

Wellhead Protection Rule Revision Advisory Committee Virtual Meeting Notes and Advice – *July 26, 2022*

Committee Members Present

Jay Ackerman, James Backstrom, Marilyn Bayerl, Doug Brands, Leanne Buck, Wayne Cymbaluk, Annie Felix-Gerth, John Greer, Robyn Hoerr, Mark Janovec, Dominic Jones, Jen Kadar, Melissa King, Lindsey Krumrie, Brian Martinson, John Paulson, Luke Stuewe, Rick Whalen.

Others Present

Anita Anderson, Cynthia Hakala, Dave Hokanson, Alycia Overbo, Linda Prail, Steve Robertson, Debby Sellin-Beckerleg, Josh Skaar, Amanda Strommer, Mark Wettlaufer, Trudi Witkowski.

Meeting

- 1. Linda Prail, Rule Coordinator, welcomed everyone and thanked members for their comments and that their participation is appreciated. If not able to attend advisory committee meetings, please review notes and let us know if you have any comments and questions.
- 2. Mark Wettlaufer, MDH Planner Supervisor, recapped the June 28th Advisory Committee Meeting. Mark and SWP staff categorized and responded to all the MS Chat comments from the June meeting. Many good comments and suggestions were raised.
- 3. Mark Wettlaufer introduced Jenilynn Marchand, MDH Source Water Protection Supervisor, Cindy Hakala, MDH Planner, and Katie who presented on Source Water Protection (SWP) and Small Public Water Suppliers (PWS). (See attached slides) Their presentation focused on Noncommunity Public Water Supply Unit, SWP assistance to small systems, SWP Action Plans, Examples of PWS addressing a contaminant threat, SWP Unit Grants Programs and technical assistance for small systems. Many good questions and comments were made during the Discussion and Questions session after the presentation.

Question: What are the minimum and maximum amounts of grants. **Answer**: Plan implementation needs to have a \$1,000 minimum request and up to a maximum of \$10,000 request.

Question: MRWA helps with WHP Action Plans but if the small systems are not required to have a WHP Plan or Action plan in the future, will they still get support from MRWA, like training and investigation; and be eligible for grants? Can small water systems still get grants if they don't have a WHP Action Plan? **Answer:** The grants program has different programs. MRWA is totally different from grant programs and will continue to support small systems. MDH will adjust the grant programs to provide access in cases where a system may not have a action plan to access implementation grant funds.

Question: Is MDH suggesting an action plan or inner well management zone area should all be options for small systems? Advisory Committee member understands that a full wellhead plan

WELLHEAD PROTECTION RULE REVISION ADVISORY COMMITTEE VIRTUAL MEETING NOTES AND ADVICE

isn't a good fit for most small systems. Does MDH have conditions in mind that any of the source water review options would be the best fit? If action plans become the standard for small system, would DWSMAs be defined in each case? Also does an IWMZ review include creation of a DWSMA? **Answer:** First, all PWS systems need to monitor and implement strategies identified relative to potential contaminant sources identified in the IWMZ. At this time, action plans will continue to be developed and implemented for systems with capacity and interest in doing them, voluntarily outside the WHP Rule. MDH will continue to support their use and development. In the future, MDH may prioritize doing action plans based on PWS needs, capacity, type of system, vulnerability of system and contaminant threats. This reflects the fact that not one size fits all when it comes to small systems and developing and implementing a plan. We want a variety of tools in the toolbox to help them. DWSMAs will not be developed for all small systems, unless they develop an action plan. Every system has an IWMZ (200' around a well) they need to manage. Many small systems DWSMAs are smaller since they use smaller quantities of groundwater.

Question: Has MDH encountered any small systems who desperately need grant support to mitigate a discovered contaminant need, but don't qualify for grant support? If so, is there a phased approach or deferment plan for the small system to ultimately address the problem? **Answer:** An active small system would always be eligible for one or multiple grants depending on the classification type of the public water supply system, such as transient, competitive, or plan implementation grants. Competitive grants are most commonly used for the above scenario. Noncommunity also utilizes the SWP grants program to help address safe drinking water act violations, as appropriate. The most common violation that SWP grants help to resolve are wells that aren't approved for conversion to public water supply and the grants help to cover the cost of a new public water supply well. The second most common activity is well sealing, including the sealing of wells that were not acceptable to convert to use as a public water supply well. SWP grants can be used to pay for treatment of a contaminant if there is a Safe Drinking Water Act Violation or it exceeds a health risk limit or health based value, and if it is deemed that an alternate source such as drilling a deeper well, will not mitigate their contaminant issue. Examples of this include Arsenic, Nitrate, and Manganese treatment. If grant eligible, Non-community works with the public water supplier to identify a timeframe for compliance that also works with the timeframe of the grant. There are likely multiple contaminant scenarios, however, that would not be grant eligible if not related to the source of drinking water. SWP grants can only be used to protect the source of drinking water, and not used for something such as disinfection treatment by-products or within the public water supply distribution system. This factsheet provides good examples of how SWP grants have helped small non-community systems Source Water Protection Grants Protect Drinking Water: 2010-2020 (PDF) (https://www.health.state.mn.us/communities/environment/water/docs/ncom/swpprotectdw.pdf).

Mark Wettlaufer described how MDH envisions sharing the remaining parts of the rule with the Advisory Committee. He shared a spreadsheet template that will show "existing," "proposed," and "reasons for change," fields to make it easier to track and see the proposed changes being made to the rule. The rule is complex in terms of being prescriptive procedural wise and detailed in terms of plan content requirements, so it is not easy to present and discuss. It is hoped that the spreadsheet and sending out a draft copy of the revised rule will make

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explaining and showing the changes being made easier. Advisory team members reacted that they thought sending out the spreadsheet, draft rule would be very beneficial!

After a discussion regarding the number of meetings to be held in the future and when, it was decided that that the August scheduled meeting would be cancelled to allow MDH staff time to prepare the spreadsheet Mark discussed with the Committee. The scheduled Advisory Committee meetings will be scheduled for September 27, 2022, and October 25, 2022, starting at 1:30. It was agreed that the fourth Tuesday of the month is a good plan for meeting dates. The plan is to go through the spreadsheet in the September and October meeting. Mark asked if anyone had any different suggestions for format, etc.

Linda Prail asked Mark to explain what MDH and the Advisory Committee's next steps. Mark explained that after the October meeting the Advisory Committee will be released. MDH staff will review comments received from the Request for Comments, make changes, and get revisions back to the Advisory Committee.

Linda "warned" Advisory Committee that they may be brought back together one time possibly after the first of the year, to get their advice. Their advice is needed and wanted. A reminder that you do not have to wait for AC meeting to bring up a question or comment. Feel free to bring it up to Linda or Mark's attention. Josh is here to address questions also.

Linda gave a brief summary of the next few steps in the rule adoption process. The Request for Comments process is over, but the Advisory Team is still open to questions or comments. The draft of the rules will be brought to the Revisor of Statutes to be put in the correct rule format (this version is sometimes very difficult to follow). The Dual Notice to Adopt Without a Hearing contains a comment period. The Statement of Need and Reasonable (SONAR) is where the Advisory Team will explain why a rule is reasonable. You, the Advisory Committee will be asked to help us. There are two major areas where your advice will help the Advisory Team. 1) Impact and 2) Costs of complying.

If you have any questions or comments, please send them to Mark Wettlaufer at mark.wettlaufer@state.mn.us or Linda Prail at Linda.prail@state.mn.us

Minnesota Department of Health Drinking Water Protection Program 651-201-4700 www.health.state.mn.us

September 2022

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

Attachment

MDH Source Water Protection and Small Public Water Supply Systems (PDF)



Source Water Protection and Small Public Water Supply Systems

Jenilynn Marchand, MDH, SWP North Regional Planning Supervisor Cynthia Hakala, MDH, SWP Small Systems Coordinator Katie Breth, MRWA, Source Water Protection Specialist

Public Water Systems



People live there

Nonmunicipal Community

Nursing homes, mobile home parks, housing developments, apartments, and prisons



Noncommunity Nontransient

Schools, offices, factories, daycares



Noncommunity Transient

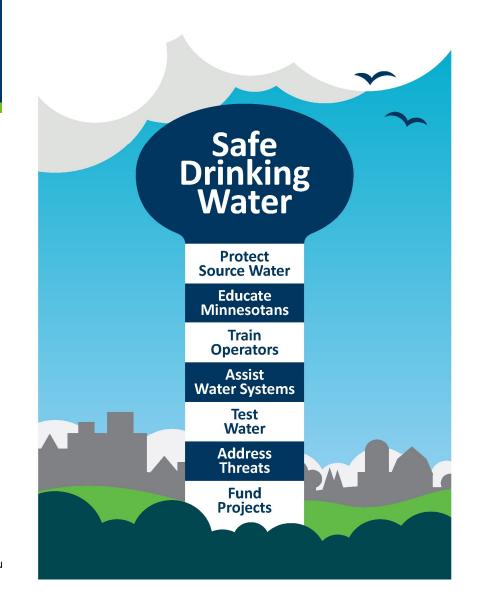
People pass through there

Drinking Water Protection

Safe and sufficient drinking water is available for everyone, everywhere in Minnesota.

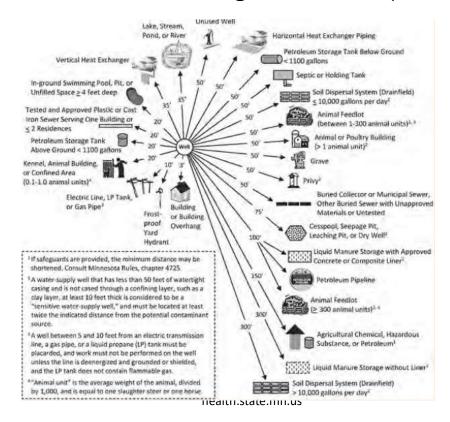
MDH: Engineers, Sanitarians, SWP Planners and hydrologists, Well Management, and

8/8/2022 MRWA staff health.state.mn.u



Drinking Water Protection's Common Denominator

Inner Wellhead Management Zone (IWMZ)





Inner Wellhead Management Zone

- Inner Wellhead Management Zone (IWMZ) is completed as part of the Sanitary Survey for both community and non-community PWS.
- IWMZ is also completed as part of WHP plan and action plan development and implementation.
- Ongoing and long-term protection
- Same potential sources of contamination and similar risks
- Management, monitoring, or removal of potential contaminant sources are the same

Inner Wellhead Management Zone and Non-Community Small Systems

"Above ground 500 gallon used oil tank located 3 feet from the well. After explaining the isolation distance requirement and reasons why it would be a good idea to relocate the tank, they set in motion a plan to gain compliance with the well code. Logistically they needed some time to move such a big tank, but true to their word, they relocated the used oil tank to an appropriate distance from the well. No grant was applied for."



https://abovegroundfuelstoragetanks.com

Inner Wellhead Management Zone and Non-Community Small Systems

"Farm centered around educating the youth has live working animals. They had set up a manure storage area not covered with a roof, that was within 100 feet of the well. I explained the setback requirement was 100 feet and asked how difficult it would be to relocate the manure storage area to meet the required isolation distance in the well code. After thinking a bit they said it probably wouldn't be that difficult, and asked if they could get it done by next year. I said that sounds like a plan, and at next years visit they had relocated it 103 feet away. No grant was applied for."



https://animalsciences.rutgers.edu/tour/page-5-manure-storage.html

Source Water Protection Grants

• Joyce Hedlin, Sanitarian, 26 years with MDH "...Understanding firsthand on a personal level how water quality can impact small businesses has made me realize the importance of SWP Grants. To see how these grants have alleviated some of the financial burden placed on small public water systems as they strive to maintain compliance with Safe Drinking Water Act Requirements has been very fulfilling... It's a wonderful program that protects drinking water and produces results for public water supply systems."

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Transient Grants

- Church: Isolation distance between well and sewer line not met during Sanitary Survey and IWMZ inventory.
- PWS received a grant to drill a new well.
- "Many small churches would have had to close without the support of SWP grants"



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Transient Grants

- Motel: SWP provided technical grant assistance to determine well and aquifer vulnerability to contamination. Well was located in wetland and was experiencing water quantity issues. Drilling a new well was prohibited within city limits. SWP grant approved for connection to City of Hutchinson water system.
- Church: Recurring bacteriological issues. Coordination with well management and sanitary survey to remove potential issues. Received SWP grant to drill new PWS well.
 Received grant to remove seepage pit sewer system. Work with SWP to do vulnerability testing and locate and seal unsealed wells.

SWP Program Toolbox



- 1. Technical Assistance
- 2. Inner Wellhead Management Zone Inventories
- 3. Source Water Protection Grants
- 4. SWP Planning Efforts: Action Plan, Wellhead Protection Plan, Source water assessments,
- 5. State and local partners

To Plan or Not to Plan, that is the Question

- 1997 WHP Rule Barriers:
 - Length of time
 - Public notices, information meetings and hearings
 - PWS Capacity
 - Legal jurisdiction
- Action plans are a flexible, stream-lined planning effort customized for the needs of small systems.
- Focus more energy on plan implementation rather than plan development.
- Similar types of potential contamination sources as larger systems, but scale and land use authority are different.
- Management strategies or removal of potential contaminant sources are similar.

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Community Nonmunicipal and Non-Community Nontransient Wellhead Protection Plans and Action Plans

- 30 Wellhead Protection Plans, 1997 WHP Rule
 - 8 Wellhead Protection Action Plan Amendments
- 116 Action Plans completed (including amendments)
 - 112 Community
 - 4 Noncommunity



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SWP Program Toolbox



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MN Rural Water: Training, Action Plans & Technical Support for Small Systems



Small System Training

- Courses are specifically designed for nontransient and nonmunicipal water operation specialists. The goal is to provide training needed to renew water operator certificate and better prepare to operate their own water system.
- Training Topics:
 - Small Public Water Systems: An Overview of Duties and Responsibilities
 - Lead and Copper Revised Rule (LCRR)
 - Drinking Water Wells, Storage & Distribution Components
 - Source Water Protection Plans and Grants



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Examples of Addressing Potential Contaminant Sources

- Supreme Mobile Home Park Old PWS Well
- Thompson MHP & Fischer's Garden MHP New Well and Seal Old Well
- Chatham Park Connecting Wells for continuous water supply
- East Point Townhomes Emergency Water Supply Plan
- Crow Wing Estates, Clearwater Forest MHP & Pines Mobile Estates— Emergency Power Supply
- Austin Mobile Home Park Security of Well
- Benton Utilities Grading Around Existing Well
- Cold Spring Granite Septic Upgrade





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Technical Support

- Development and Implementation of Wellhead Protection Action Plans
- Inner Wellhead Management Zone Assessments
- Educational and outreach materials including flyers and letter templates
- Operator education through TA Times and TODAY magazine
- Grant closeout assistance









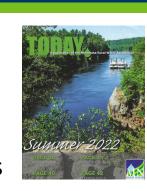
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Source Water Protection Grants

The Clean Water Land and Legacy Amendment has supported source water protection grants for public water suppliers in Minnesota since 2010.

MDH will award new grants each fiscal year if funding is available. MDH will accept applications during the following time periods.

| Notice of Availability by Grant Category | Months Applications Accepted |
|--|------------------------------|
| Plan Implementation | March and September |
| Competitive | April and October |
| Transient | March and September |



Technical Assistant Provider (TAP)

Technical Assistant Providers assists with the development and implementation of Wellhead Protection plans.

Technical Knowledge

Point of Contact

Liaison

Trainers

Educators

Researchers

Collaborators

Supporters

Community Nonmunicipal and Non-Community Nontransient Wellhead Protection Plans and Action Plans

- 18 SWP Implementation or Competitive grant applications with WHP plans or amended action plans
- Many plans developed before SWP grant program started in 2010.



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Sargent's Landscape Nursery

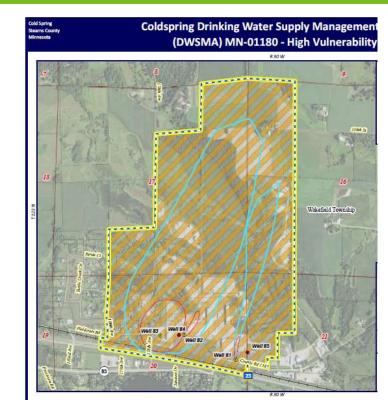
- FY 2011, Plan Implementation Grant amount: \$5,100.00
- 2008 WHP Plan approval, KidZibits exhibit





Coldspring Granite Company

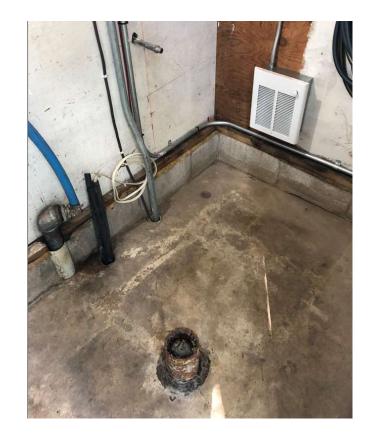
- Highly Vulnerable DWSMA
- Problem: Septic System in the IWMZ had ponding in the drainfield due to being overloaded with solids. This caused liquid waste to drain back into the septic tank requiring a pump truck to have to pump monthly.
- WHP Action Plan Approval 11/20/2019
- 2021 SWP Plan Implementation Grant to repair septic sytem(\$10,000).



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Battle Lake Mobile Home Park

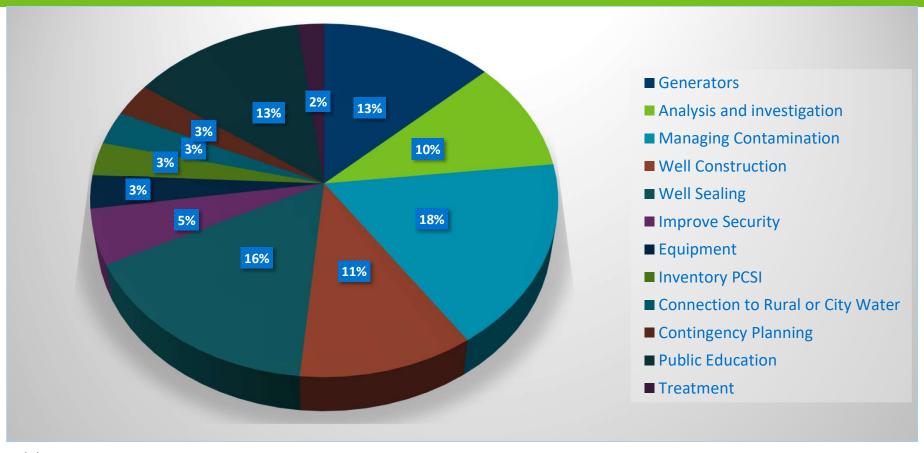
- Shallow well #1 started seeing high nitrates
- Was abandoned and drilled deeper well nearby
- Well #1 was never sealed
- In 2018 the new well had nitrate levels approaching MCL
- Well driller hired to inspect the abandoned well, found holes in well #1 casing
- With SWP Competitive grant, sealed well #1, saw drop in nitrate
- FY 2020, Grant amount: \$2,663.00
- Have an action plan (approved in 2014, currently working on new one for 2024)



Battle Lake Mobile Home Park Nitrate Levels

| II HOL CHECKEU, TESUIC HAS DEET INVAIIUACEU. | | | | | | | | | | |
|--|---------|----------------------|------------|------|------------------------------|-------------------------------|------|--------|-------|-------|
| × | PWSID | PWS Name | Collected | SPID | Sample Location | Analyte | | Sign F | esult | Units |
| V | 1560004 | Battle Lake Mobile I | 06/13/2022 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 6.00 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 04/25/2022 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 5.50 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 03/03/2022 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 5.20 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 02/07/2022 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 5.50 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 12/23/2021 | S03 | Well #3 Battle Lake Mobile H | Nitrate + Nitrite Nitrogen, T | otal | 5.30 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 11/08/2021 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 5.40 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 09/15/2021 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 5.90 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 08/05/2021 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 6.50 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 06/08/2021 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 8.00 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 05/05/2021 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 7.10 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 02/25/2021 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 7.70 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 01/07/2021 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 8.90 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 12/09/2020 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 9.50 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 10/19/2020 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 9.40 | | mg/L |
| V | 1560004 | Battle Lake Mobile I | 09/08/2020 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 10.0 | 0 | mg/L |
| V | 1560004 | Battle Lake Mobile I | 07/28/2020 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 11.0 | 0 | mg/L |
| V | 1560004 | Battle Lake Mobile I | 05/11/2020 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 12.0 | 0 | mg/L |
| V | 1560004 | Battle Lake Mobile I | 03/24/2020 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 11.0 | 0 | mg/L |
| V | 1560004 | Battle Lake Mobile I | 02/24/2020 | E03 | Well #3 Entry Point | Nitrate + Nitrite Nitrogen, T | otal | 12.0 | 0 | mg/L |
| V | 1560004 | Battle Lake Mobile I | 12/06/2019 | S03 | Well #3 | Nitrate + Nitrite Nitrogen, T | otal | 13.0 | 0 | mg/L |

2022 Grant Categories



2022 Grant Activities

Transient

- 11 systems, \$78,364.00
 - RFP \$75,000
- 9 of 11 (80%) systems received a Health Equity point

Competitive

- 28 systems, \$236,734.43
 - RFP \$75,000
- 20 of 28 (71%) received a Health Equity point

Plan Implementation

- 44 Systems, \$407,657
 - RFP \$175,000
- 33 of 44 (80%) received a Health Equity point

Wellhead Protection Rule Revision

- Voluntary WHP Plans for small systems
- Staff Support
 - Small Systems Coordinator (Cindy AKA Marty)
 - MRWA Source Water Specialist for Action Plans (Katie AKA Clara Clayton)
 - SWP North Regional Planning Supervisor (Jenilynn AKA DOC)
- Small Systems Steering Committee (AKA the Delorean)
- Flux Capacitor Fuel
 - Jigawatt generating technical support
 - DWP and Health Equity for small systems
 - IWMZ inventory and management
 - SWP grant modifications for small systems
 - New technical assistance tools to be developed
 - New generation of plans?



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Thank You!

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