

Welcome to *The Current*, the North Central Region Water Network's Speed Networking Webinar Series

Source Water Protection: 2PM CT

- 1. Submit your questions for presenters via the Q&A panel. There will be a dedicated Q&A session following the last presentation. The Q&A panel can be found via the Q&A icon at the bottom of the webinar screen.
- 2. If you are experiencing technical issues or have questions about the North Central Region Water Network or *The Current* Webinar Series, please use the chat feature. The chat feature is accessible via chat icon at the bottom of the webinar screen.
- 3. A phone-in option can be accessed by clicking the up arrow on the mute icon and clicking 'Switch to Phone Audio'.

This session will be recorded and available at northcentralwater.org.







Today's Presenters:

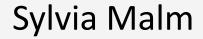
- Sylvia Malm, Senior Advisor for Source Water Protection, Ground Water Protection Council and Source Water Collaborative
- Logan M. Smith, Drinking Water Protection Coordinator, Watershed Management Section, Kansas Department of Health & Environment
- Ruth Kline-Robach, Outreach Specialist, Institute of Water Research & Department of Community Sustainability, Michigan State University



Follow us:









Sylvia Malm, Senior Advisor for Source Water Protection, Ground Water Protection Council (GWPC), supports the national Source Water Collaborative to promote opportunities for source water protection, and leads the Collaboratives Network, over 30 state, watershed, and local collaboratives across the country.

Sylvia was the Source Water Protection Team Leader for over 10 years at the US Environmental Protection Agency's Office of Ground Water and Drinking Water. While at EPA, she developed a toolkit to facilitate source water professionals' work with USDA and conservation districts and worked with FFA to create water quality lessons for high school students.

Sylvia has an MA in public policy from Duke University, MEd from Boston University, and BA from Brandeis University. Sylvia grew up on a farm in Lebanon County, PA and is a member of the NRCS Virginia State Technical Committee.







Update from the Source Water Collaborative



ABOUT ASDWA AND GWPC





- Members: State Drinking Water Program Administrators
- Mission: ASDWA provides information, opportunities, and guidance to state and federal leaders and partners in the drinking water sector to protect public health and sources of drinking water.

- Members: State Groundwater Regulatory Agencies
- **Mission:** GWPC provides an important forum for communication and research to promote the protection and conservation of groundwater resources for all beneficial uses, as a critical component of the ecosystem.



Now 30 Members!



Association of Association of Association of Association of American Planning American Water State and State Drinking Clean Water Metropolitan **American Rivers Works Association** Territorial Health Water Association Administrators Water Agencies Officials Administrators **National** Clean Water National National Environmental National **Ground Water** Association of Action/ Clean Finance Center Association of Association of Environmental Protection Council Conservation Water Fund **State Foresters Services Center** Network Counties **Districts National Ground** Rural Community Soil & Water North American National Rural **Smart Growth** Water Association Lake Management River Network Assistance Conservation / Groundwater Water Association America Society Society **Partnership** Foundation U.S. Endowment U.S. Forest USDA - FSA Water Systems The Trust for U.S. Geological U.S. EPA for Forestry & Service Public Land Council Survey **USDA - NRCS** Communities (Northeastern)

www.sourcewatercollaborative.org



Resources

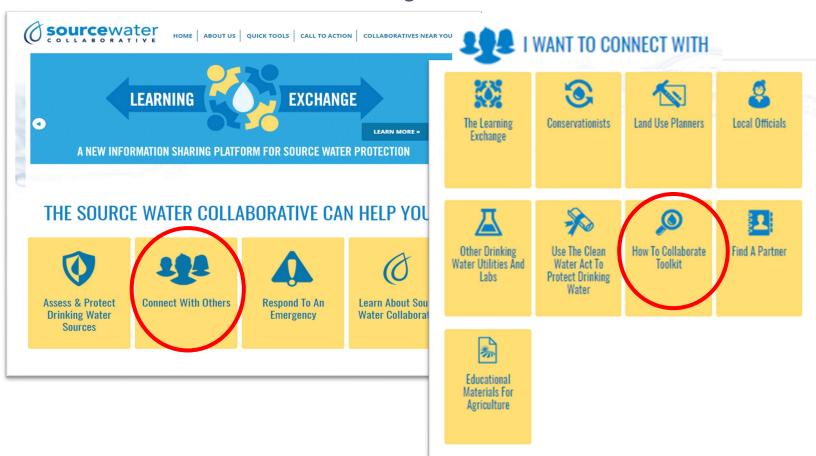
- Agricultural collaboration toolkits:
 - 1. Tips for SWP partners work with Conservation Districts
 - Tips for state SWP programs work with NRCS State Conservationists
- CWA-SDWA Infographic
- Learning Exchange
- How to Collaborate Toolkit
- Collaboratives Near You
- Guides for Planners and Local Officials
- Water Quality Lessons for 9th-12th grade

www.sourcewatercollaborative.org



Source Water Collaborative - Collaboration Toolkit

www.SourceWaterCollaborative.org





ABOUT US QUICK TOOLS CALL TO ACTION COLLABORATIVES NEAR YOU

COLLABORATION TOOLKIT:

HOW TO BUILD AND MAINTAIN EFFECTIVE PARTNERSHIPS TO PROTECT SOURCES OF DRINKING WATER

The Source Water Collaborative has developed this extensive "How-to Collaborate" Toolkit to help others initiate or enhance partnerships to protect drinking water sources. This Toolkit is part of the SWCs ongoing efforts to help foster local, state and regional/watershed source water collaboratives.

Effectively addressing drinking water contamination often requires working with key partners, across organizational and jurisdictional boundaries. Designed to meet a broad array of needs, this Toolkit provides helpful tips, sample materials, and thoughtful resources organized by each stage of collaboration, from those just getting started to mature partnerships seeking new inspiration.

Click on the map below to see state, regional, and local examples or click on the stage of your collaborative

BENEFITS OF USING A COLLABORATIVE APPROACH:

- Increases recognition of need for protecting drinking water sources
- Offers cost-effective approach rather than "going it alone."
- Aligns diverse efforts for mutual benefit (watershed protection, conservation, regulation, planning, and/or economic development).
- Brings together those with authority and influence to solve problems
- Uses a voluntary approach while leveraging current state and federal programs.

GET STARTED:

Select Your Stage of Collaboration or Skip to Specific Resources



Considering a Collaborative Effort



Forming a New Collaborative









Click Here



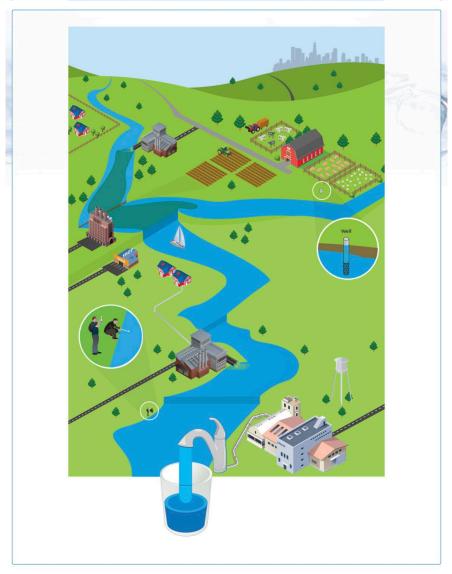
- Funding
- PartnersCommunication
- Collaborative Structure
- Sample Materials
- Collaborative Approach
- Action Planning
- Measuring Impact

Source Water Collaborative - Conservation Tool Kit

www.SourceWaterCollaborative.org



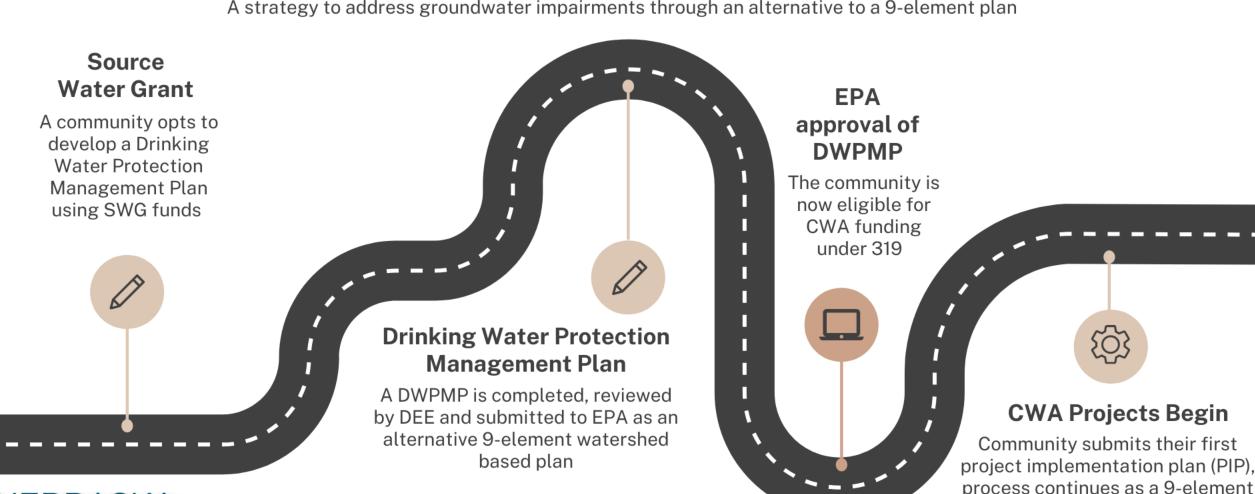
From Source to Tap: How to Use the Clean Water Act to Protect Drinking Water





Using Source Water Grants (SDWA 15% Set-Aside) to unlock 319 **Nonpoint Source (CWA) Funding**

A strategy to address groundwater impairments through an alternative to a 9-element plan



plan

NEBRASKA Good Life, Great Resources, **DEPT. OF ENVIRONMENT AND ENERGY**

FITS: Funding Integration Tool for Source Water

https://www.epa.gov/sourcewaterprotection/fits





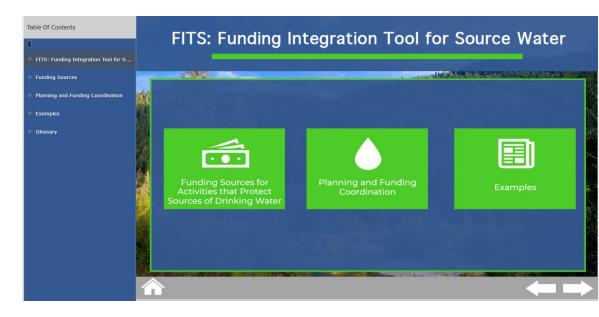
One Stop Shop for major Federal funding sources

Cross-program planning considerations

Tips for long-term planning

Rooted in real-world examples

Spirit of One Water



2018 Farm Bill Source Water Provision

Encourages practices for water quality and quantity that protect source water for drinking water ...while also benefitting agricultural producers

- Requires NRCS to work with community water systems and State Technical Committees to identify source water protection areas in each state (HUC12)
- Increases federal cost share for conservation practices that protect source water (up to 90%)
- Requires at least 10% of NRCS conservation funding be spent on SWP





State Source Water Protection Programs:

A PROGRESS REPORT ON AGRICULTURE AND FORESTRY
COORDINATION SINCE THE PASSAGE OF THE 2018 FARM BILL

September 2021

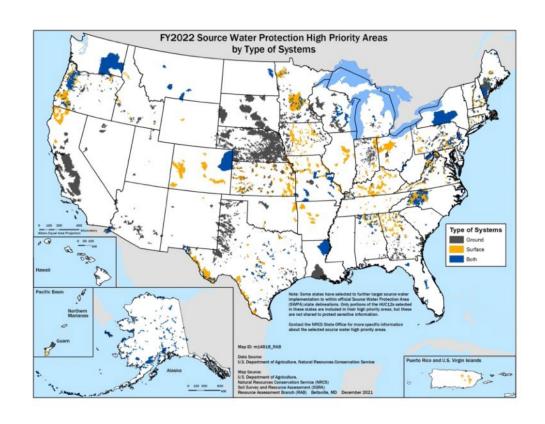


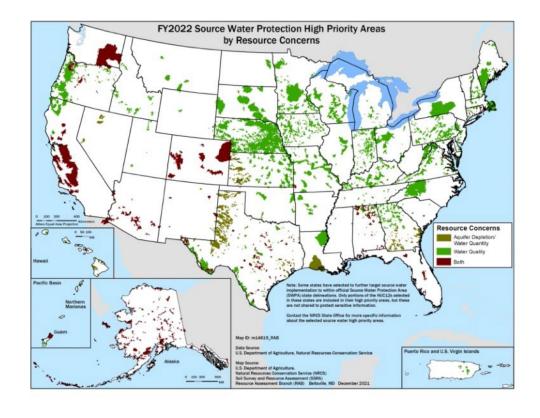


ASDWA AND GWPC ACTIONS

- ASDWA and GWPC work with our Source Water Committee, the state SWP coordinators, and the National Source Water Collaborative organizations to leverage 2018 Farm Bill opportunities.
 - September 2021 Report and Fact Sheet "State Source Water Protection Programs: A Progress Report on Agriculture and Forestry Coordination Since the Passage of the 2018 Farm Bill"
 - August 2021 Webinar with Kansas, Nebraska, and Wisconsin – "Effective Agricultural Practices to Address Nitrate in Groundwater Sources of Drinking Water"
 - 2020 NRCS Regional Meetings Southeast, Central, and West

FY 2022 NRCS SOURCE WATER PROTECTION AREAS





2022 ACTIONS

- Source Water Collaborative
 - Clean Water Act 50th Anniversary
 - Infographic update, outreach and messages
 - Learning Exchange webinars
 - New website launch
 - Collaboratives Network
 - Virtual meetings; new collaboratives
 - 2023 Farm Bill Discussion Group
 - Nexus of Source Water and Energy Discussion Group
- ASDWA and GWPC
 - State information sharing
 - Coordination, meetings, and webinars
 - NRCS, and forest and conservation organizations

Continued Needs

Coordination with partners on the ground and with researchers to show and quantify results.

Messaging about the importance of protecting drinking water sources from nitrate in groundwater.

More partners, participation and projects!

State and Regional Contacts

State Source Water Coordinators

https://www.asdwa.org/sourcewatercontacts/

Regional EPA Source Water Coordinators

https://www.epa.gov/sourcewaterprotection/source-watercontacts-epas-regional-offices



Source Water Protection Web Resources

Source Water Collaborative

https://sourcewatercollaborative.org/

ASDWA Source Water Website

https://www.asdwa.org/source-water/

EPA Source Water Protection Website

https://www.epa.gov/sourcewaterprotection

 EPA Funding Integration Tool for Source Water (FITS)

https://www.epa.gov/sourcewaterprotection/fits

 USDA Source Water Protection Website with National Source Water Priority Area Map

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/initiatives/?cid=nrcseprd1878227

NASF State Forest Action Plans

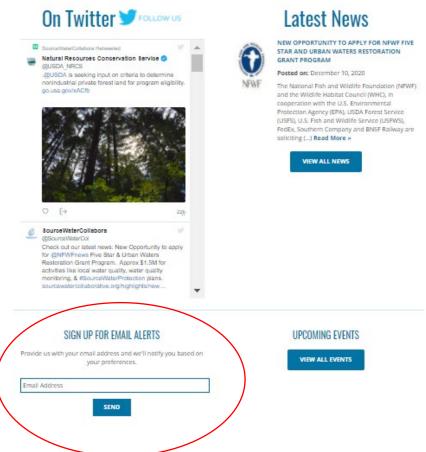
https://www.stateforesters.org/forest-action-plans/

AWWA Source Water Protection Website

https://www.awwa.org/Resources-Tools/Resource-Topics/Source-Water-Protection

Keep up with The Source Water Collaborative





Contact

Sylvia Malm
Ground Water Protection Council
(GWPC)





Logan M. Smith

Logan M. Smith is the Drinking Water Protection (DWP) program coordinator for the Kansas Department of Health & Environment (KDHE). Prior to accepting is current position, he was a hazardous waste permit writer for the Bureau of Waste Management at KDHE. Logan holds a Bachelor of Science in Earth Science and a Master of Science in Physical Science with a concentration in Earth Science; both from Emporia State University.











DWP Background



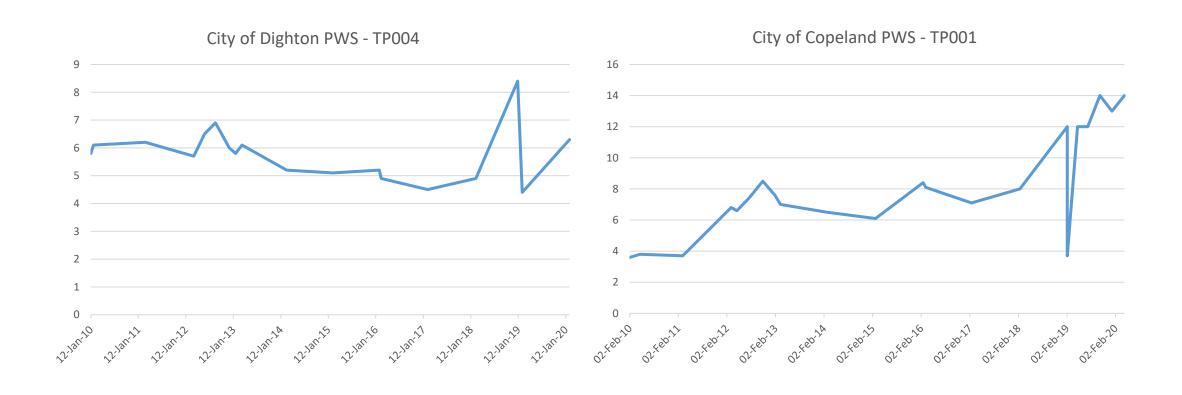
- Drinking Water Protection (DWP) is a voluntary, nonregulatory program at KDHE
- Helps Small communities in KS to prevent nitrate contamination in respective Public Water Supply (PWS)



How Communities Become Involved

- Behest of the Community
 - Concerned with rise in nitrate levels
 - Truly voluntary
- Consent Agreement
 - Through KDHE Public Water Supply

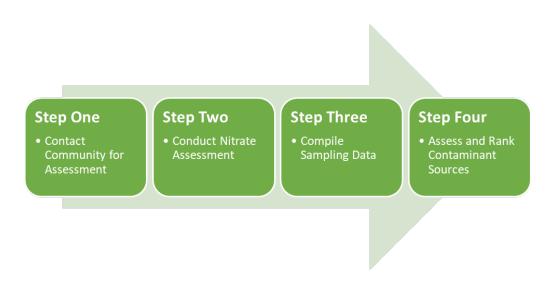






DWP Process

Phase 1



• Phase 2





Assessment

- DWP hires third party contractor
- Collects nitrate samples from private water wells
- Compiles results into a Comprehensive Investigation Report
- Reviewed by DWP





Commitment from Community

- DWP drafts Drinking Water Protection Report (DWPR) based on findings of assessment
- DWPR is presented to Community City Council
- City Council elects to continue with DWP
- Local Leadership Team (LLT)





DWPP Developed

- Once LLT is formed, DWP drafts a Drinking Water Protection Plan (DWPP)
- DWPP outlines background, BMP Implementation, Implementation Cost, Funding Resources, Etc.
- DWPP will be approved by LLT and DWP





Implementation

- Best Management Practices (BMPs)
 - Cropland
 - Rangeland/Grazing
 - Infrastructure
 - Wetland/Playa Restoration
- DWP provides Resources and Funding
- LLT helps gather I&E and gather community support





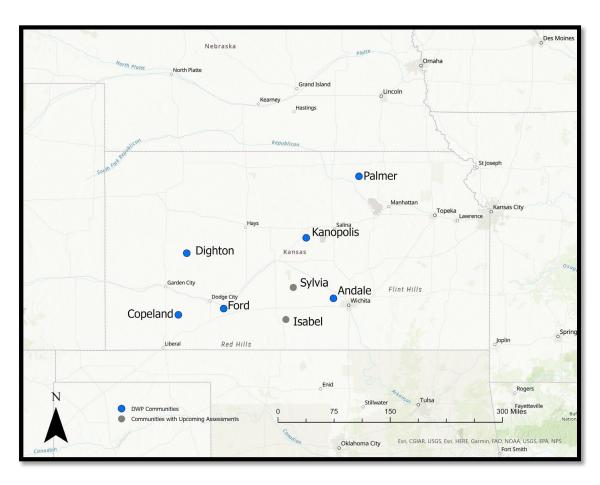
Monitor, Evaluate, Update

- DWP will monitor PWS data
- Monitoring will allow DWP to test effectiveness of practices
- Reevaluate BMPs and target zones if needed





DWP Communities





Contact Info

- Logan M. Smith
- Drinking Water Protection Coordinator
- Watershed Management Section
- KDHE
- (785)296-2469
- Logan.smith@ks.gov



Title of Presentation Goes Here

Thank you!





Ruth Kline-Robach



Ruth Kline-Robach is an Outreach Specialist with the Michigan State University (MSU) Department of Community Sustainability, the MSU Institute of Water Research and MSU Extension. She has 30 years of experience in community-based water resources management issues and provides training and technical assistance related to wellhead protection, watershed planning, and stormwater management. Ruth works with state and local agencies and organizations to promote source water protection planning across Michigan.





Source Water Protection Planning: Michigan's Approach

Ruth Kline-Robach

Michigan State University

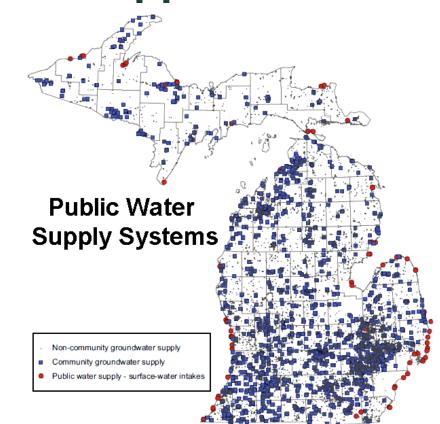
Department of Community Sustainability

Institute of Water Research

MI Public Water Supplies

1,038 public water supply systems use groundwater (app. 400 are municipal systems

70 public water supply systems use surface water



Source Water Protection Programs



Protect public water supply systems from potential sources of contamination:

- Wellhead Protection Plans for groundwater supplies
- Surface Water Intake Protection
 Plans for surface water supplies

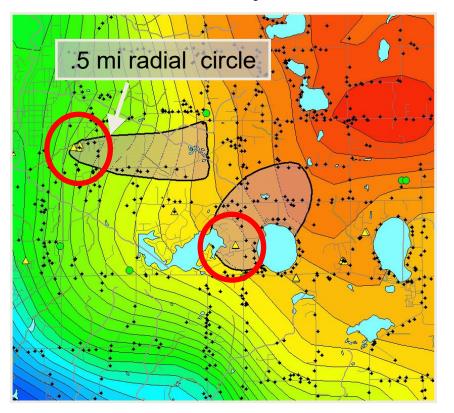
Michigan's program is voluntary at the local level

SWP Program Elements

- 1. Roles and Duties (WHP Team)
- Delineation of Wellhead Protection Area/Critical Assessment Zone
 - 3. Contaminant Source Inventory
- 4. Management strategies
 - 5. Contingency planning
 - 6. Siting new wells/intakes
 - 7. Education and outreach



WHPA Delineations - 10-year Time of Travel is determined by groundwater flow direction and velocity





Management strategies protect the source water from contamination

Examples:

- Master Plan/Zoning Ordinances
- Site Plan Review Standards
- Environmental Permits Checklist
- Pollution Prevention Programs
- Plugging Abandoned Wells

What are the barriers to SWP planning?







How does MI address these constraints?

 50% matching grant program (\$368K awarded in 2022)

 Providing Provisional WHPA delineations to groundwater systems – huge \$\$\$ savings to communities!

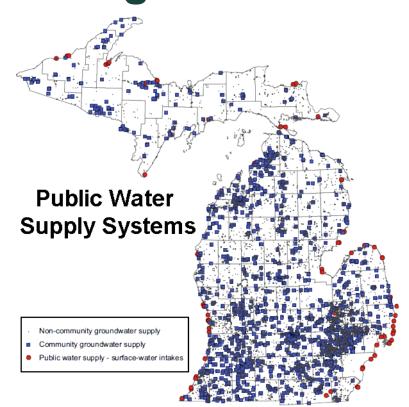
Ongoing educational programs



MI Approved SWP Programs

- 129 approved Wellhead Protection Plans (many of our larger systems)
- 14 Surface Water Intake Protection Programs

SWP Programs must be renewed every six years





How can we encourage SWP planning?



Successful SWP planning requires partnerships

- State and local government
- Adjacent communities
- Business and industry
- Agriculture (NRCS, SCDs, MAEAP, local groups)
- Other programs (watershed planning efforts, stormwater permit programs, etc.)



Incentives for SWP Planning

- Market the product in a positive way
- Ready to address emerging contaminants (e.g., PFAS)
- Overlap/synergy with other programs (e.g., MS4 stormwater permits)
- DWSRF Points
- Local control of the WHPA/CAZ
- Emergency Response
- Planning of New Wells
- Additional funding for farms located in WHPAs

Benefits of Source Water Protection Planning

- Protect public water supplies
- Serve as a roadmap for community growth and new wells/intakes
- Acknowledge that clean water is vital for community sustainability



Questions?

Ruth Kline-Robach
MSU Department of
Community Sustainability and
Institute of Water Research
kliner@msu.edu



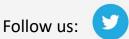


Question and Answer Session

We will draw initial questions and comments from those submitted via the chat box during the presentations.

Today's Speakers

Sylvia Malm – <u>sylvia.malm2015@gmail.com</u> Logan M. Smith – <u>logan.smith@ks.gov</u> Ruth Kline-Robach – <u>kliner@msu.edu</u>







Thank you for participating in today's *The Current!*

Visit our website, northcentralwater.org, to access the recording and our webinar archive!

Two upcoming webinars from our soil health and climate teams:

The Soil Health Matrix Decision Tool

Wednesday, April 20th at 2pm CT https://soilhealthnexus.org/

Strength in Numbers: Assessing the Impact of New and Emerging Field Crop Diseases

Monday, April 25th at 1pm CT

https://northcentralclimate.org/webinars/

