

# Wellhead Protection Rule Revision Advisory Committee Virtual Meeting Notes and Advice – September 27, 2022

## Committee Members Present

Jay Ackerman, Wayne Cymbulak, Joe Dusek, Annie Felix-Gerth, John Greer, Robyn Hoerr, Mark Janovec, Craig Johnson, Melissa King, Lindsey Krumrie, Luke Stuewe, Margaret Wagner

## Others Present

Trent Farnum, Dave Hokanson, Alycia Overbo, Linda Prail, Miles Schacher, Debby Sellin-Beckerleg, Josh Skaar, Amanda Strommer, James Walsh, Mark Wettlaufer, Trudi Witkowski

## Meeting

1. Linda Prail welcomed everyone and gave a short rundown of housekeeping information for today's meeting.
2. Draft Rule Update / Revisors Office – Linda Prail informed the Advisory Committee that a draft of the rule was at the Revisor's Office.
3. Mark welcomed everyone and then explained the Advisory Team's change of tactics and why we are not sending out our Department Rules Revision Draft and the detailed spreadsheet at this time. Mark gave a recap of past meetings and moving forward with the rule revisions. We will go through highlights of major changes. MDH will send draft rules and spreadsheet at a later date. Mark encouraged members to look at the last meeting's presentation by Katie, Jenilynn, and Cindy. The Part 1 Plan Delineation will be done by MDH in-house. Mark mentioned the Potential Contaminant Source Inventory (PCSI) and some changes to the rules.
4. Highlights of WHP rule plan development changes:
  - a. *PCSI background and changes to the Rule:* Mark gave a slide presentation on Proposed WHP Rule Changes to the Potential Contaminate Source Inventory (PCSI). He shared background on the Federal Safe Drinking Water Act, MN Groundwater Act and subsequent focus of the WHP Program PCSI on trying to identify and proactively preventing human caused contaminants from entering drinking water sources. He highlighted changes to the PCSI in the rule including: MDH completing the preliminary PCSI at the time the hydro is completing the delineation and vulnerability assessment, assigning and prioritizing PCSI risks based on new criteria being proposed in the rule. These steps would be done before the PWS starts on the second part of the WHP Plan. (See attached slide presentation titled *Proposed WHP Rule Changes to the Potential Contaminant Source Inventory (PCSI)*).

- b. Trent Farnum and Amanda Strommer presented on major changes to *WHP plan development procedures and content of a plan*. Some of the major changes described include: efficiencies and advantages of MDH doing the delineation and vulnerability assessment work for all PWS WHP Plans, eliminating redundancy of issue identification, and more specific requirements for plan development instead of extensive data elements and their assessment currently identified in rule. The proposed rule will instead focus more on linking aquifer and well vulnerability to considering implications of the physical environment, land and water use management when developing plan management strategies. Amanda went over many of these changes in her power point presentation. (See the attached slide presentation titled “*Content of a Wellhead Protection Plan and Amendment*”)
- c. Mark wrapped up staff presentations by presenting how the rule changes will improve WHP implementation and the SWP Program overall. He described improvements in procedures for evaluating and updating WHP Plans, how better prioritization of potential contaminants will provide more focused implementation work for the PWS and resource partners, and that the new rule will allow for a regional DWSMA option for PWS to work together to develop and implement a WHP Plan. He concluded by acknowledging how most State water resource programs now consider and prioritize drinking water protection and the number of State Grants, Federal Farm Bill and nonprofits help prioritize and support WHP implementation. (See attached slide presentation “*Improving WHP Plan Implementation Through the Proposed Rule Changes and SWP Program*”)
- d. Discussion/Questions.
  - i. PCSI revision presentation
    - 1. John Greer: Do you envision the PWS review of PCS just a look at what MDH identified or would the next step of looking to see if any other PCS that they'd worry about is present in the DWSMA? I think both PCS type and location relative to the water supply well should be incorporated into the risk ranking of PCS.
      - a. Mark: Good comments John. Yes, I envision an initial look at the PCS and risk ranking results, then the PWS / MDH discuss and some tweaks can be made based on local knowledge and evaluating what MDH proposes in terms of the PCSI.
    - 2. Craig Johnson: We have a number of contaminants like mercury, PCB, etc. where we have an agreement with EPA that if a certain procedure if done statewide, we don't have to have a numeric standard related to those contaminants. So before they are removed from planning, ensure that it doesn't affect those regulations with EPA. A lot of those protective measures are to ensure that we have this process with EPA, a certified regulatory process instead of numerical standards for each facility. MPCA will be aware.

- a. Mark responded to thank for the comment and note that we will look into it.
  - b. Craig: The term for an EPA-approved alternative way to demonstrate compliance in managing certain toxic contaminants like heavy metals and PCBs, which is also being looked at for PFAS, is “qualified pre-treatment program”. Those programs are what we need to make sure we don't jeopardize by removing certain potential generators from planning.
3. Lindsey Krumrie: With the new proposed rule revision, will small systems get a PCSI if they're not required to do a WHP?
- a. Mark: Lindsey - No, not as part of the WHP Rule. They would have a PCSI done if they do an action plan. The feeling is we have to prioritize agency resources and will focus on doing PCSI and action plans for systems that are vulnerable or have at risk populations. Our Noncommunity / nonmunicipal workgroup will be working on that and engaging systems in doing action plans and PCSI in that manner.
- ii. Description of aquifer and DWSMA, risk ranking, prioritization presentation
1. Craig Johnson: Agree with earlier comment that the "devil's in the details." Discussions that we're having seem like they're going in the right directions, but we have to see how it plays out. Hard to say without having the finished product in front of us. At this stage, looking out for unanticipated outcomes or areas of confusion.
  2. Margaret Wagner: Do you think the general timeline for Plan development and revisions will stay the same, or will that change as a result of these updates?
    - a. Mark - we don't anticipate changing the *timeline* for creating or amending plans. Hope to shorten some of the review periods. Having the delineation done in-house, we hope that we can complete Plans faster, where we currently are taking around 2 years for a highly vulnerable plan. Aiming for a more efficient process. Including State review earlier in the process is another example of efficiency and time savings.
  3. Marc Janovec: Is there any thought towards streamlining the public engagement portion of planning? Typically, the public information meetings after Part 1 are poorly attended (or not attended at all, in most cases). Perhaps greater emphasis towards public engagement could be applied to the Part 2 review.
    - a. Mark: currently we don't specify when the public information meeting has to be held. When the PWS chooses to hold it is a little subjective. Someone in City Council or an SWCD may have more to look at if the PCSI was done and the meeting was held, rather than when just the delineation was done. So not necessarily streamlining but allowing flexibility for PWS to engage more with citizens and Council at a more meaningful juncture in the process.

Adding the PCSI into it can help with that. We'll have to add language to maximize the benefits to the PWS.

4. Feedback on flexibility of PCSI?
  - a. Thumbs-up
  - b. Annie Felix-Gerth: Yes - makes sense to do PCSI early in process.
  - c. Lindsey Krumrie: I agree with that and like MDH is taking the lead and working with the PWS.
5. SONAR (Statement of Need and Reasonableness) Regulatory Analysis: Cost/benefit to the PWS – Feedback from Advisory Committee – Linda Prail. Linda asked the Advisory Committee to think about benefits and costs to the affected parties, other entities, and their agency as we go through the revisions. Feel free to email Mark or Linda your thoughts and concerns.
6. Next meeting discussion: Mark proposed canceling the October meeting and rescheduling the meeting for November or December. This would allow the Revisors Office to complete editing the existing draft rule, MDH staff to complete a number of edits and try to finish the rule changes spreadsheet summary. MDH would distribute the draft rule and allow the Advisory Committee at least three weeks to review before we meet again. The Advisory Committee preferred to have a November and a January meeting. Mark will send out an invite for November 27, 2022, and January 31, 2023.

Meeting adjourned at 3:14 p.m.

Minnesota Department of Health  
Drinking Water Protection Program  
651-201-4700  
[www.health.state.mn.us](http://www.health.state.mn.us)

October 2022

To obtain this information in a different format, call: 651-201-4700.

## Attachments

- Proposed WHP Rule Changes to the Potential Contaminant Source Inventory (PCSI)
- Content of a Wellhead Protection Plan and Amendment
- Improving WHP Plan Implementation Through the Proposed Rule Changes and SWP Program
- Statutory Requirements for Discussion in the Statement of Need and Reasonableness (SONAR)



# Proposed WHP Rule Changes to the “Potential Contaminant Source Inventory (PCSI)”

WHP Advisory Team Meeting  
Tuesday, September 27<sup>th</sup>, 2022

Mark Wettlaufer, MDH SWP Unit



# Potential Contaminant Source Inventory (PCSI): “The backbone of WHP”

- 1986 and 1996 Safe Drinking Water Act (Section 1428). Specific reference to identifying within each WHP area *“all potential anthropogenic sources of contaminants which may have any adverse effect on the health of persons.”*
- 1989 GW Protection Act – prevention goal.
- WHP PCSI Purpose & Goal: Proactive contaminant source management.  
Consider *“Existing – Potential – Future”*
- Proactive Planning....



# WELLHEAD PROTECTION: VULNERABILITY & LAND USE PLANNING GUIDE

## DWSMA Vulnerability and Land Use Planning Guide

DWSMA Vulnerability Category	Potential Contamination Issues	Primary Land Use Planning Focus	Examples of What to Evaluate or Update
<p><b>Low</b> – Aquifer is confined or geologically protected, with no direct impact on the aquifer from land surface activities</p>	<ul style="list-style-type: none"> <li>Abandoned or unused wells</li> <li>Management of wells in use</li> <li>Compliance with well code setbacks for contaminants from the public water supply wells.</li> </ul>	<p>Land use controls that reduce risk of improperly managed wells. WHP is considered &amp; addressed in long-term planning goals of the PWS &amp; community.</p>	<ul style="list-style-type: none"> <li>Water supply hook-up requirements</li> <li>Inclusion of DWSMA map in comprehensive plan &amp; zoning ordinance</li> <li>Local cross connection control program</li> </ul>
<p><b>Moderate</b> – Aquifer is semi-confined and may have some influence from surface water recharge and impact from land surface activities.</p>	<p>Same as above, plus:</p> <ul style="list-style-type: none"> <li>Chemical/ petroleum storage tanks</li> <li>Activities that remove protective till over the aquifer (e.g. mining)</li> <li>Other significant threats identified in the WHP Plan.</li> </ul>	<p>Same as above, plus evaluation of land uses with high-risk potential to affect the aquifer &amp; wells (e.g. tank setbacks and mining activities).</p>	<p>Items above, plus:</p> <ul style="list-style-type: none"> <li>Standards or setbacks for high-risk contaminants (e.g. Increase setbacks for large tanks; implement sand &amp; gravel ordinance)</li> </ul>
<p><b>High / Very High</b> – Aquifer is directly influenced by surface water recharge &amp; can be directly impacted by land surface activities.</p>	<p>Same as above, plus:</p> <ul style="list-style-type: none"> <li>Specific land uses leading to the detection of contaminants in the drinking water.</li> <li>High-risk land uses near the wells or threats to the aquifer, such as row crop agriculture with nitrogen fertilizer application.</li> </ul>	<p>Same as above, plus specific potential contaminants and high-risk land use issues identified in your WHP. Closer evaluation of land use issues, controls &amp; planning is suggested for highly vulnerable DWSMAs.</p>	<p>Items above, plus:</p> <ul style="list-style-type: none"> <li>Standards or setbacks for land use-related contaminants detected in drinking water</li> <li>Standards or methods to manage risk from high-risk land uses (e.g. feedlots, mining, industrial)</li> </ul>

We Base the PCSI on the Geologic Vulnerability of the Aquifer Used



# PCSI Challenges / New Ideas!

- PCSI development and timing
- Exhaustive list of PCS (particularly for High Vulnerability Systems) are they all significant contaminant risks?
- Improve prioritization and risk ranking of PCS (consider location, risk mitigation, etc.) Examples – Large tank just outside the IWMZ, but close to the well. Coop Petroleum Tank Farm, etc.
- Target “high risk” contaminants vs. “all of the contaminants identified.”
- Streamline / reduce some of the duplication in existing rule between PCSI identification, issues and opportunities. Focus more on risk ranking & prioritization.



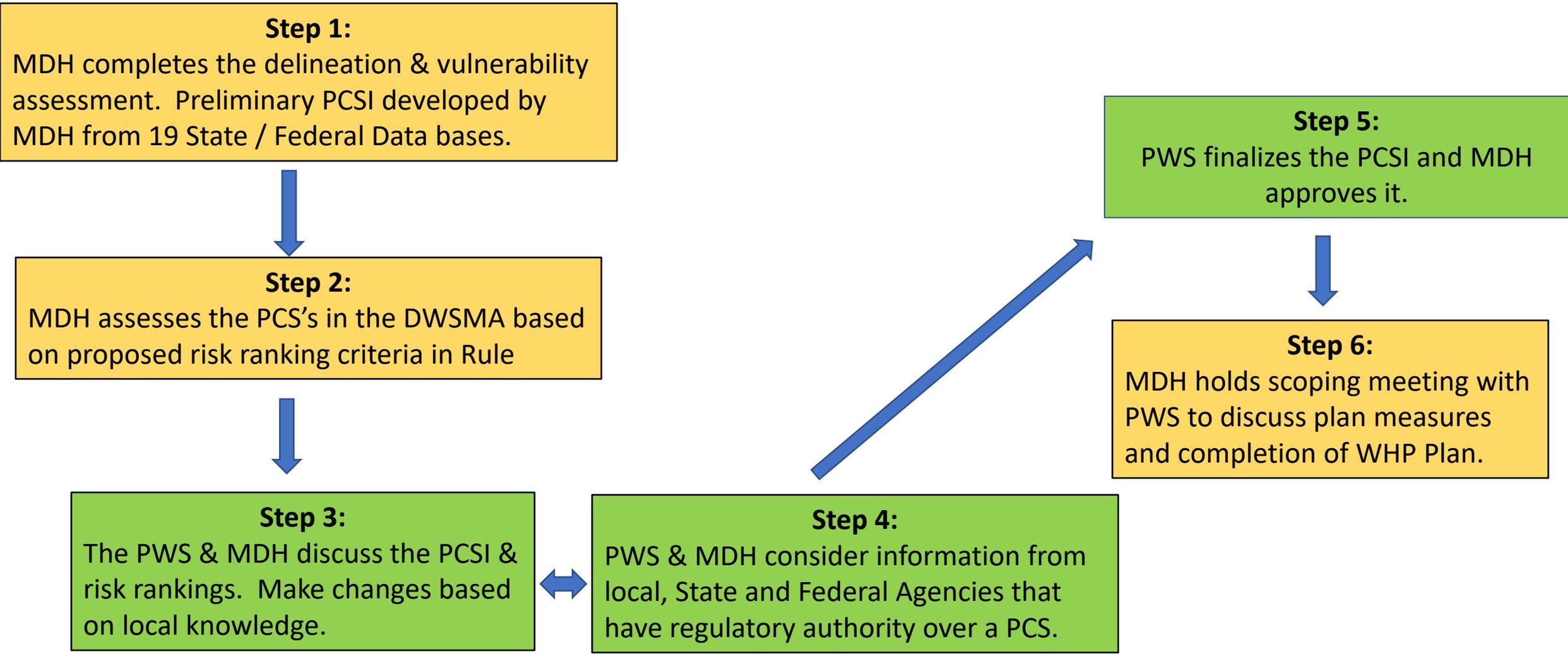
**THE WHP Planning  
PROCESS: EPA SWP  
Assessment and Protection  
Phase Flow Chart**



The existing MN WHP Rule & MDH workflow procedures *sequence the work slightly differently*, by completing the delineation and vulnerability first, then having the PWS do the PCSI inventory as the second part of the WHP Plan. (Steps 1,3, 4; Part I, then 2, 5-6, 4, 7; Part, II)

Proposed rule will sequence the development of the initial PCSI into a similar work flow as the EPA chart. PCSI will be initiated by the MDH hydro as part of the completion of the vulnerability assessment. Then reviewed and updated by the PWS.

# Proposed PCSI Rule Changes & Workflow



# Summary of PCSI Changes

- PCSI done earlier on during the delineation and vulnerability assessment phase of WHP Plan Development.
- Reduce effort on the part of the PWS to fully develop & complete the PCSI.
- Risk ranking criteria for PCS to be in rule. More collaboration between MDH and PWS in terms of the PCSI based on ranking criteria.
- Broader consideration for local, State and Federal regulatory authority over PCS and impacts on drinking water.

# Considerations / Discussion

- 1) Do you like the PCSI being initiated earlier on in the plan development phase and collaboratively completed by MDH & the PWS?  
*(versus more of a rigid categorical approach with most of the PCSI work done by the PWS) Why or why not?*
- 2) Should there be flexibility in risk ranking of PCS based on criteria? Why or why not?
- 2) Other thoughts or questions?

Thank you!!



DEPARTMENT  
OF HEALTH

# Content of a Wellhead Protection Plan and Amendment

WHP Advisory Team Meeting  
Tuesday, September 27<sup>th</sup>, 2022

Amanda Strommer, MDH SWP Unit

# 4720.5230 - Issues Identification and Prioritization

- Current Rule requires identification of issues, problems, and opportunities.
- In revised rule, must identify issues related to protection of source water aquifer and well water in DWSMA.
- Must prioritize issues for implementation.



# 4720.5230 - Issues Identification and Prioritization



High and medium risk potential contaminant sources



Water quality detections and trends for  
contaminants



Ownership around well



Jurisdictional land use controls



Official controls, zoning, regulations for  
potential contaminant sources



Implications of extreme weather events  
on well and aquifer

# 4720.5230 - Issues Identification and Prioritization



Inner Well Management Zone Report



Ability to address water supply disruption and security



Projected changes to aquifer, water quality/quantity over next 10 years



Financial, technical, administrative, and regulatory resources



Projected land use changes over next 10 years



Potential for flooding of well(s)

# 4720.5250 - Goals and Plan of Action

- Change from objectives to measurable goals that address the priority issues.
- Plan of Action includes measures, cost, and time frame.
- Amendments cover changes from last plan.
- MDH can provide a list of (S.M.A.R.T) wellhead protection measures.



## 4720.5260 - Cooperative Efforts



- New rule section that must describe existing or proposed plans or programs of other partners that address priority issues.

# 4720.5280 – Alternative Water Supply; Contingency Strategy for Emergency Water Supply

- Contingency strategy must:
  - Identify location and provisions of alternate water source
  - Identify emergency personnel, equipment, services, etc
  - Have a procedure to inform public
  - Identify ways to reduce vulnerability of water supply to disruption and improve community's response capabilities
- Adding language that a local, state, or federal stand alone document that meets the requirements is eligible.

## 4720.5400 – Required Additional Information

- No more “Data Elements”.
- Many data elements in current rule are duplicated from the Part 1.
- Revised rule focuses on physical environment, land, and water use management.
  - Surface water resources (when applicable by vulnerability)
  - Extractive mining
  - Land use controls - zoning, comprehensive plans, floodplain, shoreland, conservation easement, local partnerships and programs, etc.





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**SUBMERSIBLE PUMP WELL INSPECTION REPORT**

Customer: City of Lake Park  
 Well Number: 04 Outside filter  
 Inspection Date: 11-1-00

Area and Item Inspected	300	Completion	
		Block	Condition
1. Well Efficiency	70.50	X	
A) Gallons Per Minute	89.25	X	
B) Static Water Level (water level when not pumping)	18.75	X	
C) Pumping Water Level	16.00	X	
D) Drawdown (P.W.L. - S.W.L.)			
E) Specific Capacity (G.P.M. / D.D.)			
F) Discharge pressure gauge reading			
Submersible Pump Operation	L2 to L3 250.00	L1 to L3 250.00	
Leg / OHMS	L2 38.00	L3 38.00	
Voltage	L1 to L2 250.00	L2 38.00	
Overage	L1 40.00	0-0-0	
Wiring Resistance	00-00-00		
Insulation Resistance			
Flow / TDH Condition			

# Discussion/Reaction



# Improving WHP Plan Implementation Through the Proposed Rule Changes & SWP Program

WHP Advisory Team Meeting  
Tuesday, September 27<sup>th</sup>, 2022

Mark Wettlaufer, MDH SWP Unit



## WHP Plan Implementation: Existing Requirements & New ideas

- Municipal PWS required to implement their WHP Plan by Rule. Report on implementation efforts to MDH at “year 4” plan is in effect & prior to plan amendment (year 8).
- Streamlined, prioritization of PCS and issues result in more targeted measures and implementation efforts.
- Nonvulnerable WHP Plans may be extended 10 years if no changes to the wells and water supply (New!)
- New proposal for regional multi community DWSMAs (New! West Metro pilot project)



Much has changed....  
Local, State &  
Federal Support for  
WHP & SWP  
Implementation!

- BWSR 1w1p and Project & Practices Grants, WHP RIM
  - MDH SWP Grants to PWS
  - Interagency MDH Groundwater Restoration & Protection Strategies (GRAPS)
  - MDA Groundwater Rule & Nitrogen Fertilizer Management Plan (NFMP)
  - DNR Water Supply Planning
  - MPCA Regulatory Programs - Tanks, SSTS, Feedlot, Remediation Programs
  - Federal Farm Bill Programs
  - MN Environmental / Nonprofit Support
- 

Thanks!

Questions & Discussion....

# Statutory Requirements for Discussion in the Statement of Need and Reasonableness (SONAR)

## Impact on local government ordinances and rules

Minnesota Statutes, section 14.128, subdivision 1, requires an agency to make a determination of whether a proposed rule will require a local government to adopt or amend any ordinances or other regulation in order to comply with the rule.

## Costs of complying for small business or city

Minnesota Statutes, section 14.127, subdivisions 1 and 2, require an agency to “determine if the cost of complying with a proposed rule in the first year after the rule takes effect will exceed \$25,000 for any one business that has less than 50 full-time employees, or any one statutory or home rule charter city that has less than ten full-time employees.”

## Regulatory analysis

This part addresses the requirements of Minnesota Statutes, section 14.131 (a), which require state agencies to address a number of questions in the SONAR.

A. Description of **the classes of persons who probably will be affected by the proposed rule**, including classes that will **bear the costs** of the proposed rule and classes that will **benefit from the proposed rule**.

B. The **probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues**.

C. A determination of whether there are **less costly methods or less intrusive methods** for achieving the purpose of the proposed rule.

D. A description of **any alternative methods for achieving the purpose of the proposed rule that were seriously considered** by the Agency and the reasons why they were rejected in favor of the proposed rule.

E. The **probable costs of complying with the proposed rule**, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals.

STATUTORY REQUIREMENTS FOR DISCUSSION IN THE STATEMENT OF NEED AND  
REASONABLENESS (SONAR)

F. The **probable costs or consequences of not adopting the proposed rule**, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals.

G. An assessment of any **differences between the proposed rule and existing federal regulations** and a specific analysis of the need for and reasonableness of each difference.