchange

of engineering and scientific expertise and knowledge. AWWA has also taken a leadership role in addressing the importance of drinking water in the hydrologic cycle through advocacy of Total Water Solutions to ensure that every aspect of “source to tap” is properly integrated, managed, and protected.

### AWWA'S GLOBAL CONNECTION

AWWA's legacy has positioned it as a global leader that provides valuable guidance and training that is transferred globally. AWWA's primary focus is North America, but because of its success and historical impact, it supports international members off the continent in areas of knowledge creation and exchange to better provide continuous, high-quality water services. The entire water industry benefits

---

Among AWWA's activities and strategic initiatives, there are three broad areas in which the association can support the SDG efforts.

---

from the free flow of innovations, especially through original research and product development. AWWA will remain a leader in the global struggle to safeguard public health, support and strengthen communities, and protect the environment and, as such, has a responsibility to advocate for global achievement of the SDGs.

Although AWWA's North American members are physically separated from other continental water sector partners, they are inextricably connected through the advantages provided by rapid travel and modern technology. As such, AWWA can monitor the progress of the countries as they try to meet their SDGs, taking the parts that might work best for communities in North America. Likewise, North American members can transfer their lessons learned to off-continent members and potentially identify areas for further improvement during the process. This kind of sharing reflects AWWA's founding when its 22 original members met on the University of St. Louis campus in 1881 to share information to protect and improve water services. The International Council encourages the association's volunteers to engage through AWWA's many volunteer opportunities, spanning from the Section level to service at the national level on the wide array of committees, divisions, councils, publications, workshops, and

opportunities to publish in this most worthwhile quest to fulfill AWWA's vision of a “better world through better water.”

—*This article was prepared by members of the AWWA International Council. Dale Jacobson (to whom correspondence may be addressed) is president of DD Consulting LLC, 10838 Old Mill Rd., Omaha, NE 68154 USA; djacobson@mac.com. Charlie Anderson is senior management consultant, CDM Smith, Arlington, Tex.*

---

<https://doi.org/10.1002/awwa.1219>

### REFERENCES

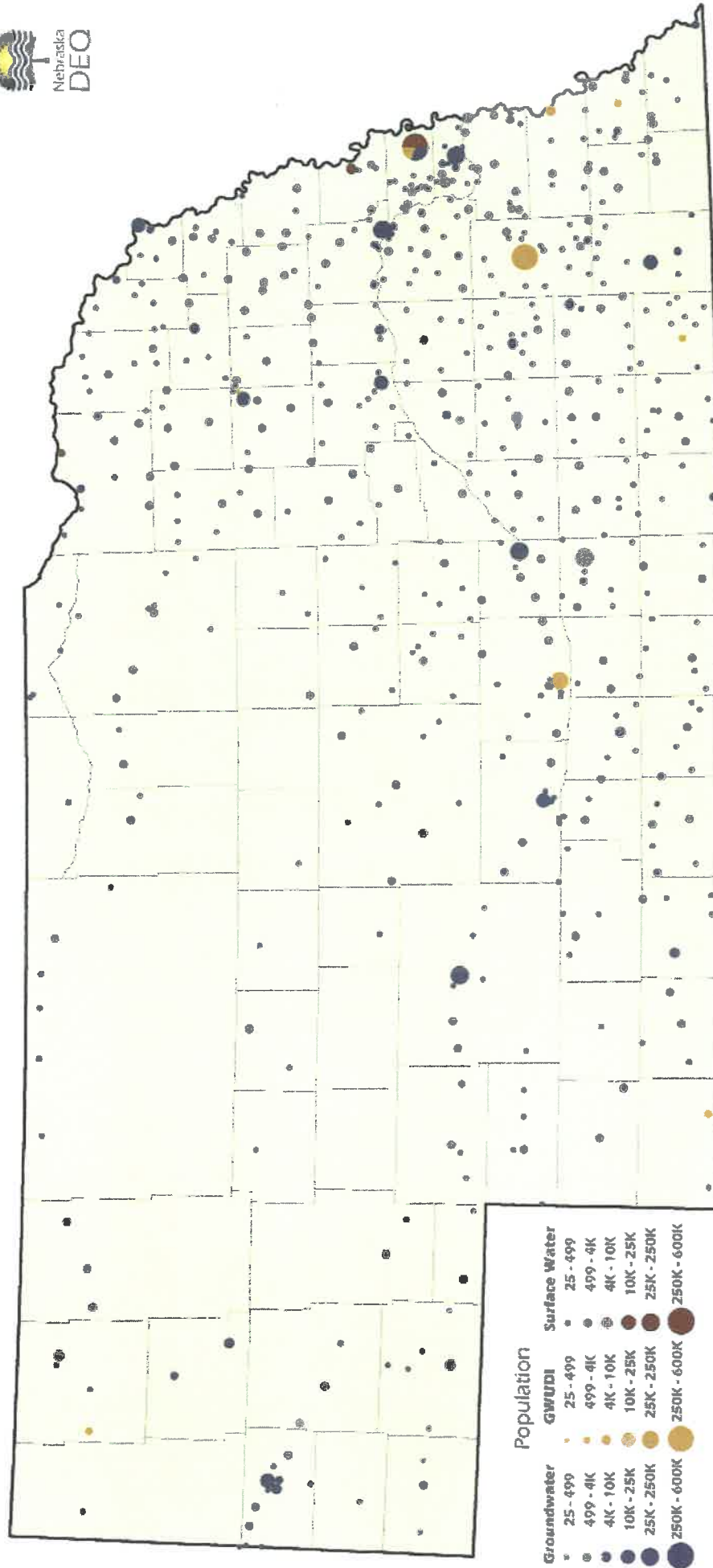
- ECOSOC (UN Economic and Social Council), 2018. Progress Towards the Sustainable Development Goals: Report of the Secretary-General. E/2018/64, Distr.: General 10 May 2018. <http://undocs.org/E/2018/64> (accessed Oct. 22, 2018).
- UN (United Nations), 2018a. Sustainable Development Goals. [www.un.org/sustainabledevelopment/home/](http://www.un.org/sustainabledevelopment/home/) (accessed Oct. 12, 2018).
- UN, 2018b. Millennium Development Goals and Beyond 2015. [www.un.org/millenniumgoals/bkgd.shtml](http://www.un.org/millenniumgoals/bkgd.shtml) (accessed Oct. 22, 2018).
- UN, 2018c. Goal 7: Ensure Environmental Sustainability. [www.un.org/millenniumgoals/enviro.shtml](http://www.un.org/millenniumgoals/enviro.shtml) (accessed June 2018).
- UN, 2018d. Sustainable Development Goals: 17 Goals to Transform Our World. [www.un.org/development/desa/statements/wp-content/uploads/sites/12/2016/01/Overview\\_SDGs\\_EN.pdf](http://www.un.org/development/desa/statements/wp-content/uploads/sites/12/2016/01/Overview_SDGs_EN.pdf) (accessed Oct. 12, 2018).
- UN, 2018e. Goal 6: Ensure Access to Water and Sanitation for All. [www.un.org/sustainabledevelopment/water-and-sanitation/](http://www.un.org/sustainabledevelopment/water-and-sanitation/) (accessed Oct. 12, 2018).
- UN, 2018f. *The Sustainable Development Goals Report 2018*. <https://unstats.un.org/sdgs/files/report/2018/the-sustainable-development-goals-report-2018-EN.pdf> (accessed Oct. 22, 2018).
- UNDP (United Nations Development Programme), 2018. Goal 6 Targets. [www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation/targets.html](http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation/targets.html) (accessed Oct. 22, 2018).

### AWWA RESOURCES

- International Council Report: Strengthening AWWA's Global Connections. AWWA International Council, 2018. *Journal AWWA*, 110:4:54. <https://doi.org/10.1002/awwa.1063>.
- A Model to End Water Poverty Through Sustainable Service Delivery. Allen, E. & Lemme, K.S., 2016. *Journal AWWA*, 108:6:45. <https://doi.org/10.5942/jawwa.2016.108.0095>.
- Challenges to Improve Water and Sanitation Facilities in Bangladesh. Jakariya, M. & Farid, A.M., 2016. *Journal AWWA*, 108:5:53. <https://doi.org/10.5942/jawwa.2016.108.0082>.

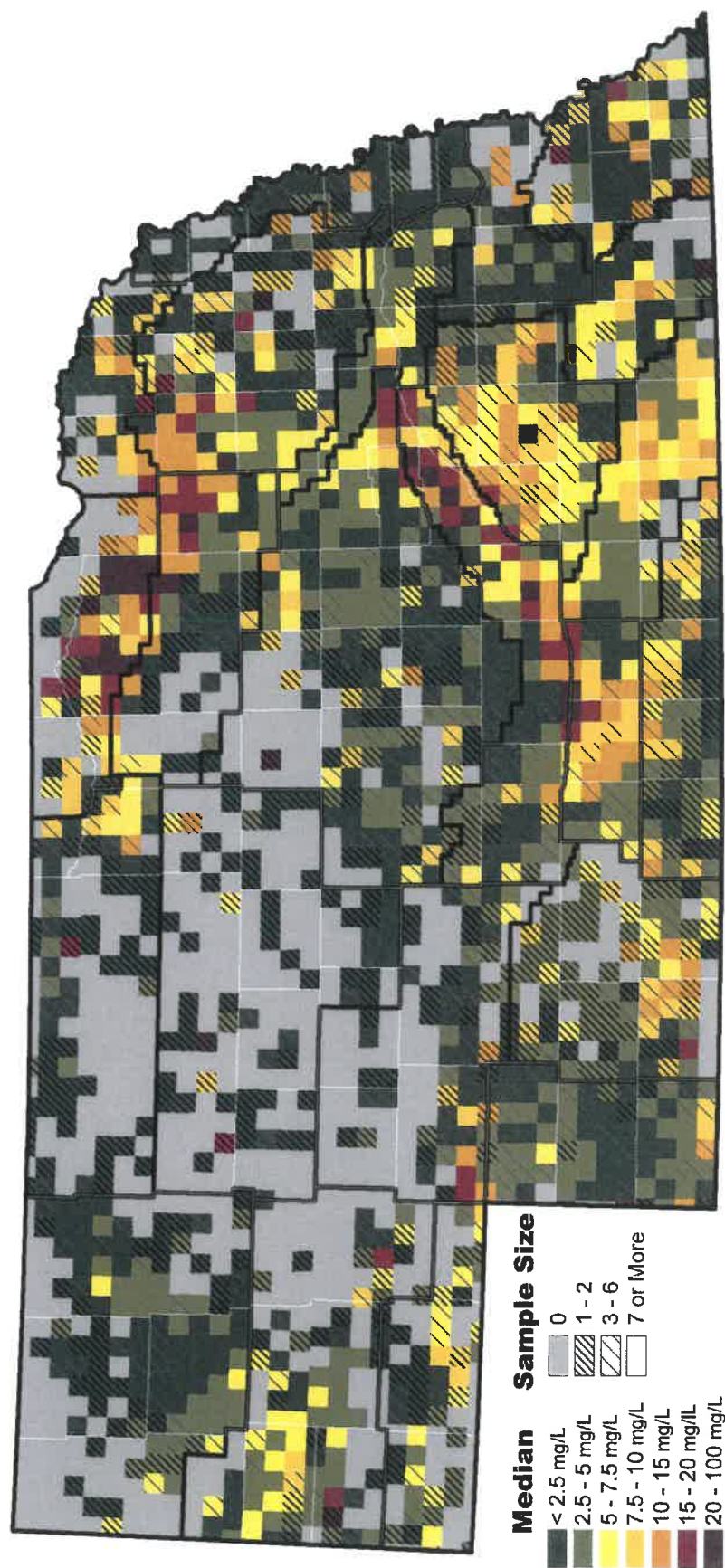
These resources have been supplied by *Journal AWWA* staff. For information on these and other AWWA resources, visit [www.awwa.org](http://www.awwa.org).

## Nebraska Public Water Systems - Source & Population



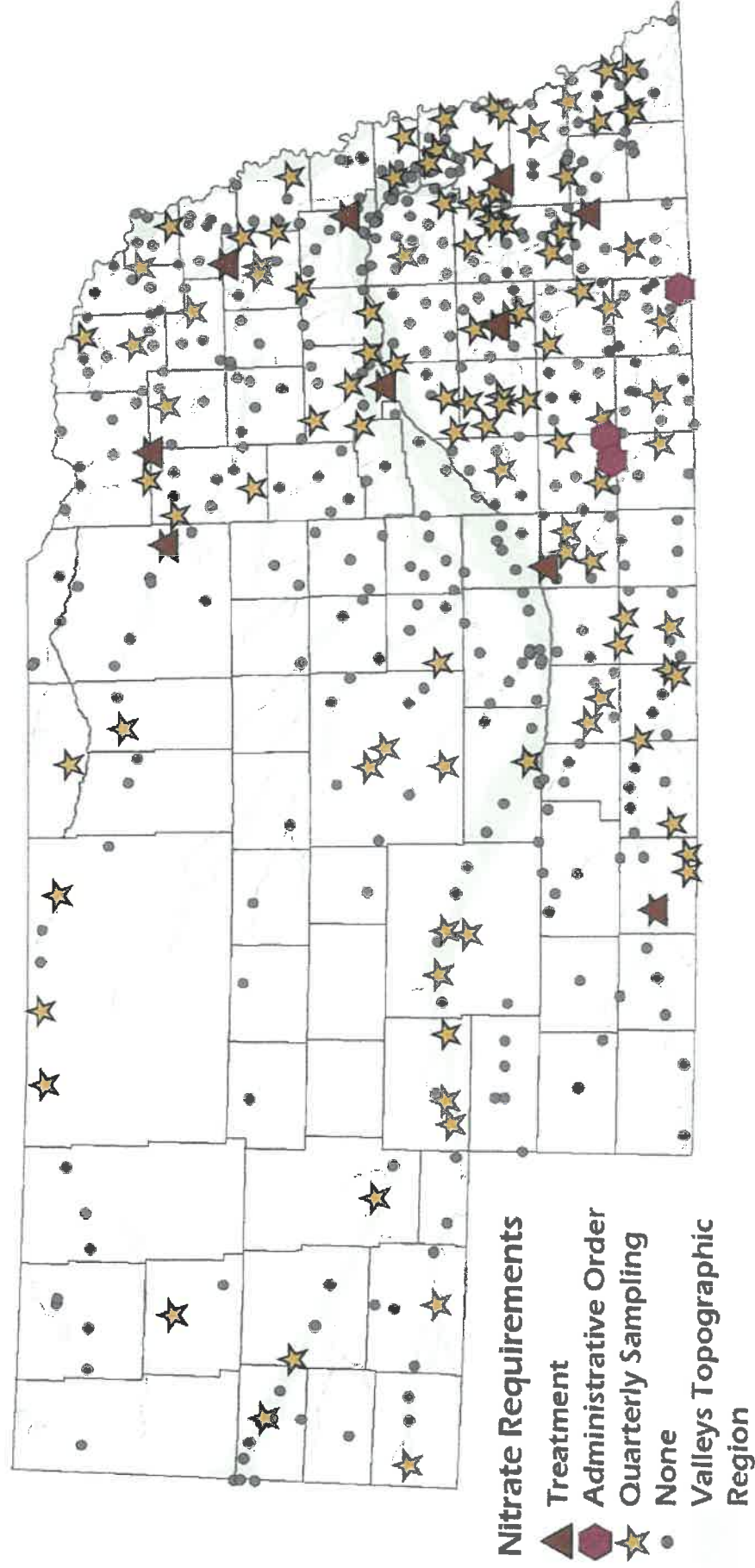


## MOST RECENT NITRATE-N CONCENTRATION BY TOWNSHIP



**Figure 13.** Median of the most recent Nitrate-N concentration by township of 18,182 wells from 1998-2017.  
 (Source: Quality-Assessed Agrichemical Database for Nebraska Groundwater, 2018)  
*Gray areas indicate no data reported, not the absence of nitrate in groundwater.*

## NITRATE IN PUBLIC WATER SUPPLIES

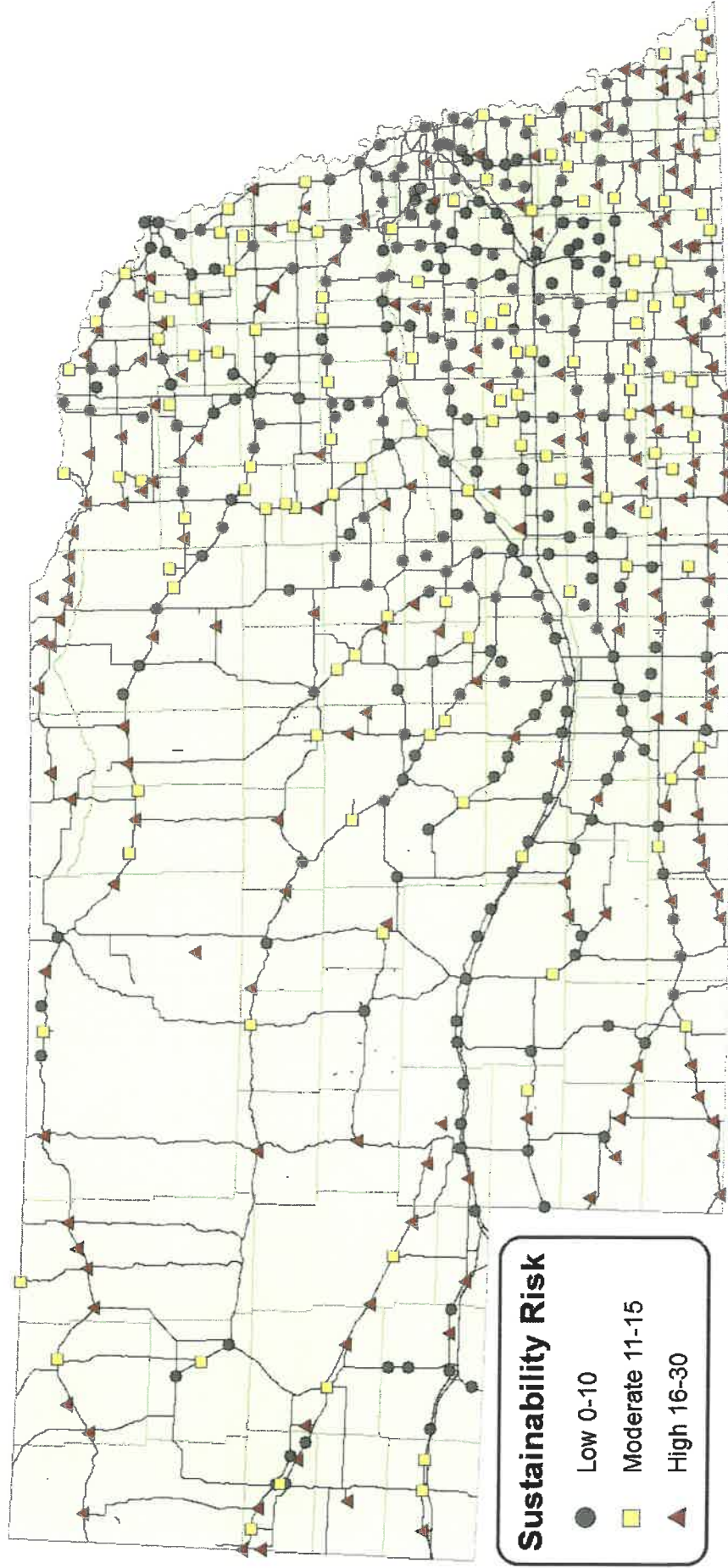


Community public water supply systems with requirements for nitrate.

(Source: DHHS, November 2018.)

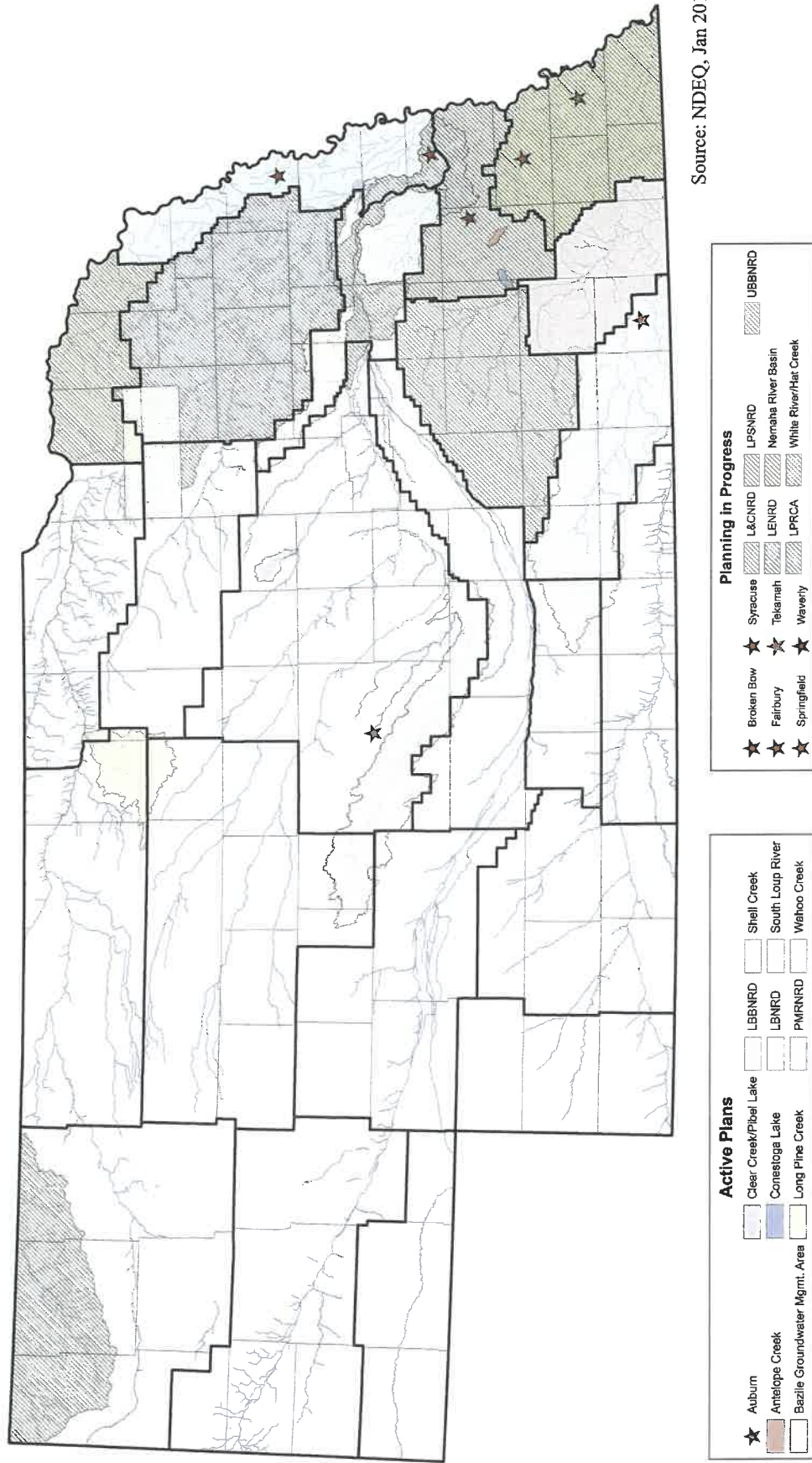


**AWIN Sustainability Model**  
**State of Nebraska**



SOURCE: 2010 US CENSUS AND 2008-2012 AMERICAN COMMUNITY SURVEY  
TOWNS WITHOUT CENSUS DATA WERE EXCLUDED

# NRDs ARE WORKING ON PROTECTING GROUNDWATER & SURFACE WATER WITH LONG-TERM WATERSHED PLANS





Bazile Creek HUC 12s  
Selected for the  
2017 National Water Quality Initiative  
in Nebraska

Legend

- 2017 NWQI Area
- NRD Boundary
- County Boundary

Lower Niobrara  
Natural Resources District

Lewis & Clark  
Natural Resources District

ANTELOPE  
COUNTY

Upper Elkhorn  
Natural Resources District

PIERCE  
COUNTY

Royal

Lower Elkhorn  
Natural Resources District

Lower Little Bazile Creek  
101701010504

Bazile Mills  
Middle Bazile Creek  
101701010704

Upper Bazile Creek  
101701010703

Headwaters Bazile Creek  
101701010701

Council Hill  
101701010702

Winnetoon

Greighton

Plainview

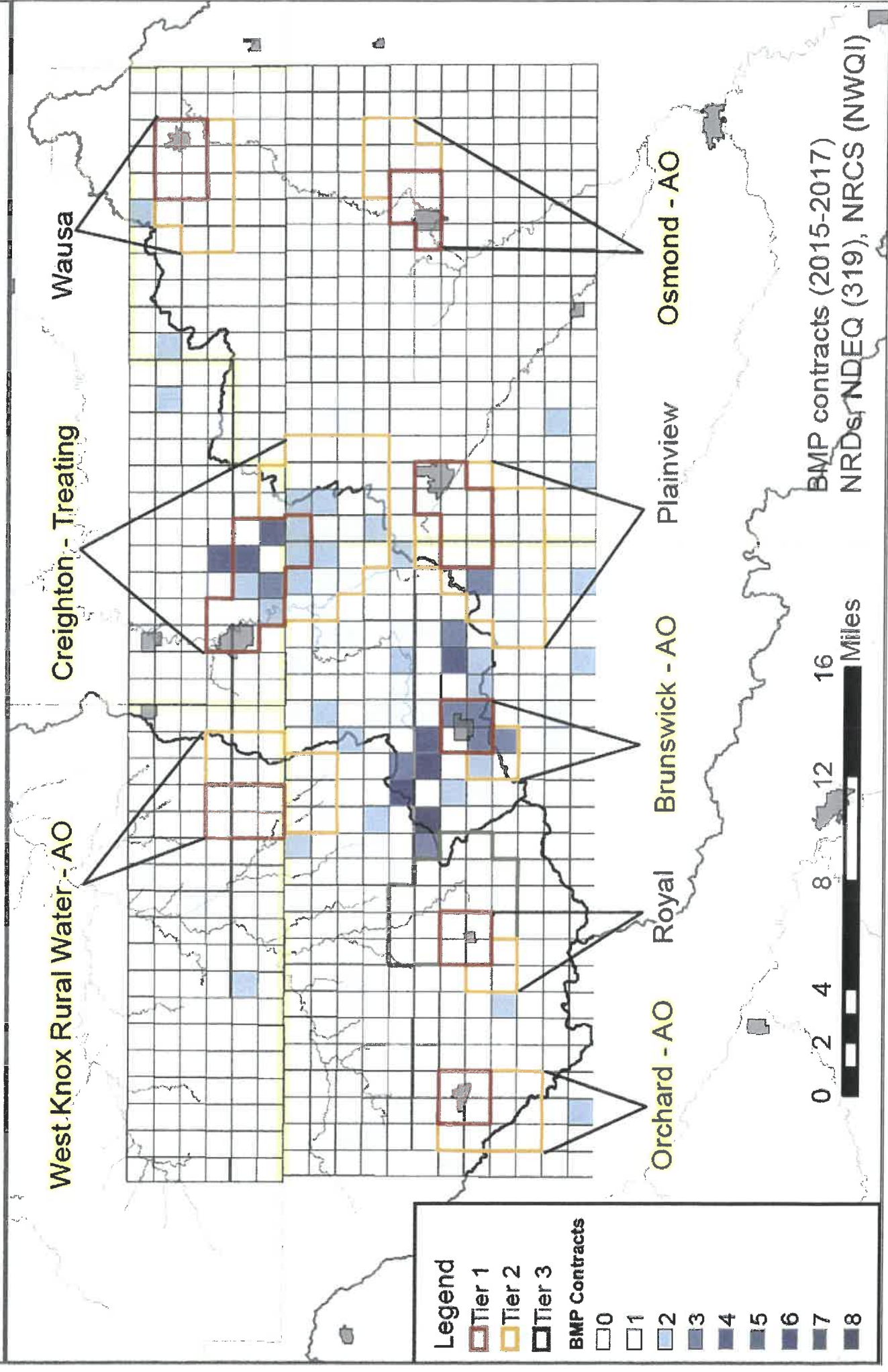
5 Miles

5 2.5 0

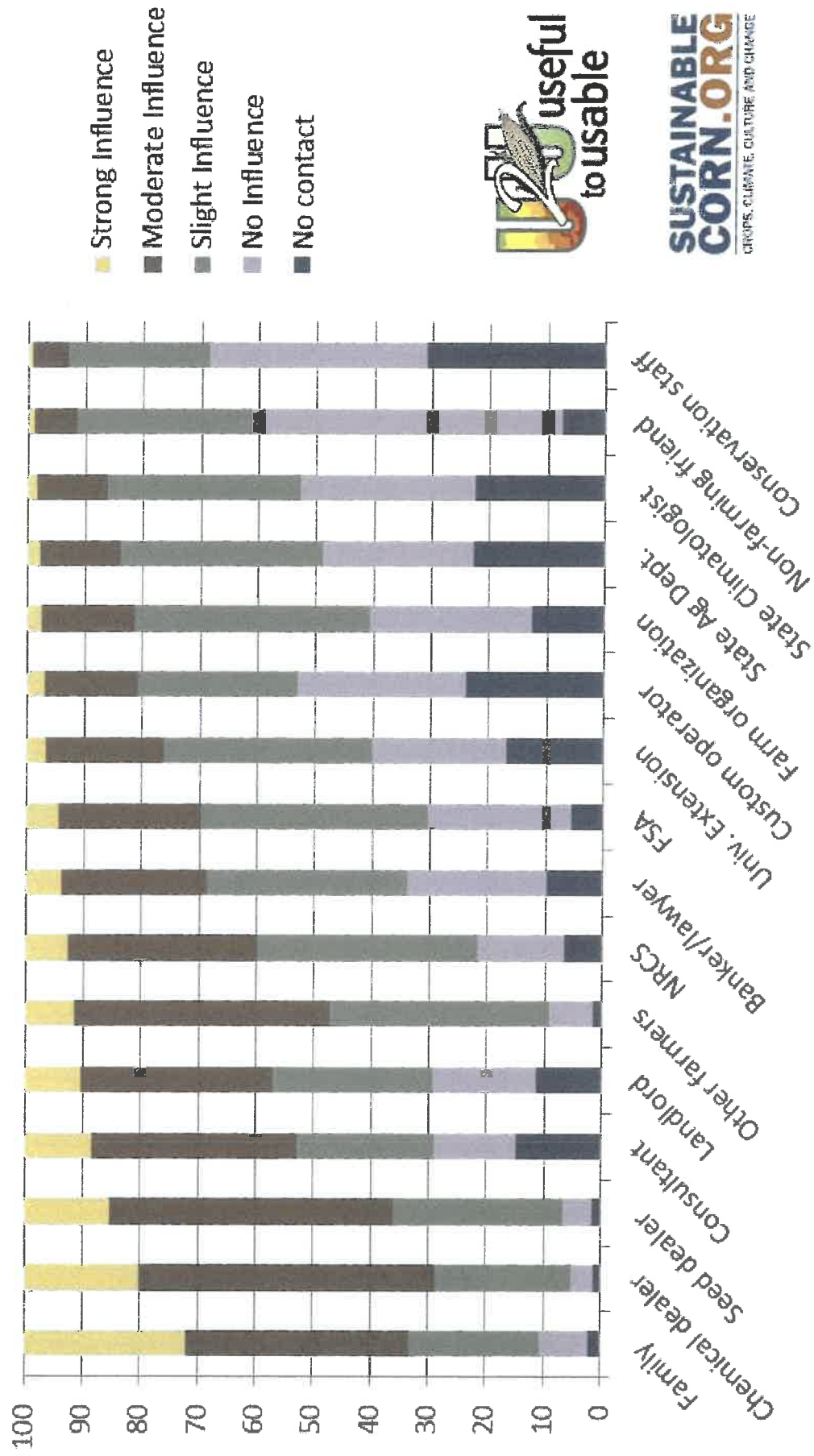
D Griffith - 2/2016



# BGMA Priority Areas and Current BMPs



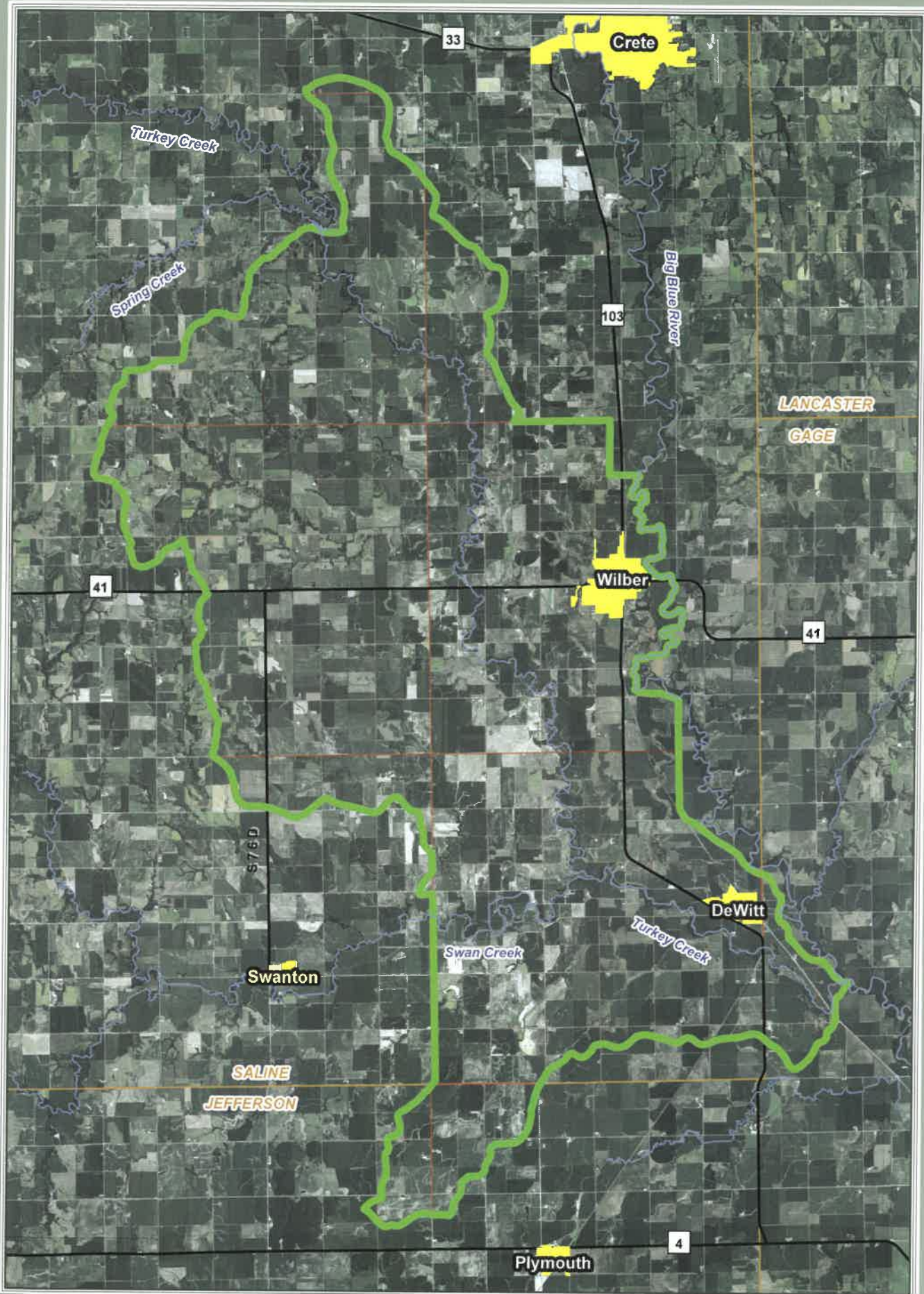
# Who's the Best Messenger?



**SUSTAINABLE  
CORN.ORG**  
CROPS, CLIMATE, CULTURE AND CHANGE



# Turkey Creek - Wilber Water Quality Planning Area





## Who Are You Going To Call?

|                       |              |
|-----------------------|--------------|
| Scott Bohaty (NRCS)   | 402-123-4567 |
| ?? (NRCS)             | 402-123-4567 |
| Ryan Thomas (LBB NRD) | 402-230-0016 |
| Paul Hay (LBB NRD)    | 402-239-1341 |
| Randy Pryor (UNCCE)   | 402-123-4567 |



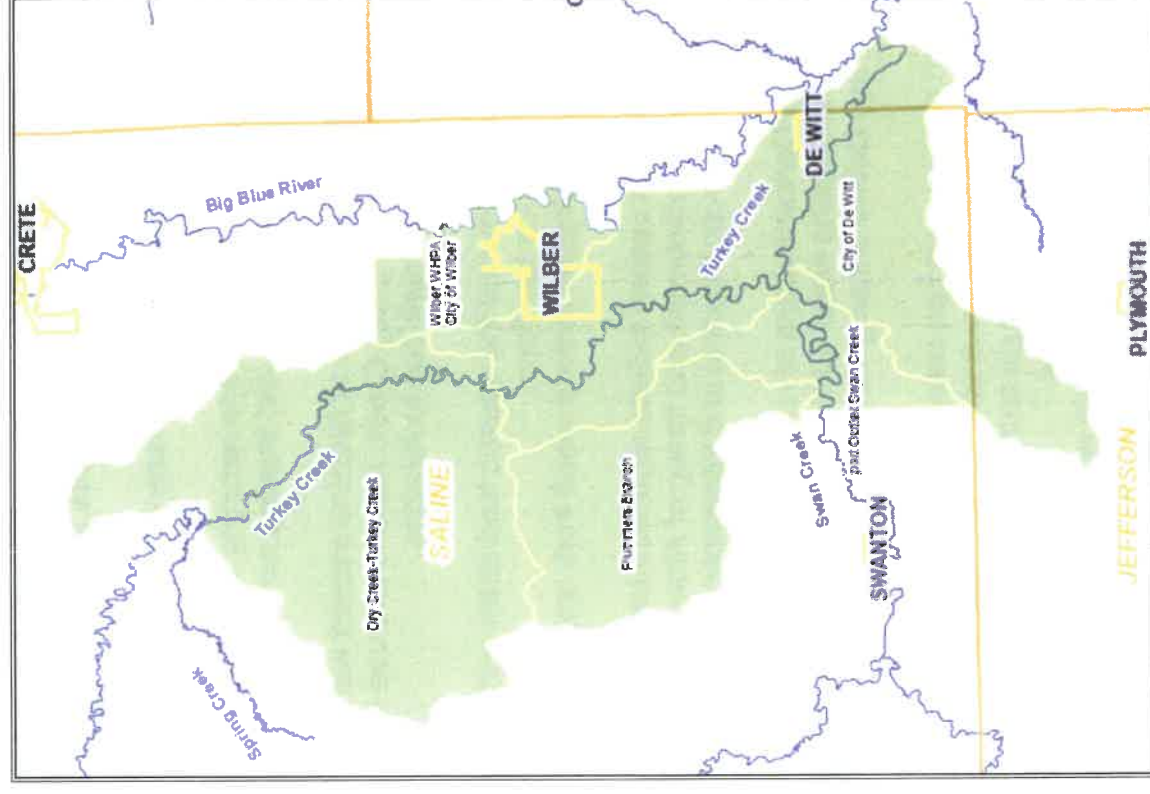
## Project Partners

USDA Natural Resources Conservation Service  
Lower Big Blue Natural Resources District  
Nebraska Department of Environmental Quality  
University of Nebraska Cooperative Extension  
City of Wilber

YOU?



## TURKEY CREEK – WILBER WATER QUALITY INITIATIVE



## *Turkey Creek-Wilber Water Quality Problems*

**BACTERIA:** Concentrations of *E. coli* bacteria exceed water quality standards in Turkey Creek. Recreational use of Turkey Creek is impaired due to *E. coli*.

- *E. coli* bacteria can cause illnesses such as diarrhea, toxicity and skin infection.
- Sources of *E. coli* bacteria include livestock, wildlife and human waste.
- Management options include reducing sources, waste control, and intercepting and treating runoff.

**ATRAZINE:** Concentrations of Atrazine exceed water quality standards in Turkey Creek. Aquatic Life use is impaired in Turkey Creek due to Atrazine.

- Atrazine may disrupt the aquatic food chain and can disrupt hormone functions.
- Sources of Atrazine include runoff from cropland and spills.
- Management options include reduced Atrazine application, placement and timing of Atrazine application, runoff control and interception.

**NITRATE:** Concentrations of nitrate in groundwater exceed the drinking water quality standard in some areas. Wilber and DeWitt drinking water sources are threatened.

- High nitrate levels can cause blue baby syndrome in infants and spontaneous abortion in livestock.
- Sources of nitrate include fertilizer and waste from livestock, pets and wildlife.
- Management options include reduced fertilizer application, alternative placement and timing of fertilizer application, runoff control, and interception.

## *Creating A Water Quality Improvement Plan*

A water quality improvement plan will provide:

- Comprehensive assessment of watershed conditions.
- Strategies to resolve water quality problems.
- Coordinated agency technical and financial resources.
- Opportunities to try voluntary conservation practices.

### *We Need Your Help!*

You can help develop the plan by:

- Providing input at public meetings.
- Responding to a conservation survey.
- Serving on an advisory committee.
- Sharing your concerns about water quality issues.
- Sharing your interest in conservation practices.



*Holmes Lake Watershed Planning Meeting*