COLLABORATING ACROSS STATE DRINKING WATER PROGRAMS TO SUPPORT SUSTAINABLE SYSTEMS

WORKSHOP EXERCISE: TRAINING BACKGROUND FOR FACILITATOR

Introduction

Background

State drinking water programs manage and oversee a variety of programs and activities that support public water systems (PWSs) including: Capacity Development, Operator Certification, Enforcement, and the Drinking Water State Revolving Fund (DWSRF). Collaboration among these programs will help to ensure the greatest public health protection for the American public.

In this exercise, participants are asked to take on one of five roles in a state program. Each participant is given background information on their role and a description of each system that has been specifically tailored for that particular role (e.g., the Enforcement packet includes information about violations, the DWSRF packet includes information about funding amounts, etc.). Participants will then work individually, and as a group, to both evaluate the needs of example water systems, and to prioritize state assistance.

Since each part of a drinking water program brings something different to the table, collaboration can provide creative answers and additional solutions for these PWSs. Effective communication within a state drinking water program can increase efficiencies and the value of the support provided to small PWSs.

This exercise focuses on small PWSs, as this size group has traditionally faced multiple challenges, such as lack of financial resources, aging infrastructure, cost of scale, management limitations, and lack of long-term planning. These challenges contribute to difficulty in implementing and consistently remaining compliant with drinking water regulations.

Purpose

The purpose of this exercise is to demonstrate that a better understanding of other state roles, increased communication, and collaboration among different roles, will result in improved, more holistic, PWS assistance.

Target Audience

State and EPA staff who oversee or assist PWSs, either directly or indirectly.

Structure

Teams act as a hypothetical state, with each team member playing a different role within the state's drinking water program:

- State Drinking Water Administrator
- Capacity Development Representative
- Operator Certification Representative
- Enforcement Representative
- DWSRF Representative

The State Drinking Water Administrator leads the discussion, encourages collaboration, and makes the final rankings and assistance determinations for the team. Each of the other roles is provided a subset of information on the PWSs within the state and is tasked with:

- Ranking the PWSs based on their need for state assistance.
- Working with team members to determine if PWSs should receive technical assistance (TA) and/or DWSRF loan, or no assistance.
- Reporting out their final ranking, recommended actions, reasoning, and lessons learned from the exercise.

Outcomes

This exercise will result in different answers each time it is conducted. There is no single correct answer. The goal of the exercise is to help participants learn to:

- Collaborate and communicate among programs.
- Understand the point of view of other programs.

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Acronyms

AO	Administrative Order
CCR	Consumer Confidence Report
CEU	Continuing Education Unit
CWS	Community Water System
DBPR	Disinfectants and Disinfection Byproducts Rule
DWSRF	Drinking Water State Revolving Fund
ERP	Enforcement Response Policy
ETT	Enforcement Targeting Tool
GWR	Ground Water Rule
IOC	Inorganic Contaminant
LCR	Lead and Copper Rule
LT1ESWTR	Long Term 1 Enhanced Surface Water Treatment Rule
LT2ESWTR	Long Term 2 Enhanced Surface Water Treatment Rule
M/R	Monitoring and Reporting
MCL	Maximum Contaminant Level
NOAV	Notice of Alleged Violations
PN	Public Notification
PWS	Public Water System
RTC	Return to Compliance
RTCR	Revised Total Coliform Rule
SWTR	Surface Water Treatment Rule
TA	Technical Assistance
TMF	Technical, Managerial, and Financial
USDA	U.S. Department of Agriculture
VOC	Volatile Organic Contaminant

Overview

For purposes of this exercise, the current year is 2019, and the month is October.

Length of Workshop

- About 90-135 minutes minimum (assuming no more than 3 teams).
- For each additional team, add 10 minutes.
- If time is limited, reduce the number of PWSs.

Number of Participants

Each team can consist of 5-9 people. There should be at least one person (but no more than two) assigned to each role but there may only be one State Drinking Water Administrator per team.

Some participants may only have limited knowledge of the drinking water activities in the exercise; some limited background information is provided, but participants may need to make assumptions.

Preparing for the Exercise

- **Print and assemble the materials.** Based on the anticipated number of participants, determine the number of teams you will have. Remember, each team must have at least one person per role (at least 5), but more than one team member can play each role (except there should only be one State Drinking Water Administrator). See Appendix A for the list of the materials needed for each role and the order in which the materials should be collated. At a minimum, print one complete set of materials for each team.
- **Gather additional materials for the training.** In addition to the instruction packets, you will need to have:
  - Pens, pencils, and markers (including white board markers if needed).
  - Poster boards, white boards, or placards for the ranking matrix, colored sheets for each team (to report ranking results to the entire group).
  - Folders, binder clips, or paper clips to organize the materials for each role.
- **Become familiar with each role** prior to the training. Each role will receive certain facts and information but only you (the facilitator), has the entire picture. This will help you answer any questions that may arise during the exercise and decide how to set up the teams. The following roles are asked to:
  1. **State Capacity Development Representative.**
     a. Consider each PWS's TMF capacity, using the provided TMF assessments.
     b. Look for issues or situations that may suggest a longer-term capacity problem (e.g., a low score on a TMF assessment, training level of the operator, size of the system, etc.).
     c. Consider the PWS's ETT score, and whether a PWS is a priority for enforcement.

2. **State Operator Certification Representative.**
    a. Evaluate each PWS to determine if the operator is certified to the correct level (i.e., an operator's "current certification" is equal to or greater than the "required certification").
    b. Determine if each PWS's operator has the correct number of CEUs for their required certification level.
        - *For the purposes of this exercise, operators are required to receive a certain number of CEUs based on the PWS type, where one CEU is equivalent to 10 training hours on any topic. Renewal is required every 3 years. Note that in this exercise, there is one month remaining until the end of the renewal cycle.*
    c. Look for issues or situations of concern with the PWS's operator (e.g., an operator that does not properly maintain the PWS).
    d. Consider how PWS partnerships (e.g., sharing an operator) or the use of a contract operator might aid a PWS.
3. **State Enforcement Representative.**
    a. Carefully review the violations, including violation types.
    b. Review the ETT score for each PWS and identify which PWSs have 11 or more points. These PWSs are considered a high enforcement priority according to EPA's Drinking Water ERP.
    c. Determine if there are PWSs that are consistently noncompliant even if the ETT score does not reflect a high enforcement priority.
        - *Participants with a strong understanding of enforcement activities may ask about **implicit RTC.** Implicit RTC may be applied on a state by state basis and states may take into consideration PWS monitoring frequency and data clean-up activities. Implicit RTC has not been taken into account for this exercise.*
    d. Consider violations that represent acute threats to public health versus violations that could be indicative of inadequate knowledge and/or experience (i.e., low TMF capacity).
4. **State DWSRF Representative.**
    a. Review the projects for each PWS.
    b. Based on DWSRF criteria, determine the eligibility of the PWS, the project's purpose, and the individual aspects of each project.
    c. Assign DWSRF priority points and rank the PWSs based on their score.
        - *For the purpose of this exercise, some priority ranking categories are pre-assigned.*
    d. Flag any PWSs or projects that are not ready to proceed with DWSRF funding but could use TA.

5. **State Drinking Water Administrator.**
    a. Review inventory data.
    b. Review the state resource constraints.
    c. Review and announce or hand out news flashes to the team.
    d. Facilitate a discussion on PWS rankings, develop the final team ranking and allocate funding.
    e. Report all of this information out to the entire group.

- **Think about how to organize the teams.** Before you conduct the exercise, determine how you will organize participants into teams. Pre-label each participants package of materials with the role they will be assigned to in their team. Hand these out as participants enter the room or put them on the chairs before they enter. Designate a table for each team, and have a marker on the table (e.g., a colored sheet of paper) to allow participants to locate their table. Teams can be organized based on:
    1. **Experience.** You may want to ensure that newer staff members are on a team with more experienced staff to encourage learning and growth among all team members.
    2. **Current role in the drinking water program.** You may want assign program staff to a role that they are unfamiliar with, to learn the point of view of another program.
    3. **Leave the team formation to chance.** Hand out the instruction/role packages randomly to people as they enter the room or randomly place the packages on chairs.

- **Prepare a ranking matrix.** On poster board, a white board, or a wall, create a matrix that will be used to summarize the final rankings of each team. An example matrix is included below, and the matrix will be used during Phase 3 of the training. If you use less than eight PWSs due to time constraints, reduce the number of rows to match the number of PWSs included in the exercise.
    - *List the team names horizontally across the top of the board or wall matrix. The PWSs are listed vertically. You can also print out each column heading and row heading on a separate piece of paper and then affix the sheets of paper on the wall to result in a larger matrix.*
    - *The boxes below each team name indicate the final ranking for receiving assistance. You can print/write the numbers 1-8 on separate pieces of paper (a set for each team) or use a different color of paper for each team for the ranking numbers.*
    - *Once a team has decided on a final ranking, the State Drinking Water Administrator will report the results on the board or wall matrix. In the example below, there are three teams. Administrators for these teams used the pre-prepared pieces of paper, with the ranking numbers, to show how their team ranked the systems.*

Example Ranking Matrix

	Final Ranking for Receiving Assistance		
System Name	Team 1	Team 2	Team 3
ADDISON	2	1	3
BRICK	1	2	7
CRANSTON	3	5	4
DARLING	6	3	6
EASTON SQUARE	4	6	2
FREDERICK CENTRAL	5	4	5
GUTHRIE	8	7	8
HIDDEN	7	8	1

Setting up the Exercise

- **Explain the purpose of the training and the objectives of the exercise (5 minutes).** Explain that the purpose of this exercise is for teams to collaborate and communicate with the intention of:
  1. Ranking the PWSs in order of need for state assistance,
  2. Making recommendations to their State Drinking Water Administrator, and
  3. Discussing the types of assistance for each PWS (TA and/or DWSRF funding, or no assistance).
  - *Use the provided PowerPoint slides for a visual aid when explaining/facilitating the exercise.*
  - *Remind the participants that the State Drinking Water Administrator on each team will make the final decision and report out to the entire group.*
  - *Emphasize that there is no single correct answer. The goal is to share how the PWSs were evaluated based on the available information, and to identify the steps needed to assist these PWSs.*
- **Explain the materials and the basics of the exercise (5 minutes).** All participants should have their information packages (assigned roles and teams). Have the teams relocate if necessary, so that every team is grouped together, and quickly choose a team name. Spend the remainder of the time explaining that:
  1. **All participants receive instructions and materials specific to their role.** Describe the materials by going through what should be in each packet to ensure that all participants' packets are complete. Explain that **some of the materials differ** depending on the role. It will help to hold up an example of the materials as you are going through the packet. (e.g., "If you are playing the Operator Certification role, your packet should have the following documents: 1) Operator Certification

Role Instructions, 2) Operator Certification System Details, 3) PWS Inventory, 4) Systems Map, 5) Ranking Sheet, 6) Background Resources")

2. **All participants receive some of the same materials.** All packets include the "PWS Inventory", "Systems Map", "Ranking Sheet", and "Background Resources", but **other materials may differ.** Ask participants to put aside the Background Resources, as they will not be needed during the exercise. Participants can refer to them after the exercise for additional information.
3. **All participants should write the team name that they have agreed upon** on the "Ranking for State Assistance to Public Water Systems" or "Ranking Sheet".
4. The exercise is broken up into three 30-minute phases (option for 45-minute phases if enough time is available).

   Phase 1: PWS Review (30 minutes). Instruct participants to use the worksheet provided for each role. The worksheet provides a place where the participants can record the information about all the PWSs in one place. They will also use the "Ranking for State Assistance to Public Water Systems" document to complete this Phase. In the first 30-minute period, each person (except for the State Drinking Water Administrator) will:

   a. Read through their materials.
   b. Collect and record data about the PWSs on the worksheet.
   c. Independently rank the inventory of PWSs in order of need for state assistance. A ranking of number 1 should be assigned to the PWS with the greatest need for assistance and a ranking of 7 (note at this time the participants are unaware that there is an eighth system) should be assigned to the PWS with the least need for assistance. If a team has more than one person playing a role, the members can work together to establish the ranking, but participants should not share information with team members assigned to a different role.
   d. Develop reasons for their rankings. Instruct the teams that each role has different information and some information may have only been provided to another team member. Explain that it is okay to make assumptions when ranking the systems, just make sure that those assumptions can be explained during Phase 2 of this exercise.
   e. Develop recommended actions to assist each of the PWSs based on the given information and the chosen rank.

   Since State Drinking Water Administrators are often tasked with attending off-site meetings and events to further the public health goals of their state drinking water program, hold a meeting with the State Drinking Water Administrators in a separate part of the room. Give the Administrators time to review their materials but also use this meeting to coach them on their key facilitation role in Phase 2. At this meeting hand out an *Example Results: Final Ranking for State Assistance to Public Water Systems*, for an example of a completed final ranking sheet. Remind the Administrators that this is not an answer key but just an example of how the final rankings can be allocated. Also hand out and explain the news flashes.

Phase 2: Team Discussion (30 minutes). During the second 30-minute period, team members will share their ranking with the rest of their team and help the State Drinking Water Administrator decide on a final ranking list for the entire team. The team will have 30 minutes to help the State Drinking Water Administrator make a final decision about: 1) the final ranking for state assistance; 2) the reasons for that ranking; and, 3) the recommended actions to assist the PWSs (TA and/or DWSRF funding, or none). The State Drinking Water Administrator should record the team's final ranking and any recommended actions on the "Ranking for State Assistance to Public Water Systems" document.

Phase 3: Report out (30 minutes). In the final 30-minute period, the State Drinking Water Administrator from each team will report out to the entire group. The State Drinking Water Administrator will report: 1) the team's final ranking for both DWSRF projects and PWSs receiving TA; 2) the team's reasons for those rankings; and, 3) any recommended actions to aid the PWSs. Note that the end goal is not necessarily a definitive, final ranking of PWSs, but rather a discussion of the process used to develop such a ranking.

Remind the participants that you will keep time and will announce when they should transition to the next activity. Also remind all participants that there is no single correct answer. The goal is to collaborate and share ideas. Before beginning, ask if there are any questions.

Facilitating the Exercise

- **Keep track of the time.** Once you provide directions, teams should have:
  - 30 minutes to complete the individual rankings, reasons for their rankings, and recommended actions (i.e., Phase 1: PWS Review).
  - 30 minutes to discuss the overall ranking with the State Drinking Water Administrator (i.e., Phase 2: Team Discussion).
  - 30 minutes during which each team reports their results to the entire group (i.e., Phase 3: Report out).
    - Remind the participants that you will keep time and will announce when they should transition to the next activity.
- **Convene a State Drinking Water Administrators Meeting.** During Phase 1, call a meeting with all the State Drinking Water Administrators (meet in the back of the room or the hallway). Give the Administrators some time to review their material and then:
  - **Remind the Administrators that the exercise's goal** is to foster communication and collaboration through the development of a list of ranked PWSs needing assistance. Explain that while the Administrator should try to reach a consensus in the team's ranking, the Administrator has the final say.
  - **Explain Phase 3** of the exercise (the Report Out) and remind the Administrators that they will report: 1) his/her team's final ranking for both DWSRF projects and PWSs receiving TA; 2) the team's reasons for those rankings; and, 3) any recommended actions to aid the PWSs. Emphasize that the end goal is not necessarily a definitive,

final ranking of PWSs, but rather a discussion of the process used to develop such a ranking.

- **Discuss the resource constraints outlined in their instructions and remind them to notify their team of these constraints.**
- **Hand out and explain the Example Results:** ***Final Ranking for State Assistance to Public Water Systems.*** This Ranking Sheet is an example of a completed final ranking sheet. Remind the Administrators that this is not an answer key but just an example of how the final rankings can be allocated.
- **Hand out and explain the news flashes**. News flashes are scenarios that may impact how a team member ranks a PWS (though not every role will be impacted by a news flash). The State Drinking Water Administrator will announce/handout each news flash to their team and has the authority to decide when during the 30-minute PWS review time (Phase 1), to do so. The Administrators will announce/hand out news flashes. It is anticipated that one or two of the following news flashes will be used during a training:
  - Tornado
  - Newly Found PWS
  - Workforce Issue
  - Harmful Algal Bloom

  The file "Consolidated Example Ranking + News Flashes" includes all four news flashes, and the chosen news flashes can be extracted from here along with the corresponding Example Ranking (if applicable). The file includes four Example Rankings for different combinations of the news flashes. The options available are: Tornado and Newly Found PWS; Workforce Issue and Harmful Algal Bloom; Tornado and Harmful Algal Bloom; and Newly Found PWS and Workforce Issue. The State Administrator may only decide to use one news flash or a different combination of news flashes. The Example Rankings are not meant to serve as "answers" to this activity, but they are meant to show how different roles might consider each PWS and news flash.

➢ **Check in.** As participants are working through their materials and ranking the PWSs, check in to see if they have any questions about the exercise. See the role instructions for details on what each role must complete. If anyone has any questions, you can refer to Appendix C Summary and Discussion Questions, which contains a brief summary of each PWS, and Appendix D Complete System Details, which contains a compilation of all of the information provided to each role.

  ➢ ***Play the role of State Engineer for the PWSs.*** *While floating around the room to assist teams, also play the role of State Engineer. If a team has a question about a PWS, offer information that the State Engineer assigned to that particular PWS is likely to provide. If you don't know the answer or there isn't an answer in the materials, make an assumption and make up the answer in order to facilitate workshop completion!*

➢ **Report out and group discussion.** Once each team has finalized their ranking of PWSs, ask each State Drinking Water Administrator to report out to the entire group. Allot approximately 10 minutes per team (depending on the number of teams) for this part of

the exercise. As the Administrators are presenting their rankings, record the information on the ranking matrix you prepared before the training (see example table above).

Ask each State Drinking Water Administrator to present:

1. Their team name;
2. Their team's final rankings for both DWSRF projects and PWSs receiving TA;
3. The team's reasons for that ranking; and,
4. Any recommended actions to aid the PWSs.

If the team was divided on how to rank a specific PWS, ask the State Drinking Water Administrator to explain how this discrepancy was resolved. Facilitate the discussion by prompting each State Drinking Water Administrator to:

- Discuss any assumptions that were made during the ranking process.
- Provide justifications or reasons as to how the team prioritized the PWSs.
- Mention any information that the team thought was missing or was needed to improve the ranking process.

➢ **Summarize the findings.** After each State Drinking Water Administrator reports out, summarize the findings. Note similarities and differences in the rankings and facilitate a discussion around why the different teams ranked the PWSs differently. For guidance on discussion points refer to Appendix C Summary and Discussion Questions.

➢ **Discussion of lessons learned.** After you summarize the findings, discuss overall lessons learned from the exercise. Since the purpose of this exercise is to facilitate better communication and collaboration among state staff across all drinking water programs, some questions the group can consider include:

- Did the exercise help you gain an understanding of general priorities of the drinking water program and the specific priorities of your team members?
- Is there a process like this in your state?
- What (if any) are the methods to share information?
- What (if any) are the barriers to communicating and collaborating?

➢ Be sure to leave enough time for this final portion of the exercise, as discussing lessons learned and the overall process can yield some of the most important and valuable takeaways from the training.

Appendix A. File Name List by State Role

Below are the various state roles and the file names that correspond to those roles. All files (except where noted below) are provided in Microsoft Word 2013.

At a minimum, one complete set of information is needed for a team to complete this exercise. Materials can be printed in black and white and should be printed double-sided. Once all materials are printed, the materials for each role should be collated in the order presented below and either paper clipped or put into an envelope. If you use envelopes, make sure to mark the outside with the role's title. Three files (indicated below) should be handed out to the State Drinking Water Administrator during the Administrator's meeting.

State Capacity Development Representative

Filename: Consolidated Capacity Development Packet.docx

- Capacity Development Role Instructions.
- Acronym List.
- Capacity Development TMF Assessment Form for Addison.
- Capacity Development TMF Assessment Form for Brick.
- Capacity Development TMF Assessment Form for Cranston.
- Capacity Development TMF Assessment Form for Darling.
- Capacity Development TMF Assessment Form for Easton Square.
- Capacity Development TMF Assessment Form for Frederick.
- Capacity Development TMF Assessment Form for Guthrie.
- PWS Inventory.
- Map of System Locations.
- Worksheet.
- Ranking Sheet.
- Background Resources (to be set-aside by the participants, not needed for the exercise).

State Operator Certification Representative

Filename: Consolidated Operator Certification Packet.docx

- Operator Certification Role Instruction.
- Acronym List.
- System Details on Operator Certification Status.
- PWS Inventory.
- Map of System Locations.
- Worksheet.
- Ranking Sheet.
- Background Resources (to be set-aside by the participants, not needed for the exercise).

State Enforcement Representative

Filename: Consolidated_Enforcement Packet.docx

- Enforcement Role Instructions.
- Acronym List.
- System Details on Enforcement Status.

- PWS Inventory.
- Map of System Locations.
- Ranking Sheet.
- Background Resources (to be set-aside by the participants, not needed for the exercise).

State Drinking Water State Revolving Fund (DWSRF) Representative

Filename: Consolidated DWSRF Packet.docx

- DWSRF Role Instructions.
- Acronym List
- System Details on DWSRF Status.
- PWS Inventory.
- Map of System Locations.
- Worksheet.
- Ranking Sheet.
- Background Resources (to be set-aside by the participants, not needed for the exercise).

State Drinking Water Administrator

Filename: Consolidated State Administrator Packet.docx

- State DW Administrator Role Instructions.
- Acronym List.
- PWS Inventory.
- Map of System Locations.
- State DW Administrator Final Ranking Sheet.
- Background Resources (to be set-aside by the participants, not needed for the exercise).

Additional Material to be to be distributed during the State Drinking Water Administrator meeting

Filename: Consolidated Example Ranking + News Flashes.docx

- Select one of the four combinations of news flashes and its corresponding example final ranking sheet.
    - Option 1: State Drinking Water Administrator Example Final Ranking Sheet 1.
        - News Flash! Tornado
        - News Flash! Newly Found PWS
    - Option 2: State Drinking Water Administrator Example Final Ranking Sheet 2.
        - News Flash! Workforce Issue
        - News Flash! Harmful Algal Bloom
    - Option 3: State Drinking Water Administrator Example Final Ranking Sheet 3.
        - News Flash! Tornado
        - News Flash! Harmful Algal Bloom
    - Option 4: State Drinking Water Administrator Example Final Ranking Sheet 4.
        - News Flash! Newly Found PWS
        - News Flash! Workforce Issue
- You can also use a different combination of news flashes and use the Example Final Rankings provided as a guide.

Appendix B. Drinking Water Regulations: Applicable to Small Community Water Systems

Drinking Water Regulations
Applicable to All CWSs Serving Less than 10,000 Customers
Consumer Confidence Rule (CCR)
Lead and Copper Rule (LCR)
Phase II/V Rules for Inorganic Chemicals (IOCs), including Arsenic; Synthetic Organic Chemicals (SOCs); and Volatile Organic Compounds (VOCs)
Public Notification (PN) Rule
Radionuclides Rule
Revised Total Coliform Rule (RTCR)
Based on a CWS's use of disinfection, they may also be subject to: ▪ Stage 1 & 2 Disinfectants and Disinfection Byproducts Rule (DBPR)
Based on a CWS's source water type, they may also be subject to: ▪ Ground Water Rule (GWR) ▪ Surface Water Treatment Rule (SWTR) ▪ Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) ▪ Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)

Appendix C: Summary and Discussion Questions

PWSID	PWS Name	Summary	Discussion Questions
PWSID-A	ADDISON COMMUNITY WATER SYSTEM	PWS serves 6,000 people using surface water and a conventional filtration plant. The PWS is 100 percent metered and is in good shape. The PWS has an asset inventory and modest reserves. However, the PWS is due for a rate increase. The PWS missed the deadline for sending their CCR out one year. The operator is certified to the correct level and has achieved the number of required CEUs. The PWS has a mutual aid agreement with Frederick Central Water Works (PWSID-F) in the event of an emergency. The PWS would like to replace their ground-level water tank because the pressure on the east side of town is not adequate for firefighting. **News Flash** (if applicable): There is a harmful algal bloom at the surface water source for the system.	• Being a PWS without MCL violations, is there a public health need to help this PWS? • How can the state encourage the PWS to place a priority on communications with their customers? • Could the PWS's experience with mutual aid be utilized to educate other owners and operators on the benefits of mutual aid agreements? • Since this PWS is actively working with a neighboring PWS, (e.g., mutual aid agreements with other PWSs) can this PWS be encouraged to form other water system partnerships?
PWSID-B	BRICK CITY WATER SYSTEM	PWS serves 2,772 people through surface water sources. The operator does not have sufficient CEUs for her required certification level and there is only one month left to acquire the necessary CEUs. PWS has not requested TA. PWS is not metered and would like to get DWSRF funding for a metering project throughout the distribution system. Low rates have resulted in deferred maintenance, and infrastructure has deteriorated significantly. PWS has recent DBPR MCL and PN violations but has instituted operational changes at its plant. The operator is not effectively supported by the Board; there is little communication between the two parties.	• Being an unmetered PWS, is there a concern that the PWS's rates and reserves effectively supplement any assistance that the state provides? • How could the communication difficulties between the operator and the Board impact the PWS's ability to take advantage of the state resources? • Keeping in mind the deteriorated infrastructure and recent violations, how could additional resources for the PWS have an impact on the community's public health? • Is there a way to encourage the operator to get the sufficient number of CEUs? Keep in mind the PWS has not yet taken advantage of TA.

PWSID	PWS Name	Summary	Discussion Questions
PWSID-C	CRANSTON AGRICULTURAL ASSOCIATION	PWS serves 2,100 people through ground water sources. The primary ground water well is causing contamination issues; PWS needs a replacement well. PWS is not metered. The community has been identified as "disadvantaged." The operator is not certified to the correct level and had difficulty answering questions during the TMF assessment. The system had two recent *E. coli* MCL violations and failed to correct all sanitary defects found during the Level 2 Assessment. In addition, the system never submitted reports in compliance with the Stage 2 DBPR and has other M/R violations under the GWR and LCR. Because of the potential for contamination and the number and severity of the violations, the state has commenced formal enforcement against the PWS.	• Will enforcement alone help to bring the PWS into compliance? • What other assistance could help the PWS to address public health concerns due to ongoing contamination issues? • How can the state assist the PWS through the DWSRF application process? • Is there a way to encourage the operator to get certified to the correct level? • How could the state encourage the PWS to meter? • Do the M/R violations mask possible MCL violations considering the condition of the well and the lack of knowledge of the operator?
PWSID-D	DARLING MOBILE HOME PARK	PWS serves 294 people through ground water sources. Operator is certified to the correct level. There was a water main break in 2019 that the operator did not respond to quickly enough. The operator is also the operator at the Easton Square Water District (PWSID-E). PWS needs to improve recordkeeping practices. The system recently had an RTCR *E. coli* MCL violation and failed to distribute PN. The Level 2 Assessment uncovered piping issues. PWS would like to get DWSRF funding to replace 60 percent of its distribution system that is deteriorating cast iron pipe. PWS also experiences pressure problems during periods of high demand.	• Will the PWS's recordkeeping practices affect their ability to take advantage of the state resources? • Taking into account the PWS's recent violations, how could additional resources for the PWS have an impact the community's public health? • How does the operator's work at the Easton Square System (PWSID-E) affect his work at this PWS? Did it affect his ability to respond to the emergency at the Darling Mobile Home Park?

PWSID	PWS Name	Summary	Discussion Questions
PWSID-E	EASTON SQUARE WATER DISTRICT	PWS serves 3,000 people through ground water sources. 10 percent of the PWS is unmetered. The operator is certified to the correct level and is also the operator at the Darling Mobile Home Park (PWSID-D). PWS hopes to use DWSRF funds to install security and safety measures around their elevated storage tank due to previous trespassing. The system failed to let its customers know for 3 days about one of its *E. coli* MCL violations. The Level 2 Assessment found the chlorinator to be faulty. The PWS is planning on funding a replacement chlorinator for two ground water wells with capital reserves. A NOAV has been sent and the system told Enforcement that the chlorinator has been replaced. **News Flash** (if applicable): The operator recently announced that he plans to retire in 8 months.	• How does the operator's work at the Darling Mobile Home Park (PWSID-D) affect his work at this PWS? • How can the state help the PWS perform its security and chlorinator projects simultaneously? Would it make more financial sense if the PWS funded the security project and DWSRF funded the chlorinator project? How would this benefit the PWS and its community? • Should the state encourage the PWS to meter the additional 10 percent of their PWS that is currently unmetered?

PWSID	PWS Name	Summary	Discussion Questions
PWSID-F	FREDERICK CENTRAL WATER WORKS	PWS serves 394 people through ground water sources. PWS has established a mutual aid agreement with Addison Community Water System (PWSID-A) in the event of an emergency. The operator is certified to the correct level and has achieved the number of required CEUs The PWS wants to resize their elevated water tank to provide sufficient capacity to serve a planned subdivision development in the next 5 years. PWS would like to fund the resized water tank with DWSRF funding. They don't currently have any reserves and their rate structure primarily covers their operating budget. Some maintenance has been deferred due to lack of budget. They missed sending out their CCR one year. Two PWS board members are interested in attending a Rate-Setting and Asset Management training. **News Flash** (if applicable): A recent tornado damaged the PWS completely destroying the storage tank.	• How can the state help the PWS with the after-effects of the tornado (e.g., infrastructure repairs, emergency planning)? • Could the PWS's experience with mutual aid be utilized to educate other owners and operators on the benefits of mutual aid agreements? • Can their experience with water system partnerships (e.g., mutual aid agreement) be expanded to include other types of partnerships that may be beneficial to the PWS? • What steps can be taken to encourage the PWS to develop an asset inventory and a more proactive process to manage and maintain their assets?
PWSID-G	GUTHRIE WATER SYSTEM	PWS serves 326 people through ground water sources although the system has been providing potable water to its customers from an alternate source for years as it tries to resolve it long-standing arsenic problem. Two percent of the PWS is unmetered. PWS does not currently have an operator. PWS has been trying to interconnect with a nearby PWS in order to mitigate long-term arsenic compliance problems. Has applied for DWSRF funds. PWS is also seeking funding with the USDA. PWS had numerous, uncorrected arsenic MCL and arsenic M/R violations in since 2015. Two percent of the system is unmetered.	• Should the state continue to encourage connection of Guthrie to a nearby PWS? Which PWS is the best candidate? • How can funding be coordinated with the USDA to fund the PWS' interconnection with a nearby PWS? • How can the state help the PWS to get an operator? Is there a nearby town the PWS can coordinate with? (Hint: Refer to the Systems Map.) • Does the PWS need to install treatment to mitigate its arsenic compliance issues?

PWSID	PWS Name	Summary	Discussion Questions
PWSID-H	HIDDEN HOMEOWNER'S ASSOCIATION	**News Flash** (if applicable): PWS serves 45 people using one ground water well. This is a newly found PWS, and the state has yet to conduct a TMF assessment. Historical violations are unknown for the PWS. The PWS does not have an operator.	• What are the first steps that the state should take to assist this newly found PWS? • Being a PWS without a known violation history, is there a public health need to help this PWS? If so, how can the state help? • Being a PWS without a TMF assessment, is there a public health need to help this PWS? If so, how can the state help? • What level of certification does the PWS's future operator need to acquire? How can the state help the PWS find an operator?

Appendix D: Comprehensive System Details

PWSID	**Inventory**	**PWSID-A**		
PWS Name		**ADDISON Community Water System**		
Population Served		6,000		
PWS Type		CWS		
Source Water		Surface Water ***News Flash** (if applicable): There is a harmful algal bloom at the surface water source for the system.		
Major Infrastructure		▪ Conventional Filtration Plant ▪ 1 Ground-level Water Tank ▪ 62 Miles of Pipe ▪ 100% Metered		
Name of Operator	**Op Cert**	Steve Mack		
Required Cert.		4		
Operator Current Cert.		4		
CEUs		20		
Operator Notes		Some infrastructure, including ground-level water tank, needs replacing. PWS has established a mutual aid agreement with Frederick Central Water Works (PWSID-F), in the event of an emergency.		
Need for DWSRF Loan	**DWSRF**	The PWS's ground-level water tank needs replacing because the pressure on the east side of town is not adequate for firefighting.		
Project Cost		$450,000		
Project Priority Points		Violations: 5 Source: 0 Storage: 24 Pressure: 30 Filtration: 0 Treatment: 0 Dist. System: 0 Well Construct.: 0	Affordability: 0 Small System: 0 Consolidation: 0 Security: 0 Asset Mgmt.: 0 Water Conserv.: 0 Green Project: 0 **TOTAL = 59**	
Eligibility		Not Eligible (for fire suppression only)		
Readiness to Proceed		Ready		
Important Notes		The PWS has a modest reserve fund.		
TMF Capacity Score	**Cap Dev**	92		
TMF Overall Comments		Overall, the PWS is in good shape. They missed their CCR due date by 3 weeks. They said it was in the works, and then they just forgot to send it out. The PWS has a modest capital reserve fund.		
Violation	**Enforcement**	**Violation Name**	**Compliance Period**	**Severity Score by Vio. Type**
		IOC Monitoring M/R	1/1/2018-3/31/2018	1
		CCR Failure to Report	7/1/2018-6/30/2019	1
Duration from Oldest Unaddressed Violation (yrs.)		0		
ETT Score		0		
Notes		N/A		

PWSID	**Inventory**	**PWSID-B**
PWS Name		**BRICK CITY WATER SYSTEM**
Population Served		2,772
PWS Type		CWS
Source Water		Surface Water
Major Infrastructure		▪ Conventional Filtration Plant ▪ 1 Elevated Water Tank ▪ 40 Miles of Pipe ▪ 0% Metered
Name of Operator	**Op Cert**	Erin Flower
Required Cert.		3
Operator Current Cert.		3
CEUs		2
Operator Notes		Little to no communication between the Board and the Operator.
Need for DWSRF Loan	**DWSRF**	The PWS is unmetered and is unable to bill customers according to usage. The PWS would like to install water meters throughout the distribution system.
Project Cost		$700,000
Project Priority Points		Violations: 45 Source: 0 Storage: 0 Pressure: 0 Filtration: 0 Treatment: 0 Dist. System: 0 Well Construct.: 0 Affordability: 0 Small System: 0 Consolidation: 0 Security: 0 Asset Mgmt.: 0 Water Conserv.: 10 Green Project: 10 **TOTAL = 65**
Eligibility		Eligible
Readiness to Proceed		Ready
Important Notes		This project is part of a large Water Conservation Program being undertaken by the PWS.
TMF Capacity Score	**Cap Dev**	72
TMF Overall Comments		The operator stated that the Water Board is not supportive and not in tune with the needs of the operations. There is little communication between the operator and the Water Board. There is also very limited communication among the staff, and even less with customers. Rates have been kept low due to deferred maintenance. Operator is certified. Infrastructure deterioration is visible. NOAV sent concerning DBPR and PN violations. The operator contacted the state to discuss treatment plant adjustments.

		Name	Compliance Period	Severity Score by Vio. Type
Violation	**Enforcement**	DBPR MCL Average (x3)	1/1/2019-3/31/2019	5
			4/1/2019-6/30/2019	5
			7/1/2019-9/30/2019	5
		PN for NPDWR (DBPR MCL x3)	3/26/2019	1
			6/19/2019	1
			9/18/2019	1
Duration from Oldest Unaddressed Violation (yrs.)		0		
ETT Score		18		
Notes		Except for the recent DBPR MCL violations, the PWS has no other health-based violations for any other contaminant. NOAV sent concerning DBPR and PN violations. System is implementing operational changes to the treatment plant.		

PWSID		PWSID-C
PWS Name		CRANSTON AGRICULTURAL ASSOCIATION
Population Served	Inventory	2,100
PWS Type		CWS
Source Water		Ground Water
Major Infrastructure		▪ Disinfection (Membrane technology) ▪ 1 Elevated Water Tank ▪ 23 Miles of Pipe ▪ 0% Metered
Name of Operator	Op Cert	Renee Halls
Required Cert.		3
Operator Current Cert.		2
CEUs		15
Operator Notes		Operator needs additional training.
Need for DWSRF Loan	DWSRF	The PWS is experiencing ongoing contamination issues with their primary ground water well. A replacement well is needed to ensure that residents are supplied with a reliable and safe source of drinking water. Furthermore, the PWS plans to install a high-efficiency well pump in the new well.
Project Cost		$80,000
Project Priority Points		Violations: 30 Source: 30 Storage: 0 Pressure: 0 Filtration: 0 Treatment: 0 Dist. System: 0 Well Construct.: 12 Affordability: 30 Small System: 0 Consolidation: 0 Security: 0 Asset Mgmt.: 0 Water Conserv.: 0 Green Project: 10 **TOTAL = 112**
Eligibility		Eligible
Readiness to Proceed		Ready
Important Notes		This community has been identified as “disadvantaged.”
TMF Capacity Score	Cap Dev	66
TMF Overall Comments		The sanitary survey report states that the main well is deteriorated, and the seal has been compromised. The PWS needs to replace this well. The operator is certified but not to the correct level and had problems answering our questions. The system had two recent *E. coli* MCL violations and failed to correct all the sanitary defects identified in the Level 2 Assessment. In addition, the system has multiple M/R violations (RTCR, GWR, Stage 2 DBPR, and LCR). Because of these on-going issues and violations, the state has commenced formal enforcement against the PWS. The PWS has very limited communication with customers.

PWSID		PWSID-C		
PWS Name		CRANSTON AGRICULTURAL ASSOCIATION		
Violation		Violation Name	Compliance Period	Severity Score by Vio. Type
		RTCR *E. coli* MCL (x2)	2/1/2019-2/28/2019	10
			3/1/2019-3/31/2019	10
		RTCR Treatment Technique (TT)	5/1/2019-6/1/2019	5
		GWR Source Monitoring M/R	2/10/2019-2/11/2019	1
		DBPR Stage 2 M/R (x10)	1/1/2014-12/31/2014	1
			1/1/2014-12/31/2014	1
			1/1/2015-12/31/2015	1
			1/1/2015-12/31/2015	1
			1/1/2016-12/31/2016	1
			1/1/2016-12/31/2016	1
			1/1/2017-12/31/2017	1
			1/1/2017-12/31/2017	1
			1/1/2018-12/31/2018	1
			1/1/2018-12/31/2018	1
		LCR Follow-up and Routine Tap M/R	7/1/2018-12/31/2018	1
		CCR Inadequate	7/1/2014-6/30/2015	1
		CCR Failure to Report (x2)	7/1/2014-6/30/2015	1
			7/1/2015-6/30/2016	1
Duration from Oldest Unaddressed Violation (yrs.)		0		
ETT Score		0		
Notes		While the state commenced formal enforcement proceedings for these violations by filing an AO, they remain ongoing and unresolved. The AO is pending. The PWS continues to experience contamination issues.		

PWSID	**Inventory**	**PWSID-D**
PWS Name		**DARLING MOBILE HOME PARK**
Population Served		294
PWS Type		CWS
Source Water		Ground Water
Major Infrastructure		▪ Disinfection (Hypochlorination) ▪ 1 Ground-level Water Tank ▪ 20 Miles of Pipe ▪ 100% Metered
Name of Operator	**Op Cert**	Donald Harris IV
Required Cert.		2
Operator Current Cert.		2
CEUs		10
Operator Notes		There was a water main break in 2019 that the operator was not able to respond to quickly.
Need for DWSRF Loan	**DWSRF**	The PWS suffered a major water main break in September 2019 and had an RTCR *E. coli* MCL violation. The Level 2 Assessment uncovered piping issues The PWS also experiences pressure problems during periods of high demand. The PWS needs to replace 60 percent of its distribution system that is currently cast-iron piping with PVC piping.
Project Cost		$450,000
Project Priority Points		Violations: 40 Source: 0 Storage: 0 Pressure: 30 Filtration: 0 Treatment: 0 Dist. System: 12 Well Construct.: 0 Affordability: 0 Small System: 12 Consolidation: 0 Security: 0 Asset Mgmt.: 0 Water Conserv.: 0 Green Project: 0 **TOTAL = 94**
Eligibility		Eligible
Readiness to Proceed		Ready
Important Notes		N/A
TMF Capacity Score	**Cap Dev**	80
TMF Overall Comments		The operator seems experienced but was having trouble locating emergency plans, source water assessments, and operation and maintenance manuals. The system recently had an RTCR *E. coli* MCL violation and failed to distribute PN. The Level 2 Assessment uncovered additional piping issues. This PWS needs to replace 60 percent of its distribution system that is old and deteriorating cast iron piping.

		Violation Name	Compliance Period	Severity Score by Vio. Type
Violation	**Enforcement**	Nitrates MCL	4/1/2019-6/30/2019	10
		RTCR *E. coli* MCL	9/1/2019-9/30/2019	10
		DBPR Stage 2 M/R (x2)	1/1/2014-12/31/2014	1
			1/1/2018-12/31/2018	1
		PN for NPDWR (RTCR *E. coli* MCL)	9/5/2019	1
Duration from Oldest Unaddressed Violation (yrs.)		5		
ETT Score		28		
Notes		N/A		

PWSID		PWSID-E
PWS Name		EASTON Square Water District
Population Served	Inventory	3,000
PWS Type		CWS
Source Water		Ground Water
Major Infrastructure		▪ Disinfection (Hypochlorination) ▪ 1 Elevated Water Tank ▪ 30 Miles of Pipe ▪ 90% Metered
Name of Operator	Op Cert	Donald Harris IV
Required Cert.		2
Operator Current Cert.		2
CEUs		10
Operator Notes		Chlorinator is poorly designed and does not maintain adequate disinfection. *****News Flash** (if applicable): The operator announced that he plans to retire in 8 months.
Need for DWSRF Loan	DWSRF	The PWS does not have a fence around its elevated water tank. Recently, teenagers were found climbing on the water tank. To increase security and safety, the PWS needs to install fencing and an alarm.
Project Cost		$30,000
Project Priority Points		Violations: 50 Source: 0 Storage: 0 Pressure: 0 Filtration: 0 Treatment: 12 Dist. System: 0 Well Construct.: 0 Affordability: 15 Small System: 0 Consolidation: 0 Security: 5 Asset Mgmt.: 0 Water Conserv.: 0 Green Project: 0 **TOTAL = 82**
Eligibility		Eligible
Readiness to Proceed		Not Ready
Important Notes		The PWS is funding a replacement chlorinator for two ground water wells with capital reserves. The PWS would like to initiate the fencing and chlorinator projects simultaneously but has not completed the necessary engineering and planning steps.
TMF Capacity Score	Cap Dev	92
TMF Overall Comments		One of the Level 2 Assessments performed after an *E. coli* MCL violation found the chlorinator to be faulty. The system plans on using funds from their reserves to replace it, but they are concerned that if something else happens, they might not be able to cover the costs of other repairs. Although formal enforcement has not commenced, a NOAV was sent by the Enforcement Division notifying the system of the violations.

PWSID		PWSID-E		
PWS Name		EASTON Square Water District		
Violation	Enforcement	Violation Name	Compliance Period	Severity Score by Vio. Type
		RTCR *E. coli* MCL (x2)	8/1/2019-8/31/2019	10
			9/1/2019-9/30/2019	10
		GWR Source Monitoring M/R (x2)	7/1/2018-7/31/2018	1
			9/1/2019-9/30/2019	1
		PN for NPDWR (RTCR *E. coli* MCL)	9/12/2019	1
Duration from Oldest Unaddressed Violation (yrs.)		1		
ETT Score		24		
Notes		An informal NOAV was sent concerning RTCR and PN violations. The system failed to let its customers know for 3 days about the *E. coli* MCL violation. In response, system has stated that the Level 2 Assessment performed by the Drinking Water Program found the chlorinator to be faulty. The system has stated that has replaced the chlorinator.		

PWSID	**Inventory**	**PWSID-F**
PWS Name		**FREDERICK Central Water Works**
Population Served		394
PWS Type		CWS
Source Water		Ground Water
Major Infrastructure		▪ Disinfection (Hypochlorination) ▪ 1 Elevated Water Tank ▪ 17 Miles of Pipe ▪ 100% Metered
Name of Operator	**Op Cert**	Robert Davis
Required Cert.		2
Operator Current Cert.		2
CEUs		10
Operator Notes		PWS has established a mutual aid agreement with Addison CWS (PWSID-A), in the event of an emergency. Two board members are interested in training on Rate-Setting and Asset Management.
Need for DWSRF Loan	**DWSRF**	The PWS requires a resized elevated water tank to provide sufficient capacity to serve the needs of a planned subdivision in the next 5 years. *****News Flash** (if applicable) indicates that the recent tornado caused the elevated water tank to collapse.
Project Cost		$1,200,000
Project Priority Points		Violations: 10 Source: 0 Storage: 30 Pressure: 0 Filtration: 0 Treatment: 0 Dist. System: 0 Well Construct.: 0 Affordability: 0 Small System: 12 Consolidation: 0 Security: 0 Asset Mgmt.: 0 Water Conserv.: 0 Green Project: 0 **TOTAL = 52**
Eligibility		Originally Not Eligible (project is for growth), but Eligible after tornado
Readiness to Proceed		Ready
Important Notes		There is no reserve fund.
TMF Capacity Score	**Cap Dev**	77
TMF Overall Comments		The PWS has no MCL violations on record. It does have M/R violations for Stage 2 DBPR and for LCR routine tap sampling. One year, it failed to distribute/submit its CCR. The PWS has enough money for operating expenses, but no capital reserve fund. The Water Board could benefit from training on asset management and rate setting. There are signs that some maintenance has been deferred due to lack of budget.

		Violation Name	Compliance Period	Severity Score by Vio. Type
Violation	**Enforcement**	DBPR Stage 2 M/R (x2)	1/1/2016-12/31/2016	1
			1/1/2016-12/31/2016	1
		LCR Routine Tap Sampling M/R (x2)	7/1/2015-12/31/2015	1
			1/1/2016-6/30/2016	1
		CCR Failure to Report	7/1/2017-6/30/2018	1
Duration from Oldest Unaddressed Violation (yrs.)		4		
ETT Score		9		
Notes		N/A		

PWSID		PWSID-G	
PWS Name		GUTHRIE WATER SYSTEM	
Population Served	Inventory	326	
PWS Type		CWS	
Source Water		Ground Water	
Major Infrastructure		▪ Disinfection (Hypochlorination) ▪ 1 Ground-level Water Tank ▪ 10 Miles of Pipe ▪ 98 % Metered	
Name of Operator	Op Cert	None	
Required Cert.		2	
Operator Current Cert.		N/A	
CEUs		N/A	
Operator Notes		Unable to find an operator. The clerk said that the operator retired a while ago.	
Need for DWSRF Loan	DWSRF	The PWS has a long-term arsenic compliance problem. In order to provide safe drinking water, the PWS has been trying to enter into a water system partnership with a nearby town with the hopes of interconnecting with a town's water supply. The PWS has not yet been able to establish an interconnection agreement. Since they are unable to connect, they need to install treatment.	
Project Cost		$327,000	
Project Priority Points		Violations: 40 Source: 30 Storage: 0 Pressure: 0 Filtration: 0 Treatment: 0 Dist. System: 0 Well Construct.: 0	Affordability: 0 Small System: 12 Consolidation: 25 Security: 0 Asset Mgmt.: 0 Water Conserv.: 0 Green Project: 0 **TOTAL = 117**
Eligibility		Eligible	
Readiness to Proceed		Ready	
Important Notes		This PWS is also seeking funding for this project from the USDA. There may be an opportunity to coordinate funding with the USDA.	
TMF Capacity Score	Cap Dev	73	
TMF Overall Comments		The PWS has a long-standing arsenic problem which they have tried to address by interconnecting with a neighboring PWS. They have been unable to establish an agreement. During this entire time, the system has been providing bottled water but still struggles with communicating necessary information (e.g., the need for arsenic treatment) to their customers. Their operator of 35 years retired. They are still looking for a new operator. The PWS has not performed water loss accounting since the operator left. An AO has been filed by the Enforcement Division.	

PWSID		PWSID-G		
PWS Name		GUTHRIE WATER SYSTEM		
Violation	Enforcement	Violation Name	Compliance Period	Severity Score by Vio. Type
		Arsenic MCL (x14)	1/1/2015-3/31/2015	4 quarters x 5
			1/1/2016-12/31/2016	4 quarters x 5
			1/1/2017-3/31/2017	5
			4/1/2017-6/30/2017	5
			7/1/2017-9/30/2017	5
			10/1/2017-12/31/2017	5
			1/1/2018-3/31/2018	5
			4/1/2018-6/30/2018	5
		Arsenic M/R (x14)	1/1/2015-3/31/2015	4 quarters x 1
			1/1/2018-3/31/2018	4 quarters x 1
			1/1/2017-3/31/2017	1
			4/1/2017-6/30/2017	1
			7/1/2017-9/30/2017	1
			10/1/2017-12/31/2017	1
			1/1/2018-3/31/2018	1
			4/1/2018-6/30/2018	1
Duration from Oldest Unaddressed Violation (yrs.)		0		
ETT Score		0		
Notes		Long-standing arsenic violations that the system has tried to solve with an interconnection agreement with a neighboring system. Currently providing water through an alternative source. Formal enforcement commenced with filing of AO. Violations remain unresolved. AO pending.		

PWSID	**Inventory**	**PWSID-H*** **
PWS Name		**HIDDEN HOMEOWNER'S ASSOCATION**
Population Served		45
PWS Type		CWS
Source Water		Ground Water
Major Infrastructure		▪ 1 Ground Water Well ▪ No Treatment ▪ 17 Miles of Pipe ▪ 100% Metered
Name of Operator	**Op Cert**	None
Required Cert.		1
Operator Current Cert.		N/A
CEUs		N/A
Operator Notes		N/A
Need for DWSRF Loan	**DWSRF**	The system has not applied for a loan.
Project Cost		N/A
Project Priority Points		Violations: N/A Source: N/A Storage: N/A Pressure: N/A Filtration: N/A Treatment: N/A Dist. System: N/A Well Construct.: N/A Affordability: N/A Small System: N/A Consolidation: N/A Security: N/A Asset Mgmt.: N/A Water Conserv.: N/A Green Project: N/A **TOTAL =**
Eligibility		N/A
Readiness to Proceed		N/A
Important Notes		N/A
TMF Capacity Score	**Cap**	This is a newly found system and a TMF assessment has not been conducted on the system.
TMF Overall Comments		N/A
Violation	**Enforcement**	**Violation Name** / **Compliance Period** / **Severity Score by Vio. Type**
		N/A / N/A / N/A
		N/A / N/A / N/A
		N/A / N/A / N/A
Duration from Oldest Unaddressed Violation (yrs.)		N/A
ETT Score		This is a newly found system with no violation history.
Notes		N/A

*** This system is part of a **news flash** (Newly Found PWS). If the news flash is not used in this exercise, this PWS will not be considered in final ranking.

Appendix E: Background Resources

FOR FUTURE REFERENCE

You can refer to these resources, as needed, after the exercise.

Overall Resources:

- EPA's Drinking Water Standards Quick Reference Guides: https://www.epa.gov/dwreginfo/drinking-water-rule-quick-reference-guides
- EPA's Compliance Guidance under the Safe Drinking Water Act by Regulation: https://www.epa.gov/dwreginfo/drinking-water-regulatory-information

State Drinking Water Administration:

- The Association of State Drinking Water Administrators Website: http://www.asdwa.org/
- Information About State Drinking Water Systems Programs: https://www.epa.gov/ground-water-and-drinking-water

Capacity Development:

- EPA's Small Public Water Systems and Capacity Development Website: https://www.epa.gov/dwcapacity
- EPA's Guidance on Capacity Development: https://www.epa.gov/dwcapacity/information-states-about-building-capacity-drinking-water-systems
- EPA's Tools/Resources for States and TA Providers: https://www.epa.gov/dwcapacity/technical-managerial-and-financial-tmf-capacity-resources-small-drinking-water-systems

Operator Certification:

- EPA's Operator Certification Website: https://www.epa.gov/dwcapacity
- EPA's Guidance on Operator Certification: https://www.epa.gov/dwcapacity/information-states-about-certifying-operators-drinking-water-systems
- The Association of Boards of Certification: http://www.abccert.org/

EPA's Drinking Water ERP and the ETT:

- EPA's Drinking Water Enforcement Policy: https://www.epa.gov/sites/production/files/documents/drinking_water_erp_2009.pdf
- EPA's ETT Scores Tracker and ETT Report (Note: you must be a registered user): https://echo.epa.gov/
- SDWA Dashboard: https://echo.epa.gov/trends/comparative-maps-dashboards/drinking-water-dashboard?state=National
- SDWIS Federal Reports Search: https://ofmpub.epa.gov/apex/sfdw/f?p=108:200:::NO:::

Drinking Water State Revolving Fund:

- EPA's Drinking Water State Revolving Fund Website: https://www.epa.gov/drinkingwatersrf

Drinking Water Trainings:

- Drinking Water Trainings Website: https://www.epa.gov/dwreginfo/drinking-water-trainings
- Small Systems Monthly Webinar Series: https://www.epa.gov/water-research/small-systems-monthly-webinar-series

Additional Partners:

- American Water Works Association: http://www.awwa.org/
- National Rural Water Association: http://www.nrwa.org/
- Rural Community Assistance Partnership (RCAP): http://www.rcap.org/
- Environmental Finance Center Network (EFCN): http://efcnetwork.org/