



# Water System Partnerships Handbook

**U.S. EPA Office of Ground Water and Drinking Water**

**Rollout Webinar**

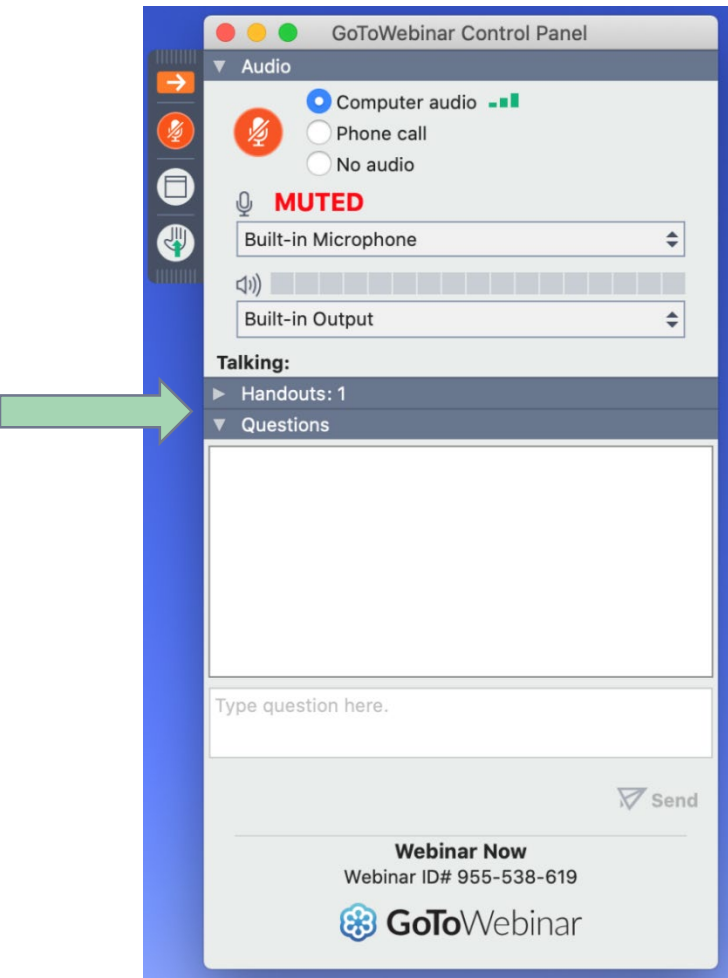
**November 18, 2020**

# Today we will:

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- Review what is meant by water system partnerships
- Introduce the Water System Partnerships Handbook
- Detail the six steps it takes to get from identifying systems in need to engaging water systems in partnership discussions
- Point out pop-ups and resource links and explain fillable worksheets within the handbook





# Webinar Housekeeping

Please familiarize yourself with the webinar panel on your screen

- Handouts
- Questions

**Question and Answer session at the end**



# Today's Presenters

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**Carla Hagerman**

**National Water System Partnerships Coordinator  
Office of Ground Water and Drinking Water**

**Matthew Reed**

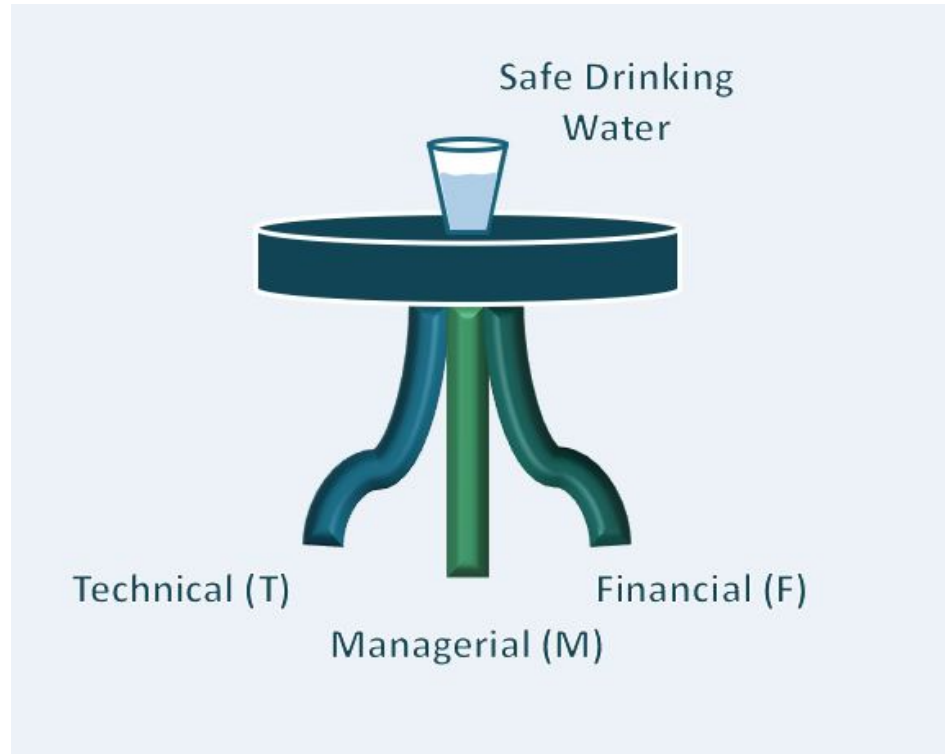
**National Operator Certification Coordinator  
Office of Ground Water and Drinking Water**



# Water System Challenges

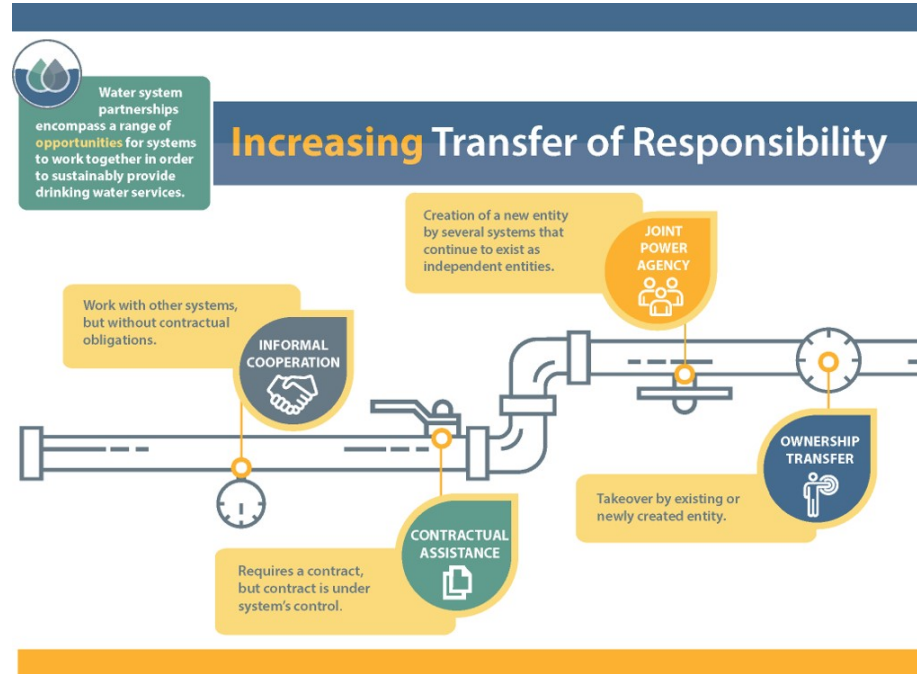
**\*PWSs need TMF capacity**

**\*Small systems face unique challenges to providing safe drinking water**

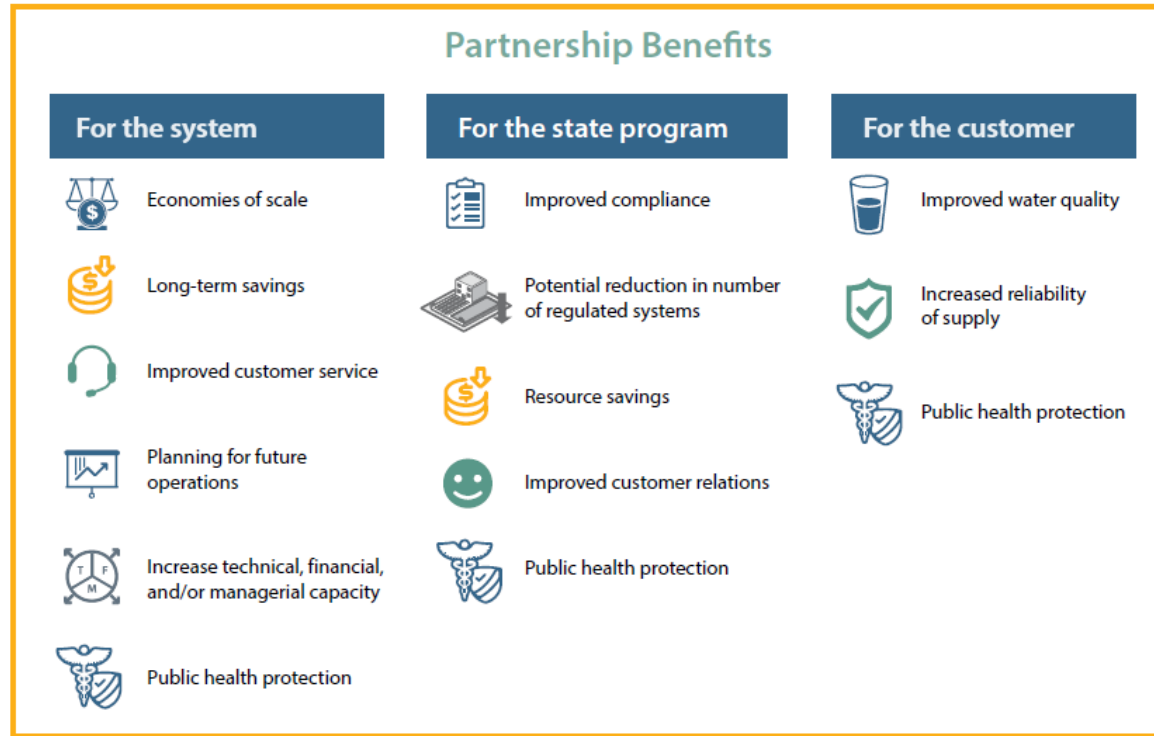


# Water System Partnerships

- Informal or formal
- Address shared challenges
- Pair systems with complementary strengths



# Benefits of Partnerships



# Types of Partnerships

There are four general types of partnerships. PWSs can also use several types of partnerships in a layered approach to improve efficiency and provide safe drinking water. For partnership examples, visit the EPA's [Interactive Partnerships Case Studies Map](#).

**Informal Cooperation:** PWSs coordinate with other PWSs without contractual obligations. [Examples and Advantages](#).

**Contractual Assistance:** PWSs contract with other PWSs or service providers. The PWSs remain independent, but certain functions are contracted out to increase efficiency. [Examples and Advantages](#).

**Joint Power Agency:** A group of PWSs create a new management entity designed to serve the PWSs that formed it. [Examples and Advantages](#).

**Ownership Transfer:** PWSs engage in mergers, mutual transfer of existing entities, or creation of a new entity. [Examples and Advantages](#).





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**Joint Power Agency:** A group of PWSs create a new entity to provide services. [Advantages](#).

**Ownership Transfer:** PWSs engage in mergers or acquisitions. [Advantages](#).

Examples of Informal cooperation partnerships may include PWSs:

- Sharing information and being available to answer questions on operations, equipment, etc.,
- Sharing equipment,
- Having mutual aid agreements for emergency response management, or
- Sharing bulk supply purchases.

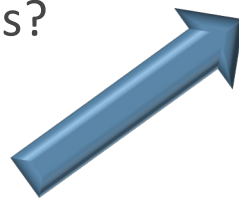
Advantages of informal cooperation include creating the opportunity for small or medium-size PWSs to increase their economies of scale, increase the pool of technical expertise by improving communication between other PWSs, and allowing PWSs to maintain local control and community identity.

Informal partnerships can be helpful in ensuring access to necessary expertise, equipment and supplies, but they may not address more significant challenges such as treatment or water supply issues.



# Helping Systems Partner

- How can you identify systems that could benefit from partnership?
- How do you identify systems with shared challenges and complementary strengths?
- **Enter:** The Water System Partnerships Handbook



# Role of State Drinking Water Program



## How to Support Water System Partnerships

### Water System Partnerships Handbook

#### Steps for Identifying, Assessing, and Launching Partnerships

##### STEP 1:

Identify PWSs in Need

##### STEP 2:

Determine How Partnerships Could Improve Compliance

##### STEP 3:

Assess Practicality of Potential Partnership Activities

##### STEP 4:

Identify on the Ground Support

##### STEP 5:

Develop a Communications Plan

##### STEP 6:

Approach PWSs About Partnerships





## **Step 1: Identify PWSs in Need**

# Brainstorm PWSs in Need

## STEP 1: IDENTIFY PWSS IN NEED

The purpose of this step is to begin identifying PWSs with compliance issues by reviewing your state's drinking water compliance and TMF capacity data. As you and your team review your state's data, you should consider the following questions:

Are there geographic patterns or areas within your state where many PWSs violate drinking water regulations?

Yes ☒ No ☐

- Where are the compliance problems concentrated (select all that apply)?

Rural Areas ☒ Suburban Areas ☐ Urban Areas ☐

- Are there areas of PWSs with similar problems?

Yes ☒ No ☐

Do PWSs using ground water or surface water have more violations?

Ground Water ☒ Surface Water ☐ Equal ☐

How many PWSs in the state are publicly-owned? How many are privately/investor-owned?

Publicly-owned: 30

Privately/Investor-owned: 5

- Are compliance challenges correlated with ownership type?

Yes ☐ No ☒

Are the highest number of violations related to monitoring or reporting?

Monitoring ☐ Reporting ☐ Equal ☒ Other (e.g., MCL) ☐

From the above questions, record any patterns you notice with your compliance and TMF capacity data. For example, the northwestern part of the state has multiple surface water PWSs in rural areas with monitoring violations. In addition, some of the PWSs in this area also have managerial-related challenges.

Rural areas have monitoring and reporting violations for groundwater.

These answers can start to determine what common challenges PWSs are facing. Using the responses above, complete the table below to identify specific PWSs that might benefit from a partnership.

## Document PWSs in Need

PWSID or PWS Name	General Location in the State	Type of Water Used	Ownership Type	PWS Size	Do they have health-based violations?	Reason for Violations	Are there similar characteristics to other PWSs?
PWS 000123	Northwestern part of the state	Surface Water	Public	Small (population about 3,000)	Yes	Multiple monitoring violations	Yes
PWS 000111	Southwest	Ground Water	Public	Small (3,500)	Yes	Reporting violations	Yes
		Surface Water	Private		No		No
PWS 000112	Southwest	Ground Water	Public	Medium (4,000)	Yes	Monitoring violations	Yes
		Surface Water	Private		No		No
PWS 000113	Southeast	Ground Water	Public	Small (3,000)	Yes	Monitoring violations	Yes
		Surface Water	Private		No		No
		Ground Water	Public		Yes		Yes
		Surface Water	Private		No		No
		Ground Water	Public		Yes		Yes
		Surface Water	Private		No		No
		Ground Water	Public		Yes		Yes
		Surface Water	Private		No		No
		Ground Water	Public		Yes		Yes
		Surface Water	Private		No		No

Clear Form

You now have a list of PWSs that could benefit from a partnership. In the next step, you will review the PWSs identified and brainstorm what types of partnerships may help PWSs overcome the identified challenges.



## **Step 2: Determine How Partnerships Could Improve Compliance**

# Factors to Consider for Partnerships

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## **Technical Factors:**

- No certified operator
- Water quality or quantity
- Failing infrastructure

## **Administrative Factors:**

- Compliance with regulations

## **Community Factors:**

- Maintain local control, identity, and self-sufficiency
- Overwhelmed with responsibilities





# Additional Questions to Consider

If the partnership option under consideration requires geographic proximity, make sure the geographic area considered is broad enough to include multiple options for potential partners, but limited enough to make a partnership feasible. Some partnership options, such as contracting management services like payroll and billing, may not necessarily rely on geographic proximity and consideration can include partners outside the region.

Select the button to the right for additional questions to consider when deciding whether certain partnership options may be effective for a particular PWS.

Additional Questions to Consider >>>

Answers to the questions below will help your team identify PWSs that could benefit from partnership activities.

What is the physical condition of the facility? **Old facility**

- Have there been any recent renovations? Yes ☐ No ☒
- Are there concerns about aging infrastructure? Yes ☒ No ☐
- Were any significant deficiencies identified during the last sanitary survey? Yes ☒ No ☐

What is the current service area and where are the existing facilities? If necessary, consult a map that shows the service area, existing/proposed facilities, site plan, etc.

**Existing facilities are in rural area and are difficult to access.**

Is there an available asset management plan? Yes ☒ No ☐

Is the supply quantity or quality adequate for demand? Yes ☒ No ☐

- If not, are supply concerns about source quantity or quality? quantity ☐ quality ☐

# Grouping PWSs for Partnerships

Grouping	PWS Name or ID	Reason PWS Fits in Grouping	Role in Partnership/ Strengths	Identified Partnership Solution (Type)	Grouping Foundation/Title
1	000123	Similar area and monitoring violations	Needs access to a part-time certified operator	Contractual Assistance	Northwestern Surface Water PWSs
1	123000	Similar area and monitoring violations	High operator turn-over, cannot keep an operator on full-time	Contractual Assistance	Northwestern Surface Water PWSs
1 2 3 4	PWS 000111 PWS 000112 PWS 000113	Same water source and similar monitoring violations	Certified operator new and inexperienced	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	Southern Ground Water PWSs
1 2 3 4	PWS 000111 PWS 000112 PWS 000113	Same water source and similar monitoring violations	Full time operator overloaded	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	Southern Ground Water PWSs
1 2 3 4	PWS 000111 PWS 000112 PWS 000113	The PWS Names and IDs entered in the previous table should auto-populate here. If you do not see them, click into another cell and back into the PWS Name or ID cell to reset the field.		Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	





## **Step 3: Practical Assessment Of Identified Partnership Types And Partners**

# Possible Partnership Activities

Grouping Foundation/Title:

Southern Ground Water PWSs

If you do not see any selectable options, click in and out of each cell to reset the fields.

Partnership Type:
☐ Informal Cooperation
☒ Contractual Assistance
☐ Joint Power Agency
☐ Ownership Transfer

PWSs Included in the Partnership	Possible Partnership Activities	How does this solve the PWSs' violations identified in Step 1?	What are the possible challenges to partnership implementation?
✓ Example PWS			
✓ PWS 000111	Contract 112 operator to support 113	112 learns from experiences operator 113 gets support	Potential to overload 113 if not receiving sufficient support from 112
✓ PWS 000112			
✓ PWS 000113			

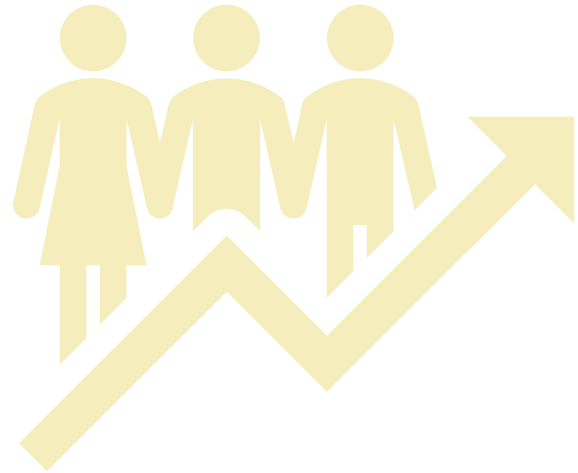
Do any of the challenges (e.g., geographic location) make this partnership type unfeasible?

Yes ☐
No ☒

# Consider if Partnerships are Feasible

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- Consider:
  - Availability of support
  - Financial implications
  - How to build and maintain relationships



# Incentives for Partnerships

- What short- and long-term incentives are available and can be used to promote partnerships with the PWS(s)? List available incentives (e.g., economies of scale):

**Sharing resources, Improved compliance, Improved water quality, Increased experience,**

- Based on the questions you answered and the form you completed partnerships and partnership activities are most feasible to pursue. Talk could address PWSs' needs and barriers to success.

**Southern Ground Water PWSs**



## Incentivize Partnership

Partnership incentives include the inherent benefits and additional financial or outreach-related benefits that the state offers to PWSs that engage in partnerships. The most effective way that you can promote partnerships is to ensure that PWSs:

- Recognize partnership potential,
- Raise awareness of challenges, and
- Consider the options available to PWSs to improve operations and provide safe drinking water to their customers.

You and your team can help PWSs benefit from partnerships by:

- Educating PWSs on how partnership options can help achieve and maintain compliance, and
- Creating incentives that help PWSs consider new ways of maintaining compliance.

## Enforcement as an Incentive

Keeping the PWS informed of their compliance status, including notice of violations and enforcement, can help improve communication and understanding. Prior to working with PWSs to determine the partnership options that are right for them, ensure that the state has the necessary legislation in place to support those decisions.





## **Step 4: Identify Project Champions and On The Ground Support**

# Champions, Allies, and Stakeholders





# Champions, Allies, and Stakeholders

Consider possible champions for the partnership you identified as most feasible under Step 3.

Do any of the communities or PWSs have strong champions already identified? Yes ☒ No ☐

Who are they?

Owners, Operators, Citizen Organizations, and TA provider

13

How to Support Water System Partnerships

Engaging with these individuals or organizations early and often in the development and planning stages can help keep momentum and can also aid in early communications with PWSs and communities.

Are there PWSs that do not have identified champions? Yes ☒ No ☐

If so, use the list of possible champions above to identify possible champions for the partnership:

TA provider



# Champions, Allies, and Stakeholders





## **Step 5: Develop a Plan for Communicating with Stakeholders**

# Develop a Communications Plan

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- Identifying the right messenger
- Communicating the significance of partnerships
- Addressing community concerns
- Communicating community benefits



# Document Stakeholders

	Grouping/Foundation Title: Southern Ground Water PWSs				
If not already developed during Step 4, develop a full list, consider the following:					
What are the stakeholder groups that may be affected the PWS?					
Customers; Entity staff, operators, and managers; organizing group	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	PWS Owner	Monitoring violations	Champion Ally Stakeholder	Press conference
	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	Water System Customers	Degraded water quality	Champion Ally Stakeholder	Public forum, Letter to customers
Who would be impacted if a PWS were to engage	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	Local health department	Monitoring violations	Champion Ally Stakeholder	Press conference
Customers; Entity staff, operators, and managers; organizing group	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	Community organizing group	Degraded water quality	Champion Ally Stakeholder	Public forum
Who would be impacted if the PWS were to become	Informal Cooperation Contractual Assistance Joint Power Agency Ownership Transfer	Local schools and childcare facilities	Degraded water quality	Champion Ally Stakeholder	Public forum, Letter to affected schools
Customers; Entity staff, operators, and managers; organizing group					



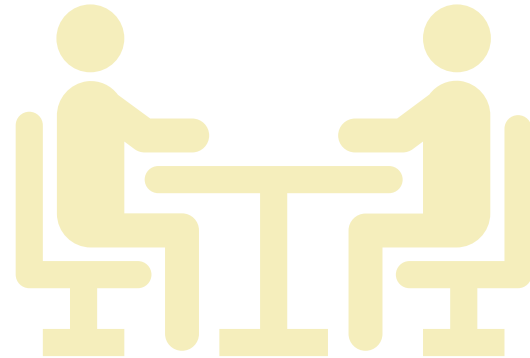


## **Step 6: Approach PWSs About Partnerships**

# Approaching PWSs for Partnerships

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- Consider:
  - Best way to meet with project champions, allies, stakeholders, and PWSs
  - Type of communication
  - Previous studies
  - Previous partnerships



# Example of Partnerships Actions

Example of Partnership Actions	Your Role	PWS Role
Obtaining the necessary approvals	Inform PWSs of approval requirements and help them navigate the process.	If any of the participating PWSs are privately/investor owned, state PUC approval may be required.
Obtaining financing	Provide information on available grants and loans that can be used to fund partnerships. Educate PWSs on funding procedures. Help PWSs make the case to funding agencies that partnerships promote compliance.	Secure grants or loans to help facilitate partnerships. Investigate financing sources to minimize the impact on the local ratepayer. Understand funding procedures and how other PWSs have utilized funding for partnership.
Approving plans and specifications	Educate the PWS on plan reviews and encourage them to use an impartial technical assistance provider to improve the likelihood of success.	If part of the partnership involves engineering changes, a plan review is usually required.
Finding sources of technical assistance	Help PWSs make connections with technical assistance providers in the State (such as NRW or RCAP).	Contact and obtain necessary technical assistance from providers who are willing to help in the partnership effort.
Supporting regional planning activities	Attend community meetings to show support for partnerships.	Hold community meetings to gain buy-in for partnership options and to educate others on how the partnership will help the PWSs overcome present and future challenges.
Plans and specifications for construction-related projects	Approve engineering plans and specifications.	Complete engineering plans and specifications and submit them to the state.
Notify customers of partnership	Help PWSs ensure clear messaging to customers.	Contact customers via letter and email. Provide useful information to inform customers.







**Questions?**



Thank You!

[Hagerman.carla@epa.gov](mailto:Hagerman.carla@epa.gov)

[Reed.matthew@epa.gov](mailto:Reed.matthew@epa.gov)

Water System Partnership Website:  
<https://www.epa.gov/dwcapacity/water-system-partnerships>