



# Streams of Information

Jake Wilson

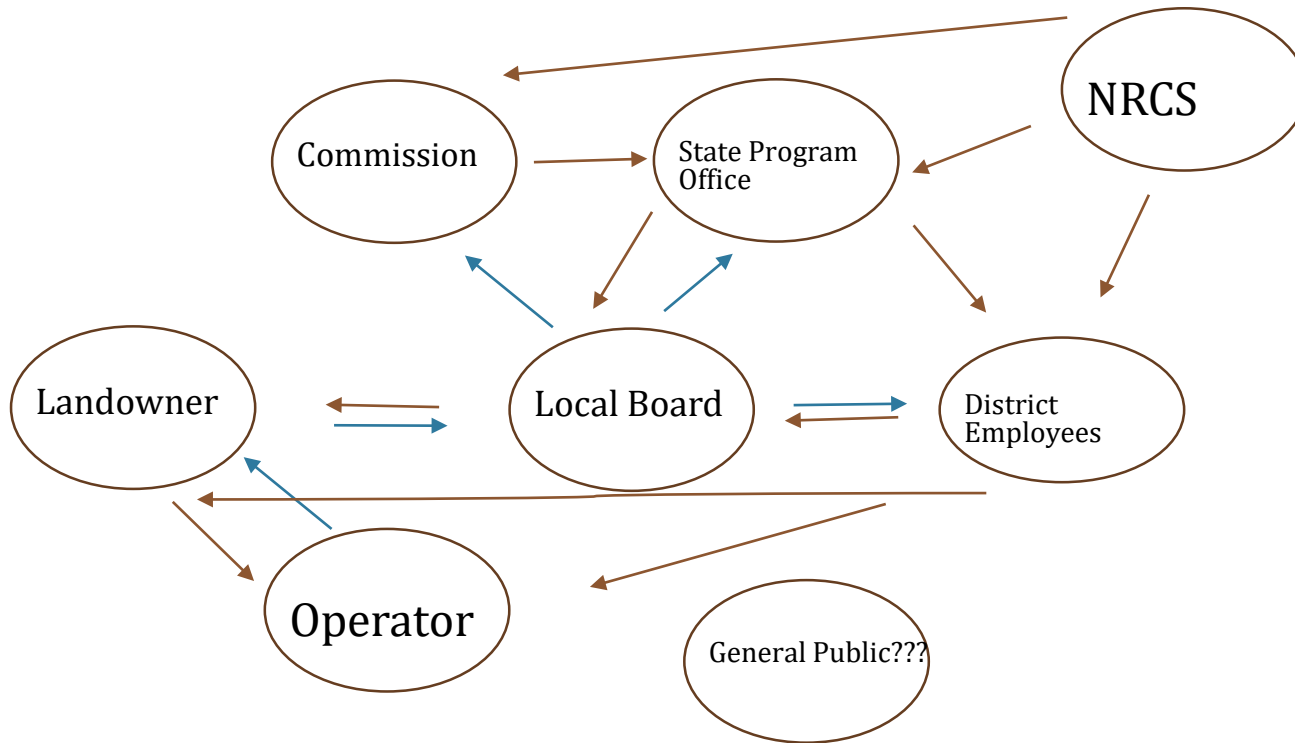
NASCA Annual Meeting

October 2021

# SWCP Communication Plan

- Goals-broaden circle of influence, create dialogue, determine needs
- Key Messages-our actions benefit the environment, the economy and our partners, we have a long track record of success.
- Stakeholders: Who Carries the Message-hopefully everyone
- Action Plan-this presentation will focus on some of the actions we are taking.

# Information Flow



# Information Flow

- Targets for Communications
  - a) Accurate
  - b) Timely
  - c) Useful
  - d) Diverse

# Information Streams

- Official Memorandums/Handbooks
- In Person Exchanges(board meetings, conferences)
- E-Newsletter
- Press Release
- Fact Sheets and Brochures
- Social Media

# Information Streams

- **Handbooks, Memos,**
  1. Often very technical in nature, and we rely on district employees and/or our frontline staff to make sure boards see, read, and comprehend the contents.
    - a) Distributed electronically and very few board members receive directly.
    - b) Not always updated in a timely manner.

# Information Streams

- **In Person Exchanges**
  1. Board Meetings-Front line staff (District Coordinators) attend board meetings and do a great job...However... there is no script
  2. Training-Also falls on District Coordinators, but not handled consistently across the program
    - a) Working on standardized curriculum and materials
  3. Conferences-Used to be common, but rare in the current climate.
    - a) Is this over, or just paused?

# Information Streams

- Quarterly [E-Newsletter](#)
  - Done in the past, but abandoned
  - Revitalized and targeted towards districts (boards and employees)
  - Used to inform target audience about:
    1. Program office priorities/vision.
    2. Provide transparency.
    3. Help get to know staff.
    4. Summarize and explain policy decisions.



# Information Streams

- Press Releases
  - Rarely done in the past
  - Emphasis on being timely (can be a challenge)
  - Topics of interest to the general voting public

# Information Streams

- [Fact Sheets/Brochures](#)

1. Originally Intended for conference settings, but just as useful at the district level with all the limitations on face to face interactions.
2. Summarizes practices and helps to match official practice names/codes to purpose and common names of practices.
3. Keeps information and style consistent, but allows local districts to add contact info and logo

# Information Streams

- Social Media
  1. Tricky for districts because encouraged, but not policed
  2. Highly variable
  3. Not allowed for state program (must use department account)
  4. Difficult to obtain content.

# Information Streams

- What about feedback?
  1. Committees have been successful in the past
    - a. Education/Information Committee needed?
  2. Surveys
  3. Ballot

## Sensitive Areas

Practices in sensitive areas assist in the protection of water quality through buffers that collect and filter out sediment, nutrients, herbicides and pesticides that could run off of farm fields. The exclusion of livestock from streams protects the streambank from soil degradation and keeps animal waste out of streams, which prevents high nutrient and E. coli content.



C650 Streambank Stabilization

### Eligible Conservation Practices

**C650 Streambank Stabilization practices** use large stones or natural materials such as logs and root wads as mechanical protection of highly eroded stream banks. Stabilized banks are then planted with herbaceous vegetation and trees to provide further long-term stability. Streambank stabilization designs must be prepared by licensed professional engineers with significant streambank experience.

**DSP-31 Sinkhole Improvement** is used in karst areas that are particularly susceptible to groundwater contamination from many sources. This practice is aimed at reducing the potential of pollution from nonpoint sources and includes protected drains to allow infiltration of water into the subsurface.

**BDSP-31 Buffer Sinkhole Improvement** provides an incentive to be used for continuing protection of sinkholes that have been stabilized using the DSP-31 Sinkhole Improvement practice.

**N351 Well Decommissioning** helps to properly treat, fill and seal abandoned wells. This prevents entry of vermin, debris, fertilizer, pesticides or other foreign substances into the well or well bore hole. This cost-share practice provides a one-time incentive for each properly decommissioned well.

**N380 Windbreak/Shelterbelt Establishment** is used to reduce the impacts of wind erosion and improve irrigation efficiency in cropland by establishing trees and shrubs at the edges of crop fields to deflect the impact of wind.



DSP-31 Sinkhole Improvement: Vertical Drain

**N386 Field Border** is a cost-share practice used to establish a permanent grass buffer along the edges of crop fields to reduce soil loss and improve water quality by preventing excess sediment and nutrients from leaving fields.

**N391 Riparian Forest Buffer** is an incentive program to protect soil and shallow groundwater from contamination by sediments, chemicals, nutrients, pesticides or organic matter. It protects streambanks from erosion by planting woody species along the stream course and protecting the buffer area from traffic and grazing.

**N393 Filter Strips** are used to reduce or prevent pollution of water from agricultural nonpoint sources. The establishment of permanent grass filter strips below cropland, pasture or hayland prevents sediments, chemicals or manure from entering environmentally sensitive areas.

**N574 Spring Development** allows landowners to use springs as a water source for livestock while simultaneously protecting the spring from direct animal access. This prevents contamination of the water source and protects downstream water quality.



N574 Spring Development



WQ10 Stream Protection: High Tensile Electric Exclusion Fence

**N725 Sinkhole Treatment** is an incentive practice that protects shallow groundwater resources from pollutants by protecting groundwater inlets with buffers and exclusion areas to trap sediments, chemicals and organic matter.

**WQ10 Stream Protection practices** provide cost-share to exclude livestock from a stream and provide an alternative water source. This stops bank erosion caused by the livestock, keeps manure out of the stream and allows the stream corridor to naturally regenerate over time.

District Contact Information here.

# Animal Waste Management

Animal Waste Management Systems are planned to preclude discharge of pollutants to surface or groundwater and to recycle waste through correct soil application on agricultural land. Cost-share for Animal Waste Management is based on the number of applicable animal units present on the property. Cost-share assistance is not available for permitted systems. Cooperators are required to complete a comprehensive nutrient management plan prior to being approved for any Animal Waste Management contract. If a contract is completed, the cooperator may be eligible for a \$2,000 incentive to help defray the cost of obtaining their plan.



N312 Poultry Waste Management: Stack Shed

## Eligible Conservation Practices

**N312 Beef and Small Ruminant Waste Management practices** help to construct a covered feeding and manure storage area. This prevents soil erosion and keeps nutrient-rich runoff from entering streams.

**N312 Dairy Waste Management** provides cost-share for components such as flush tanks, gutters, storage tanks and solids separators for non-permitted dairy operations.

**N312 Poultry Waste Management systems** provide a protected area to store poultry waste in a way that prevents environmental degradation.

**N312 Swine Waste Management cost-share** helps farmers install the flush tanks, gutters, basins and pit storage needed to safely handle the waste associated with farrowing, growing, gestation, feeding, finishing, or nursery buildings.



N317 Composting Facility: Multi-Bin Composter



N312 Beef and Small Ruminant Waste Management: Winter Feeding Facility

**N316 Incinerators** are used to incinerate livestock and poultry carcasses as part of a waste management system and to decrease nonpoint source pollution of surface and groundwater resources.

**N317 A composting facility** is a structure used to safely treat organic waste, such as animal carcasses and food waste in a way that creates a humus-like material that can later be used as a soil amendment according to a nutrient management plan.

District Contact Information [here](#).

**WATER UPDATE:** Mozingo Lake

# Monitoring may shed light on nutrient runoff

*Aims to show if it's to blame for increased algae growth at Mozingo*

By **GEOFFREY WOEHLK**  
The Forum

MARYVILLE, Mo. — Officials hope that a water quality monitoring program will help answer questions about the leading causes behind algae blooms at Mozingo

Lake that have affected drinking water across the area.

Typically, algae blooms like the ones that have become more and more frequent at Mozingo Lake are caused by excess nutrients, like nitrogen and phosphorous. Buildup of those nutrients in other locations

have been linked to runoff from nearby farms — especially from chemical fertilizers or manure.

However, specific data on exactly where those nutrients are coming from in Mozingo's case is scarce, leading some landowners in the surrounding watershed area to express some skepticism about a link.

"We could not prove to the landowners or prove to the public that soil erosion was coming off of the

landowners' farms and coming into the lake, therefore causing an algae bloom in the lake," said Jeremy Redden, environmental manager with the Missouri Department of Natural Resources' Soil and Water Conservation, at a briefing of the Nodaway County Commission last week. "So, we thought, OK, we need to have a monitoring project to be able to prove this, or to be able to show people this ... data."

In August, DNR announced a partnership with the U.S. Geological Survey to install a monitoring gauge in Mozingo Creek, the largest tributary to Mozingo Lake. Over the next three years, the gauge will measure turbidity, temperature, dissolved oxygen and nitrate levels, among other parameters.

See **WATER, A2**

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## Water

*Continued from A1*

Particularly in the northern part of the watershed, Redden said his agency felt it was missing crucial runoff data. "Without data, you can't say yes or no, and there's a lot of things being said that I think they'll find out may not be happening," said Rod Barr, director of School of Agricultural Sciences at Northwest Missouri State

University, who was also at the Aug. 26 meeting.

It's possible, Redden said, that monitoring could instead show that nutrient runoff is unlikely to be a primary cause of the uptick in algae blooms. That would also be a valuable outcome, he said.

"This is very good news, and I am very excited about it," said South District Commissioner Scott Walk. "I know several people in that watershed district that

I talked to that went to the initial (stakeholder) meetings and they were skeptical."

Walk said that no matter what the data shows, it should help paint a clearer picture of how to proceed.

Originally, the DNR and the county were moving forward with the possibility of using a federal grant to pay for a monitoring program, which would have also required a significant local match. But last month, Redden said, DNR freed up money

to pay for the initiative itself, committing \$231,000 to the project, with USGS putting in another \$141,300 in federal funds. The combination of state and federal money means that no local funds will have to be spent on the monitoring program.

"I'm pretty excited about it, to be honest with you, just so at the end, we can say, you know, 'Yes, sediment's coming down the river,' or 'No, it's not,'" Redden said. "And then we can adjust our con-

servation practices in the watershed as needed."

In addition to the automated monitoring on Mozingo Creek, Redden said the USGS also will be hand-drawing samples from other tributaries throughout the life of the partnership.

"I hope we find some results," said North District Commissioner Chris Burns. "That's the main focus, is to figure out if we have a problem, how to solve it."

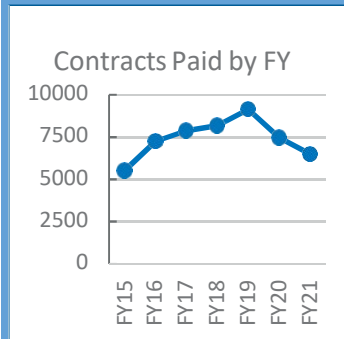




Soil and Water Conservation Program

## Was this a Typical Year?

For those of you that have worked in soil and water conservation for a while, there are some years that will never be forgotten for all the wrong reasons (think 2012). Unfortunately, FY21 will probably be relegated to a similar place in our memories. Unprecedented staff turnover, unpredictable weather, and a global pandemic all contributed to fewer contracts being completed across the state when compared to the recent past.



## Lessons Learned.

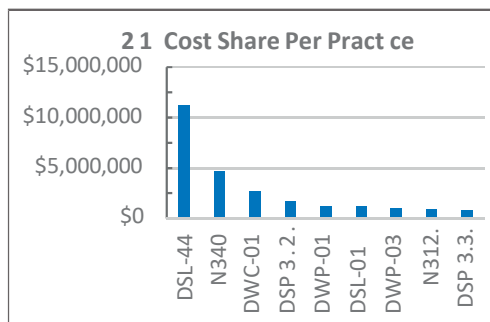
Due to the travel and occupancy restrictions in most offices, many of us were forced headlong into learning new technologies and working from alternate locations. Although success varied, most of our infrastructure, policies, and attitudes are in a better place to embrace remote work if the need arises in the future.



## Conservation on the Ground in FY 21

The SWCP had an appropriation of \$40 million for cost share last year. The following is a summary of cost share activity in Fiscal Year 2021.

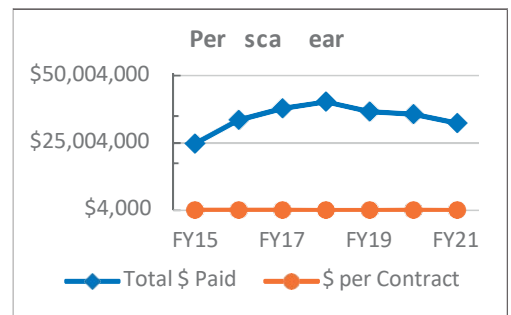
Our conservation partners overcame shuttered offices, staff shortages, and rising component prices to put approximately \$32 million worth of cost share practices on the ground over the last fiscal year. What's even more impressive than the dollar figure is the number of individual cost share contracts that were executed. FY 21 saw around 6,500 contracts make it to the payment stage. This is significantly down from our recent highs in FY 18 and 19, but substantial, considering the circumstances. Cover crops continued to be the most popular practice in terms of contract numbers making up around 14% of total contracts, but DSL-44 terraces with tile received the most cost share dollars at over \$11 million, followed by cover crops at \$4.6 million.



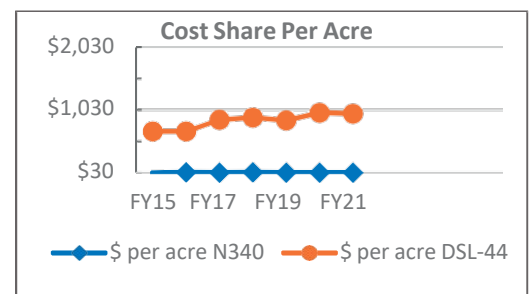
### This issue

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- Onboarding New Staff [P.2](#)
- Staff Spotlight [P.3](#)
- Upcoming Events [P.4](#)

When comparing this year's activity to the recent past, a few notable trends begin to emerge. Since FY 15, when cover crops were first implemented, the average cost share contract amount has hovered around \$4,500, even as total expenditures have shown a slow but steady increase. Acres served by state cost share have also shown a steady increase. This is a result of many more individual contracts, primarily cover crops.



Another interesting trend is the cost share expended per acre for different practices. A comparison between N340 cover crops and DSL-44 terraces clearly illustrates the rising cost of structural vs. management or incentive based practices.





## What tools are available to help districts onboard new staff?

We are always happy to see district employees advance their careers; however, this year we saw an unprecedented number of vacancies in SWCDs. Many districts had to refill all of their staff positions, resulting in the loss of institutional knowledge and continuity of operations.

Fortunately, there are many resources available to districts to help them onboard new employees. The program office has developed a “New Employee Handbook” that can be customized with information specific to each local district. This packet includes basic information about where to find resources, who important partners are, and a checklist of items to attend to in the first days. When used in conjunction with human capital investment by the board and partners, this handbook helps to make the transition into the district more professional, organized, and efficient.

There are also a plethora of online resources available from the SWCP and NRCS. The SWCP intranet serves as an online repository for official correspondence and handbooks. The latest training videos and policy updates are only a few clicks away for anyone on the state network. For those employees seeking technical certifications, NRCS has extensive training and technical resources available through Aglearn and their online field office technical guide (EFOTG).

Of course, all the handbooks and videos in the world are not enough to train up a fully effective and capable employee. This past year has taught us that technology has its limits, and there is no substitute for real live people and the experience they bring to the table. Board members are ultimately responsible for employee supervision, so it is vital they take some time to sit down with new employees in their first days to talk about expectations and opportunities and to just get to know them. Employees are more likely to be productive and keep their supervisors well informed if they know and respect them from day one.

When it comes to state cost share policy, MOSWIMS, and administrative matters, the district coordinator is the most important person for new employees to get acquainted with. Coordinators serve as trainers and policy interpreters, as well as provide oversight to the cost share process. In addition, coordinators are well connected with program management and partners, and are able to get answers on items that might be difficult for local districts.

When it comes to technical training, NRCS has the expertise and processes in place to ensure that district employees are learning the valuable skills needed to plan, design, lay out, and support construction of conservation practices. The District Conservationist for each county can help the board design and implement a training plan that covers the board’s needs, and is mutually beneficial to their agency.

## Soil and Water Conservation Relies on Partnerships

We are fortunate in Missouri to have a dedicated state sales tax that provides a steady, reliable funding source for soil and water conservation efforts, in excess of what federal programs bring in. However, it is our extensive leverage of partnerships that creates efficiencies that allow those dollars go further than almost anywhere else in the country. Instead of having to spend state tax dollars on retaining staff to develop technical standards and train district employees how to run survey equipment, we rely on the extensive talent pool of NRCS. This allows us to keep administrative costs low and provide more money directly to cost share for farmers implementing conservation practices.

**“District coordinators act as the liaison between the SWCP, NRCS, and SWCDs”**

**-Jeremy Redden,  
Environmental Manager with SWCP**

## Getting to Know Kurt Boeckmann

Kurt began working for the department in 1996 and brings to this role extensive experience with the agriculture community, both within Missouri and regionally. He has been active in the national discussions on Gulf hypoxia and nutrient reduction and has been instrumental in developing Missouri's Nutrient Loss Reduction Strategy. He served for seven years as the department's Agricultural Liaison, and has previous experience working in the Soil and Water Conservation Program and in the Federal Facilities Section, which is now the Environmental Remediation Program. Kurt began as the SWCP Program Director in September 2020, after the retirement of Colleen Meredith.



Edge of Field Monitoring Station made possible by Section 319 funding through Missouri DNR in partnership with the Missouri Corn Merchandising Council and Missouri Soybean Merchandising Council.

## Q & A with the SWCP Program Director

**Q:** Do you have any specific goals for the program under your leadership?

**A:** One of the goals for the SWCP will be to expand the use of targeted conservation.

**Q:** Why targeted conservation?

**A:** This type of approach has many benefits for agricultural systems, such as improving soil health and water quality. The department and partners have been researching the benefits of installing best management practices (BMPs) in the specific watersheds where we are getting the best return on the taxpayer's dollar. Now, with sound research and tools that provide a good understanding of the efficacy of these BMPs,

I believe Missouri can build on what we have accomplished in 35 years of the SWCP and into the future by prescribing the best practices in the best locations for landowners, while also improving their profit margin.

**Q:** Some people associate the phrase *targeted conservation* with a more regulatory or compulsory approach to soil and water conservation. What would you say to stakeholders that are hesitant about embracing this new approach?

**A:** The program is working well as a voluntary program. I believe that to improve water quality in watersheds across the state, the SWCP and partners must strive to provide landowners and SWCDs with the best tools available, so they can make

conservation planning effective, while keeping the program voluntary.

**Q:** What other changes might we see in the near future?

**A:** The SWCP will be working with partners for messaging about the program and its success. I would like to increase the SWCP's visibility, and reach new audiences that can contribute to Soil and Water Conservation efforts. The sales tax was passed overwhelmingly in 2016. That could not have been done without the help of all the partners that were involved. The next renewal is right around the corner, so improving our visibility now will bring even more support the next time it is on the ballot.

For more information on Targeted Conservation

<https://store.extension.iastate.edu/Product/A-Targeted-Conservation-Approach-for-Improving-Environmental-Quality-pdf>

## Upcoming Events

- **2021 Area Meetings**

The MASWCD area meetings and elections will be held the week of Sept 13<sup>th</sup>. Location and format to be determined.

- **Soil and Water Districts Commission Meeting**

August 18, 2021 at the Missouri State Fair. Agenda and packet can be found here <https://dnr.mo.gov/env/swcp/meetings.htm>

- **FY 22 Training Conference**

After a one year hiatus, the Annual Training Conference will be held in person this year at Margaritaville in Lake Ozark. The conference will run from November 28-December 1.

## We come

The program office recently filled two vacancies with faces that may be familiar to many of you.



Matt Blansett formerly worked as a district specialist in Callaway SWCD for 10 years and is now our newest District Coordinator.



Sandy Burd comes to us with a wealth of experience from over 32 years in the Maries SWCD and will be filling the administrative support professional role vacated when Lori Bax retired.

Join us in welcoming Matt and Sandy to their new roles.

### Soil & Water Conservation Program

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