

### Participant Packet

### Water System Partnerships Workshop

### **Contents**

<u>Agenda</u>

**Speaker Bios and Contact Information** 

Slide Deck

**Case Studies and Examples** 

Water System Scenario

Module 3 Exercise

Module 6 Exercise

Module 8 Exercise

**Acronym List** 

Resources Guide

Business Plan Outline

Partnerships Checklist

**Attendee Contact Information** 

Feedback Form





### Example Agenda

### Water System Partnerships Workshop

### [Month Day, Year]

### [Insert Location]

8:00 am	Sign-in/Registration
8:30	Introductions and Workshop Logistics
9:00	Module 1: Capacity Development
9:45	Module 2: Partnerships Overview
10:30	Break
10:45	Module 3: Current Partnerships Activities Exercise
11:30	Module 4: Identifying Strengths and Challenges
12:15 pm	Lunch and Guest Speaker
1:00	Module 5: Identifying and Assessing Partnerships Opportunities
2:00	Module 6: Expanding Partnerships Activities Exercise
3:00	Break
3:15	Module 7: Implementing Possible Partnerships Solutions
4:15	Module 8: Partnerships Action Plan Exercise
5:15	Wrap-up and Business Card Exchange





### Speaker Information

Water System Partnerships Workshop

# Speaker Bios and Contact Information





### Module 1: Capacity Development Module 2: Partnerships Overview Module 3: Current Partnerships Activities Exercise Module 4: Identifying Strengths and Challenges Module 5: Identifying and Assessing Partnerships Opportunities Module 6: Expanding Partnerships Activities Exercise Module 7: Implementing Possible Partnerships Solutions Module 8: Partnerships Action Plan Exercise



### What is Capacity? • The ability to plan for, achieve, and maintain compliance with applicable drinking water and wastewater standards • Includes sufficient capabilities in three areas: • Technical (T) • Managerial (M) • Financial (F) • Partnerships can help water systems overcome barriers to meeting capacity

### What Are Water System Partnerships? • Any informal or formal relationship or agreement that water systems engage in • They can: • Assist small and mid-size water systems in overcoming unique challenges • Build TMF capacity for water systems • Provide a wide range of opportunities for water systems to work together





### ☐ Technical, managerial, and financial (TMF) capacity ☐ Elements and examples of TMF capacity ☐ Importance of building capacity

8

### What is Capacity?

- Capacity Development programs allow water systems to obtain more robust TMF capacity which helps them provide quality services
- Manages challenges water systems face,
- including:
   Regulatory compliance Retaining staff
- Infrastructure needs
   Training needs
- Insufficient revenue
   Water security
- Recruiting staff
- Declining populations





### Why Build Capacity?

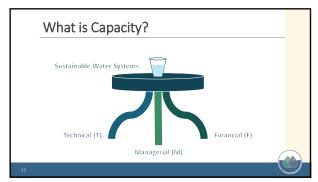
- Capacity is critical to achieving and maintaining compliance
- Water systems must have TMF capacity to receive SRF funding (or the funding must help the water system achieve TMF capacity)
- EPA can withhold 20 percent of capitalization grant funds from states that do not meet regulatory requirements for capacity development
- Linking these two important programs, Capacity Development and SRF, shows the importance placed on capacity





praced on capacity

10



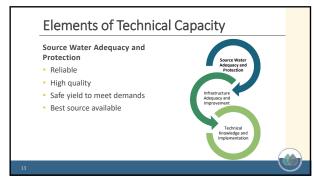
11

### TMF Capacity: Technical

**Technical Capacity**: The physical and operational ability of a water system to meet regulatory requirements, including the adequacy of physical infrastructure and the technical knowledge

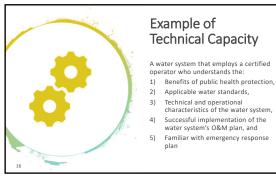
### Examples

- Maintaining high quality source water
- Replacing outdated infrastructure
- Operating and maintaining treatment and distribution system



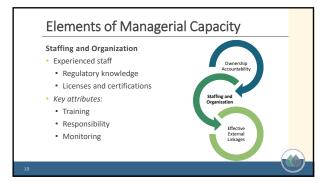
# Infrastructure Adequacy and Improvement Adequate infrastructure Adequate planning Asset management Water loss programs Resilient to all-hazards High quality maps Adequate planning Asset management Asset manag

# Elements of Technical Capacity Technical Knowledge and Implementation Operators have: Certification Sufficient technical knowledge Understanding of water systems Water system has effective O&M program Technical Knowledge and Implementation

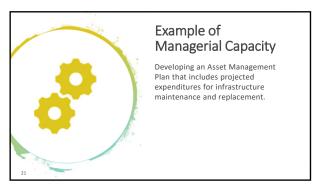


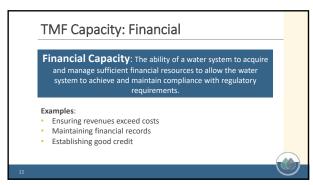
# TMF Capacity: Managerial Managerial Capacity: The ability of a water system to conduct its affairs in a manner enabling the water system to achieve and maintain compliance with regulatory requirements, including institutional and administrative capabilities. Examples: Identifying water system ownership Staffing the appropriate personnel Communicating regularly with customers Rural Development 10 Key Management Areas

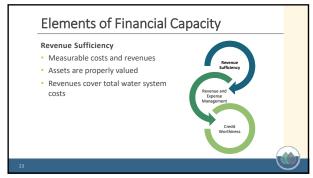
# Elements of Managerial Capacity Ownership Accountability I dentification of operators and managers Elements of Managerial Capacity Ownership Accountability Staffing and Organization Staffing and Organization Effective External Linkages

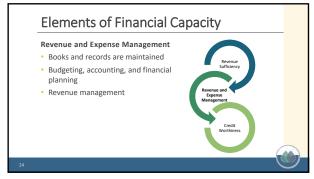


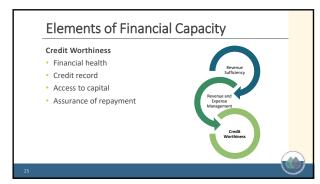
# Effective External Linkages Stakeholder interactions External resource awareness Key attributes: Planning Asset management Planning Asset management Compliance Water loss programs Effective External Linkages Effective External Linkages







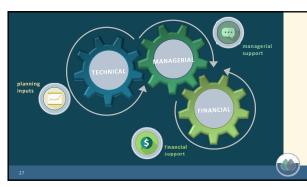




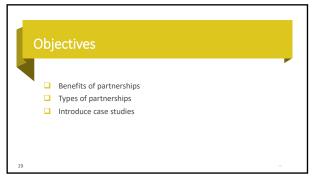


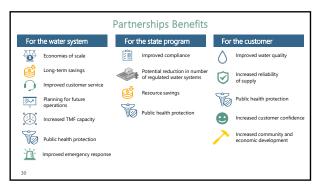
### Example of Financial Capacity

A water system with **sufficient revenue** to hire and retain enough certified operators to achieve and maintain compliance with regulatory requirements. The water system has a **good credit record**, making the water system eligible for loans when upgrades are needed.









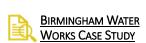


### Informal Cooperation

### Coordinated activity without contractual obligations

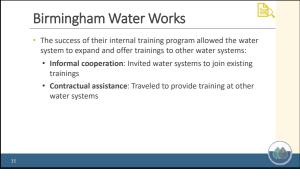
- Purchase chemicals in bulk
- Share equipment
- Create informal mutual aid agreements without contractual obligations
- Share contacts when there are questions

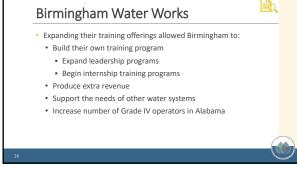
32

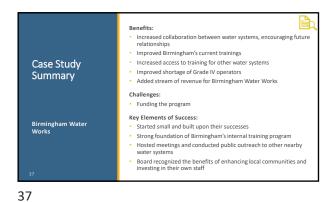




## Birmingham Water Works In 2008, Birmingham Water Works created an internal training program Shifting to internal trainings led to: Increased employee retention Increased promotion rates Reduced training costs Reduced hiring costs More knowledgeable staff







### **Contractual Assistance**

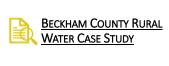
### Contract with another water system or service provider

- Purchasing water from another water system
- Contracting out O&M to another water system
- Formal Mutual Aid Agreements such as Water/Wastewater Agency Response Networks

### Example

A village in Illinois did not have a sufficient water supply to provide adequate fire protection for the town. Water supply concerns as well as infrastructure needs led the village to contract all public works services, including water, out to St. Louis-based Environmental Management Corporation

38

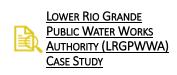




### A small water system in Beckham County, Oklahoma was experiencing challenges meeting technical demands and lost their only employee The Board contracted with Water Systems Management to fully manage and operate the water system Contracting was more cost-effective than hiring an operator



### 





### **LRGPWWA**



- Five mutual domestic water associations began meeting regularly to discuss regional challenges and efforts (informal cooperation)
  - Regular meetings helped build relationships and the associations began to discuss opportunities to partner
  - Built a foundation of trust between the partners, lowering the perceived risk for partners involved
- Eventually, created a Joint Power Agency

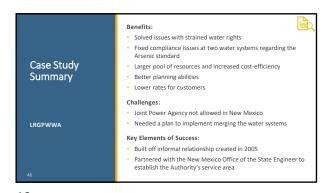
44

### **LRGPWWA**



### Timeline

- 2005: Memorandum of Understanding between four original mutual domestic water associations
- 2009: New Mexico passed House Bill 185, creating the LRGPWWA and giving them legal standing to discuss mergers
- 2016: Four additional domestic water associations joined the Authority



### Ownership Transfer

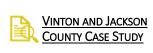
Merger or mutual transfer of an existing entity or newly created entity

- One water system acquiring another
- One water system formally connecting to another through a physical, financial, and managerial connection

Example

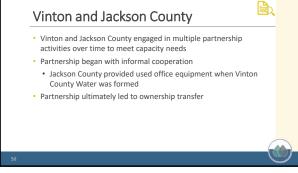
Isle of Pines water system, located in South Carolina, suffered from a poor-quality ground water source, an untrained operator, and frequent distribution line breaks. The neighboring Town of Chapin extended drinking water service to Isle of Pines and assumed ownership of the water system.

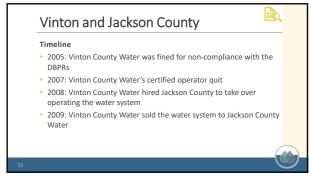
47

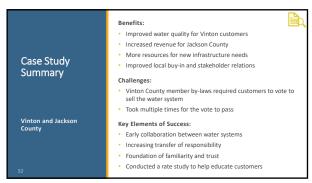


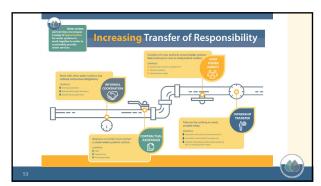


# Vinton and Jackson County Two water systems in rural southeastern Ohio Vinton County faced challenges meeting TMF capacity, including concerns with: Source water quality Low revenue streams Inability to maintain a certified operator







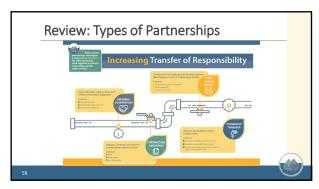


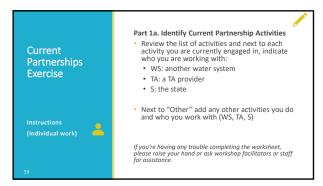




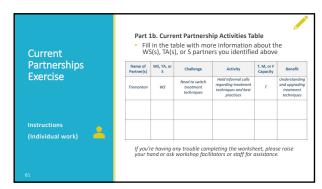


Technical	Managerial	Financial
Source water adequacy and protection     Infrastructure adequacy and improvement     Technical knowledge and implementation	Ownership accountability     Staffing and organization     Effective external linkages	Revenue sufficiency     Revenue and expense management     Credit worthiness



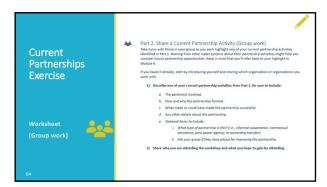


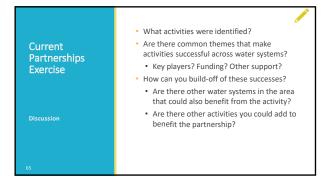
Current	program staff on any of the activities below? Next indicate if you are working with another water syst state (5). If you work with multiple organizations, it "Other" add any other activities you do that are no with (WS, TA, or S). Informal Cooperation Activities	em (WS), a technical assistance provider (TA), the
Partnerships	Call or receive calls to get or give advice	Provide or receive services at cost
Exercise	Create informal mutual aid agreements Have informal check-in meetings/calls	Share an operator
Exercise	Have standing meetings/calls	Joint Power Agency Activities
	Provide or receive training	Belong to a regional water system
	Purchase chemicals in bulk with other	Construct a shared water system
	water systems	Coordinate with water systems in your
	Purchase equipment for joint use (e.g., emergency generators)	region to plan for drought/resiliency Have satellite management
Worksheet _	Purchase lab testing services in bulk with other water systems	Manage sampling for multiple water systems
worksneet	Purchase other supplies in bulk	Program of shared operation and/or
(Individual work)	Receive or lend equipment/parts	management
	Contractual Assistance Activities	Ownership Transfer Activities
	Contract administrative support	Have a permanent interconnection to
	Contract billing services	another water system
	Contract management	Acquisition and physical interconnection
	Contract operations	Acquisition and satellite management
	Formal agreement with another local government entity	Transfer of privately-owned water system to a new or existing public entity



Current	partner you id with them add managerial, ar	dentified above dresses, the act and financial (Th	, whether they are a tivity your partnersh	water system, technical as W\$, TA, or \$ program, th igo with them entails, the rtnership with them addr artnership.  Activity	element(s) of	your partnership 🤌 f technical,
Partnerships Exercise	Tremonton	ws	Need to switch treatment techniques	Hold informal calls regarding treatment techniques and best practices	7	Understanding and upgrading treatment techniques
Worksheet (Individual work)						

	<b>/</b>			
	Part 2. Share a Current Partnership Activity			
Current	<ol> <li>Describe one of your activities from Part 1</li> </ol>			
Partnerships	a. The partner(s)			
Exercise	<ul> <li>b. How and why the partnership formed</li> </ul>			
Exercise	<ul> <li>c. What made or could have made the partnership successful</li> </ul>			
	d. Any other details			
	e. Optional: categorize your partnership; ask for advice			
Instructions (Group work)	<ol> <li>Share why you are attending the workshop and what you hope to gain by attending</li> </ol>			
	If you're having any trouble completing the worksheet, please raise your hand or ask workshop facilitators or staff for assistance.			
63				









### Identifying Strengths and Challenges Identify strengths of the water system Consider if you could share or leverage those strengths by partnering to help another water system Identify challenges or areas of capacity to improve upon Consider if a partnership could help overcome those challenges or increase capacity

# Identifying Strengths and Challenges Physical characteristics water systems should focus on: Facility condition Infrastructure adequacy Demand Supply Needs

### Identifying Strengths and Challenges

- Operational characteristics water systems should focus on:
  - Service area
  - · Technical expertise
  - Financial status
  - Financing options
  - Barriers



70

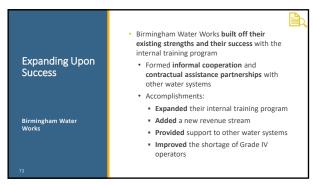
### Address Challenges through Partnerships

- Consider other partnerships in the area and what is possible, asking:
  - Are there options to contract O&M?
  - Are there other water systems that might be able to acquire or merge with the water system?
  - Has the water system considered forming a new water system or management group to oversee multiple existing water systems?
  - Are there other water systems that might be interested in collaborating?
  - Do franchises or exclusive service areas currently exist in the area?

71

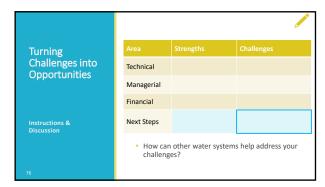
### Build off Strengths to Develop Partnerships

- Using existing successes and strengths, water systems can:
- Develop new partnerships to support other water systems
- Build on existing partnerships to:
  - Engage in additional activities
  - Engage additional partners

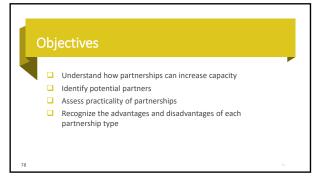


Expand upon Strengths and Challenges	Brainstorm your water system strengths and challenges and how they fit into TMF capacity			
	Area	Strengths	Challenges	
	Technical			
	Managerial			
Instructions & Discussion	Financial			
74				

Turning	Area	Strengths	Challenges
Challenges into Opportunities	Technical		
Opportunities	Managerial		
	Financial		
Instructions & Discussion	Next Steps		
		you use your water other water systems?	
75			









### Review: Improving Capacity Through Partnerships

### Technical

• Share technical expertise or contract with other certified operators

### Managerial

• Share and/or contract out administrative functions such as billing

### Financial

 Share costs, find additional revenue streams, increase number of customers, or increase economies of scale



80

### Using Partnerships to Improve TMF Capacity

Vinton and Jackson County

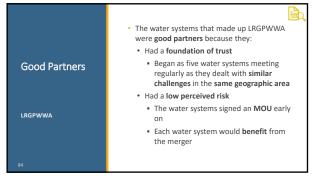


- Vinton County struggled to meet TMF capacity, specifically:
- Technical staff turnover • Financial - increasing O&M costs
- When Vinton's operator quit, Vinton engaged in partnership activities with Jackson County
- Vinton hired Jackson to fulfill operator duties and meet TMF capacity

0	1
0	т.



# What Makes a Good Partner? Trust Knowing the partner and key players to ensure you can trust them (i.e., symbiotic) Trust Similar or stronger characteristics (where needed) For example, physical condition, source, and/or location



### **Identify Potential Partners**

- · Consider the following:
- Common needs
- Existing relationships
- Physical condition of a potential partner facility
- Geography
- · Adequacy of supply
- State policies
- Consolidation



85

### What Water Systems Should Consider

- Other water systems might be experiencing the same challenges
- Consider other water systems that might be:
  - Using the same water source
  - Using similar treatment methods

  - Relying on the same or similar supply chains
     Experiencing an increase in demand (or will in the future)
     Experiencing financial instability
- Experiencing emergencies
- Determine how to compromise if a water system has different challenges

86

### What Water Systems Should Consider

### **Existing relationships**

- Build off existing relationships to
  - Engage in partnership activities
  - Engage additional partners

### What Water Systems Should Consider Physical condition of a potential partner facility If a facility is substandard in design or otherwise having significant deficiencies, physical interconnection or acquisition without interconnection might be needed

88

### What Water Systems Should Consider

### Geography

- Interconnection of two water systems might be unlikely if the distance between water systems is too large or interconnection is too costly
- Water systems might have environmental factors that could make connection challenging as well

89

### What Water Systems Should Consider

### Adequacy of supply

- Might need to find an alternate source or adjust treatment techniques to accommodate for **source limitations**
- Resolving supply-related challenges might require substantial investment in treatment techniques or establishing an interconnection with a neighboring water system

### What Water Systems Should Consider

### State policies

- Mergers in most states follow a similar process; generally, entities must create a plan of merger to be approved by their stakeholders or board members
- Joint power agencies in many states must file an agreement with their Attorney General or Secretary of State

91

### What Water Systems Should Consider

### Consolidation

- Many states require new water systems to consider interconnections to existing water systems
- Existing water systems can consider consolidation to other existing water systems, physically or managerially
- Physical consolidation: For water systems who no longer wish to provide water services
- Managerial consolidation: For water systems who no longer wish to conduct managerial services, such as reporting and billing

92



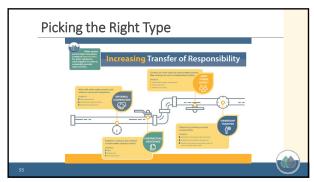
Instructions and Discussion

- · Brainstorm the following:
  - What are some qualities of a water system you would trust as a partner?
- How could water systems build trust with each other to demonstrate they will make good partners and protect each other?

Write down your answers

Share with the group to compile a list of qualities to consider in a trusted partner and ways to build trust with others





95

### **Informal Cooperation**

### Advantages

- Expands pool of technical expertise
- Allows water systems to maintain local control and flexibility of service
- · Increases economies of scale

### Disadvantages

- Might not solve significant problems such as issues with treatment or source water
- No binding contract could lead to inconsistency

### Contractual Assistance

### **Advantages**

- Allows water systems to maintain local control
- Improves TMF capacity
- Solves challenges that informal partnerships cannot
- Binding contract leads to consistency and clarity
- Formal agreements may not have contractual obligations

### Disadvantages

- Relies on the availability of service providers or neighboring water systems with the capacity to provide support
- Might not remedy all challenges



97

### Joint Power Agency

### Advantages

- Increases economies of scale and pool of technical and managerial expertise by consolidating shared services into one group or office
- Might help lower or avoid increasing rates

### **Disadvantages**

- Might require third-party facilitation which can be resource and time intensive
- Might be politically challenging
- Water systems and communities might fear a loss of local control



98

### **Ownership Transfer**

### **Advantages**

- Increases access to capital, eligibility for public funding, and other incentives
- Can address severe problems
- Increases level of TMF capacity
- Increases economies of scale

### Disadvantages

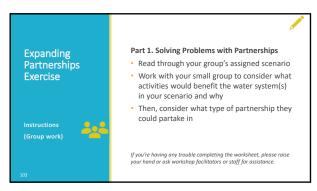
- Water systems and communities might fear a loss of local control or have concern about rate increases
- A water system must be willing to receive another water system
- Formation or transfer can be complicated
- Compensation for acquisitions might not be enough of an incentive or cover uncertain costs

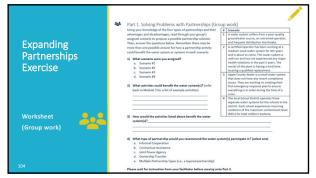


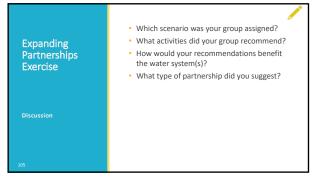


























### Stakeholder Outreach and Communication

- Effective stakeholder outreach and communication involves many steps. The primary considerations are:
  - Finding and building support
  - Effectively communicating
  - Overcoming barriers

113

113

## Stakeholder Outreach and Communication

- Finding and building support
  - Identifying project support
  - Engaging key stakeholders
  - Documenting stakeholders

114

# Stakeholder Outreach and Communication Effectively communicating Developing a communications plan Communicating the benefits of partnerships Identifying the right messenger

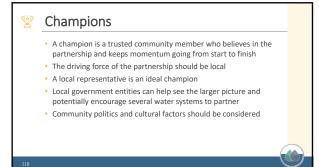
115

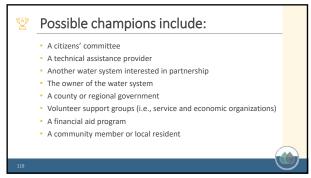
## Stakeholder Outreach and Communication

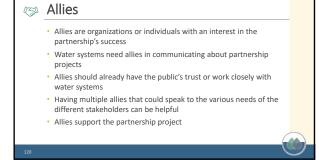
- Overcoming barriers
  - Understanding barriers to change
  - Assessing political concerns

116









(Carl	Possible allies include	le:
	Community groups Customers Entity staff, operators, and managers Elected officials, such as mayors and city councils County judges and commissioners Technical assistance providers Regulatory agency staff Senior centers or community centers Local or state health departments Local chamber of commerce	Local business owners     Public Utilities Commissions     State Department of Education     Tribes     Faith-based organizations     Recreational departments     Tourism bureaus     Regional planning committees     Public Service Commissions     Schools and childcare facilities     The media

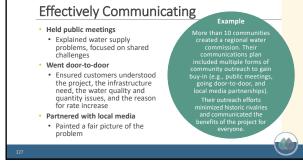
# Stakeholders Stakeholders are customers and other groups who may be impacted by the implementation of the partnership Develop a full list of potential stakeholders for the project Identify community pain points and stakeholders that may not be proponents of the partnership Engage stakeholders who may not be proponents in discussions Utilize allies to help communicate the value of partnerships to stakeholder groups that may not understand or see the benefits of a partnership

# Possible stakeholders include: Water system customers Water system owner(s) and staff School and childcare facilities Senior centers Community centers Local or state health departments





# Clear communication from a local leader (champion) is critical to the success of partnership A communications plan should help all stakeholders work together Their own with together Example More than 10 communities created a regional water commission. Their communications plan included multiple forms of community outreach to gain buy-in (e.g., public meetings, going door-to-door, and local media partnerships). Their outreach efforts minimized historic rivalries and communicated the benefits of the project for everyone.



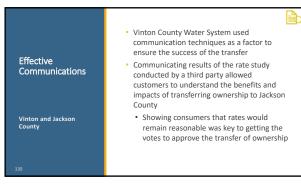
## **Communications Plan Considerations**

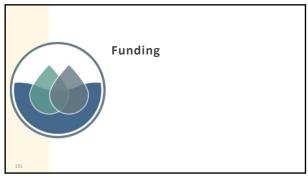
- General or water system specific challenges that could impact how the partnership should be communicated
- Information that should be emphasized
- Potential communication challenges

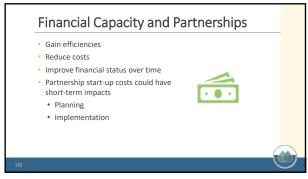
128

128

# Informal Cooperation and Contractual Assistance Can typically be more casual Share updates by posting to social media page or website Phone calls to update stakeholders Share updates at your city or town hall Dint Power Agency and Ownership Transfer Will be more formal Share updates with notifications in county, city or town newspapers Meetings to update stakeholders, identify champions and allies Obtain necessary community approvals at city or town halls







## How to Fund Partnerships Activities

- Federal and State Funding
  - SRF (State Revolving Fund)
  - USDA (e.g., Rural Development Loans and Grants)
  - HUD (e.g., Community Development Block Grants)
- Funding Resources
- Water Finance Clearinghouse (web portal)
- Contact SRF agencies and state Rural Development offices
- State Rural Development offices

133

### How to Fund Partnerships Activities

- Feasibility Study
  - Assess the practicality of implementing a water system project or partnership activity
  - Evaluate multiple plans to determine the most favorable
  - Funds could come from the state or other federal agencies

If a new water treatment plant is needed for an area, a feasibility study could compare the cost to build the plant at various locations or connect to an existing water system.

134

134

## **Funding Feasibility Studies**

- Feasibility studies can often be funded using the same sources as those used for other partnership activities
- Sources of technical assistance for a feasibility study could include:
  - Rural Community Assistance Partnership
  - National Rural Water Association
  - EPA's Water Finance Center

135



# Importance of Funding

- Required and vital to the success of a partnership
- Can be used in a variety of ways:
  - Technical assistance
- Hire a business manager
  Implement the partnership

136



137









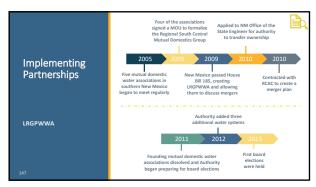
# Putting it Together: The Business Plan Create a business plan Focus on areas where there may be ways to reduce any redundancy of managerial and financial operations Provide guidance, tips, resources, and tools to use in the partnership

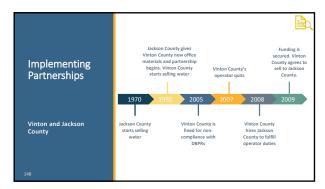
# Introduction I. Organizational Structure and Services Agreement III. Forming the Partnership IV. Best Management Practices V. Financial Information VI. Community Information and Outreach VII. Job Descriptions VIII. Questions and Concerns IX. Resources and Other Tools



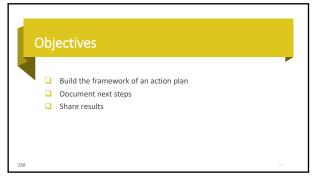
# Implementing Partnerships Involved process that can take years Example activities: Buy-in and trust building Developing a business plan Obtaining necessary approvals Securing funds Construction-related plans and specifications Regional planning activities

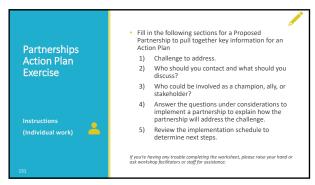












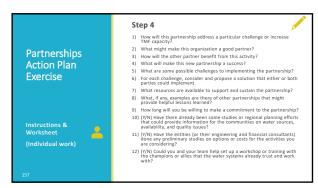
	Step 1
Partnerships Action Plan Exercise	Proposed Partnership Information (Opportunity A or Opportunity B)     The information in this section can be used to create an introduction for the Action Plan to provide key background information and key players.  Challenge to address:
	Activity:
	Partner(s):
Worksheet (Individual work)	Point of Contact (your information):
152	

	Step 2	
Partnerships Action Plan Exercise	2) General Contacts Us on the contexts for each category below and fill in discussion points for each. Consider the key posts you want to communicate to each contact including why the partnership is a good solutions, see posts you want to communicate to each contact including why the partnership is a good solutions, see to review specific partnership benefit Start may rescribed with different addresses. Varies water specific partnership benefit Start may rescribed with different addresses. Varies water specific partnership benefit solition partnership processed what information do the need in refer the understand the partnership benefits and approximation disposal contact in discuss tempors, and proceeding partnership when the protecting partner organization do you need to contact to dis- forming the partnership? What reservation could they have been partnership? In contact to dis- forming the partnership? What reservation could they have been partnership? In contact to dis- forming the partnership? What reservation could they have been partnership? In contact to dis-	eck he ney cuss
	Category Contact Name and Affiliation Discussion Points	
Instructions (Individual work)	Your water system's decision maker(s)	
153	Potential partners	



Partnerships Action Plan  Exercise  Step 3  3. Champions, Allies, and Stakeholders  1. Champions, Allies, and Stakeholders  2. Champions, Allies, and Stakeholders  3. Champions, Allies, and Stakeholders  2. Champions, Allies, and passed per lamb quarter of the partnership of the first better the last by the second per lamb quarter of the partnership of the control of the partnership of the partnersh				
	Role Contact Name and Affiliation Discussion Points			
Instructions	Champion Ally			
(Individual work)	ABy			
	Stakeholder			
155	Stakeholder			





	Step 5				
Partnerships Action Plan Exercise	5) Partnership implementation Schedule The following cample implementation schedule provides suggested steps to form a partnership and the order in which they school be completed. We be belied table on the next page to complete your own implementation schedule. Determine the order to implement the steps to make sure you've following a schedule that works for your scenario and partners.  Example Implementation Schedule				
	Step in Forming Partnership	Additional Information on System Role	Order to Implement		
	Buy-in and trust building	Shared activities, open communication, and developing relationships with personnel are important steps to corvince potential partners that a partnership will result in mutual benefit. This is an ongoing process that may take some time.	2nd		
Instructions &	Developing a business plan	Focus on areas where there may be ways to reduce redundancy of managerial and financial operations. The business plan should provide guidance, tips, resources, and tools to use in the partnership as well as information provided in this Action Plan.	1st		
(Individual work)	Obtaining financing	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 systems have utilized funding for partnerships.	5th		
	Approving plans and specifications	Plan review for engineering specifications.	4th		
	Finding sources of technical assistance	Contact and obtain necessary technical assistance from providers who are willing to help in the partnership effort.	3rd		

	Step	5			
		Step in Forming Partnership	Additional Information on Water System Role	Order to Implement	
Partnerships				1"	
Action Plan				2 <sup>nd</sup>	
Exercise				3**	
Instructions &					
(Individual work)					

### Partnerships Action Plan Exercise

Discussion

- What else should be included in an Action Plan?
- Who will be your critical allies?
- Did anything come up in the questions/considerations section that you hadn't considered?
- What would be the most challenging aspect of the implementation schedule?
- Can we produce and share any suggestions for making those aspects more manageable?

160

### Wrap-up

- Partnerships encompass a range of opportunities and address TMF
- We covered how to:
- Identify your water system's strengths and challenges
- · Identify a good partner
- Identify the appropriate partnership type
- Expand upon current partnerships to create new opportunities
- Set actionable items to implement partnerships
- Visit the EPA's Partnerships website for more information: <a href="https://www.epa.gov/dwcapacity/water-system-partnershi">https://www.epa.gov/dwcapacity/water-system-partnershi</a>

161







# Case Studies and Examples Water System Partnerships Workshop

Several case studies are introduced in Module 2 (Partnerships Overview) to illustrate key points to attendees. The facilitator should become familiar with the case studies in order to convey important elements and explain how the water systems were successfully able to overcome challenges and reap benefits from the partnership activity.

The following water system case studies are referenced throughout the example slide deck (*Toolbox Slide Deck*). The "state" is included to quickly check if the case study may be directly relevant to your workshop location, and the "population served" is included to check if the size may be similar to your attendees' water systems.

### • Birmingham Water Works Case Study

o State: Alabama

o Population served: 585,000

- A surface water system with four treatment plants delivers water to over 580,000 people in five counties in Alabama. In 2008, Birmingham saw a need to create a leadership training program to fill the need for training on water system-specific information. Management realized that Birmingham would benefit if all trainings across the water system staff were provided in-house, rather than continuing through contract operators. A robust, internal training program with on-site staff could reduce training costs and the trainings would be tailored to the water system staff's needs. Increased training opportunities resulted in higher employee retention and career growth, which reduced hiring costs and created a more knowledgeable staff. Instead of contracting trainers, Birmingham hired five full-time staff members to provide trainings, which reduced the overall training costs. By extending the trainings to outside water systems, Birmingham created extra revenue that was used to expand their training offerings. This increase in training opportunities benefited their staff and staff at outside water systems. They created a new set of classes and increased the operator pool in Alabama while improving their communication and relations with other water systems.
- o For more information, visit: <a href="https://www.epa/gov/dwcapacity/water-system-partnerships-case-studies">https://www.epa/gov/dwcapacity/water-system-partnerships-case-studies</a>
- Beckham County Rural Water Case Study
  - State: Oklahoma
  - Population Served: 857
  - O Beckham County Rural Water's only employee lacked sufficient skills to operate the water system and therefore, the Board was having a difficult time keeping up with the technical demands of the water system's operation. When the employee quit, the Board decided to contract their operations instead of looking for a replacement. The contracting company was in charge of the water system's 100+ miles of water main, its three wells, and its chlorination, storage, and pumping infrastructure. The company is also responsible for meter reading, billing, accounting, and operations and maintenance. This arrangement was cost-effective for Beckham County rather than hiring a water system operator.
  - For more information, visit: https://nepis.epa.gov/Exe/ZyPDF.cgi/20001RPX.PDF?Dockey=20001RPX.PDF



### Lower Rio Grande Public Water Works Authority (LRGPWWA) Case Study

o State: New Mexico

o Population Served: 15,000

- In early 2005, LRGPWWA began to take form as five mutual domestic water associations began to meet regularly. The regular meetings helped them build relationships and discuss opportunities to work together as partners. In the first year, four of the five associations signed a Memorandum of Understanding (MOU) that formalized their intention to work together as the Regional South Central Mutual Domestics Group. By 2009, the five founding associations had merged to form the LRGPWWA. Four additional domestic water associations joined the Authority by 2016. It was realized that each water system was conducting the same tasks, making similar purchases, and providing the same service to their consumers. This meant that all of the efforts associated with operations, maintenance, and capital investments were duplicated by each water system. Two of the associations faced National Primary Drinking Water Regulation (NPDWR) compliance issues associated with the Arsenic standard. In addition, each of the water systems had to hold mandatory board trainings and meet reporting and audit requirements. Some water systems struggled with strained water rights or had declared service areas under threat from larger entities. The associations realized that, to benefit from economies of scale, they needed to increase their number of connections and streamline duplicated efforts. A formal merger of the five associations was the most cost-effective solution to solve the associations' individual challenges.
- o For more information visit: <a href="https://www.epa.gov/dwcapacity/depth-case-study-lower-rio-grande-public-water-works-authority">https://www.epa.gov/dwcapacity/depth-case-study-lower-rio-grande-public-water-works-authority</a>.
- A helpful video about the LRGPWWA partnership can be presented during Module 2 to help breakup the presentations. If you choose to include it, make sure you have an adequate internet connection to play the video: <a href="https://www.rcac.org/videos/lower-rio-grande-public-water-works-authority/">https://www.rcac.org/videos/lower-rio-grande-public-water-works-authority/</a>.

### Vinton and Jackson County Case Study

State: Ohio

o Population Served: 6,600

O Two water systems in rural Southeastern Ohio, Vinton County Water and Jackson County Water, developed a strong relationship rooted in support and respect over almost two decades. The water systems were similar, as they shared some common service area boundaries. Both had a lower-than-average median household income for Ohio and were not-for-profit water systems. However, there were some differences. Jackson County Water was significantly larger with 800 miles of water mains and 6,000 connections, and served a much denser population. In contrast, Vinton County Water purchased treated water and had roughly 42 miles of water mains and 600 connections. Vinton County Water struggled with increasing operations & maintenance costs, staff turnover, poor recordkeeping, low revenue streams, concerns about complying with the Disinfectant and Disinfection Byproduct Rule (DBPR), and needed a new water source due to contamination. After their operator quit, Vinton County hired Jackson County to perform operational duties, and started to discuss the idea of selling the water system to Jackson County Water. Jackson County Water had pre-existing knowledge of Vinton's



- assets and challenges and were interested in a partnership to increase revenue from expanded customer base to support future infrastructure improvements and benefit from economic of scale.
- For more information visit: <a href="https://www.epa/gov/dwcapacity/water-system-partnerships-case-studies">https://www.epa/gov/dwcapacity/water-system-partnerships-case-studies</a>

If you are interested in including wastewater case studies in the presentation, visit the links below and update the slides accordingly.

- Wastewater Partnership with some operations and management contracted to private entity: <a href="https://www.veolianorthamerica.com/case-studies/springboro-partnership-ensures-compliance">https://www.veolianorthamerica.com/case-studies/springboro-partnership-ensures-compliance</a>.
- Pinellas County Wastewater Partnership: <a href="http://www.pinellascounty.org/partnership/">http://www.pinellascounty.org/partnership/</a>
- Discovery Clean Water Alliance Partnership: <a href="https://www.discoverycwa.org/scwwtp/">https://www.discoverycwa.org/scwwtp/</a>

There are several example partnerships highlighted throughout the slide deck (*Toolbox Slide Deck*). These examples are included on EPA's <u>Water System Partnerships Case Study Map</u>. The water system partnership examples referenced in the slides are:

- Thirty-five municipal drinking water and wastewater systems in Massachusetts purchase laboratory supplies and chemicals together. The water systems take turns fulfilling key roles in the buying process so that each can maintain institutional knowledge and autonomy. For more information visit:
  - https://nepis.epa.gov/Exe/ZyPDF.cgi/P1006MD0.PDF?Dockey=P1006MD0.PDF.
- A village in Illinois did not have a sufficient water supply to provide adequate fire protection for the town. Water supply concerns as well as infrastructure needs led the village to contract all public works services, including water, out to St. Louis-based Environmental Management Corporation (EMC). For more information visit:
  - https://nepis.epa.gov/Exe/ZyPDF.cgi/20001RPX.PDF?Dockey=20001RPX.PDF.
- Eleven water systems in Texas faced over-pumping of the Edwards Aquifer. The Texas Water Development Board encouraged the water systems to form the Canyon Regional Water Authority (CRWA) to manage water use and plan for long-term sustainability. For more information: <a href="https://nepis.epa.gov/Exe/ZyPDF.cgi/P1006MD0.PDF?Dockey=P1006MD0.PDF">https://nepis.epa.gov/Exe/ZyPDF.cgi/P1006MD0.PDF?Dockey=P1006MD0.PDF</a>.
- Isle of Pines water system in South Carolina suffered from a poor-quality ground water source, an untrained operator, and frequent distribution line breaks. The Town of Chapin extended drinking water service to Isle of Pines and assumed ownership of the water system. For more information visit: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100399Z.PDF?Dockey=P100399Z.PDF.

If there are particular case studies or examples that the facilitator thinks would resonate especially well with the group, they can spend more time reviewing these to discuss more deeply. In addition, if the facilitator knows of a water system partnership that could provide a better understanding for their attendees the facilitator should modify the slide deck (*Toolbox Slide Deck*) to include information on relevant examples or case studies.

Lastly, information on programs, statues, and policies implemented in each state that encourage partnerships between water systems are provided in EPA's <u>Water System Partnerships: State Programs and Policies Supporting Cooperative Approaches for Drinking Water Systems</u>.





# Water System Scenario Water System Partnerships Workshop

# Background

You are the operator of Pleasantville Department of Water Management. Your water system serves 30,000 people, runs at a demand of 4.3 million gallons per day, and is located in an east coast state. You have two conventional water treatment facilities that were built in 1923 and 1979 and are equipped with sedimentation basins. You draw water from two reservoirs, Peaceful Lake and Gentle Reservoir.

Ten years ago, your county experienced the worst drought on record. You have interconnections to three neighboring water systems through which water can flow both ways, so you reached out to them to see about purchasing some water to make it through the drought. Two of the neighboring water systems were concerned about the replenishment of their own reservoirs and were unwilling to sell their water. The third water system was willing to sell their water, but pumping all that water was expensive, and it was a significant cost to your water system that summer.

Since then, your region has been experiencing more droughts every summer. Each water system has had to purchase water from another at some point. In fact, it's become so frequent in the past couple of years that you all have standing bi-weekly meetings during the summer to keep track of how everyone's respective source water is doing. Luckily, you have never all experienced severe drought at the same time and someone is always able to sell water to the other systems. You have really built trust over the years as you all have had to rely on each other. Nonetheless, you and your neighboring water systems have each taken a financial hit from having to pump so much purchased water through your interconnections. On top of that, your town just built a new development with 300 new connections, creating a significant increase in total customers and adding to your difficulty in meeting customer demand.

### Additional Information

- Two of the smaller water systems' operators are planning to retire in the next four years, and they are having a hard time finding qualified replacements to take over for them.
- There is a 1.3-billion-gallon offline water storage reservoir nearby that is central to the four water systems, but there is no intake built yet.
- You have a new, eager town planner who loves regional planning. They are also motivated to apply for grants, and in their short tenure, they have already secured a couple of community development grants.





# Exercises

# Water System Partnerships Workshop

# Cover Sheet for Exercises

# Water System Partnerships Training Workshop

# Current Partnerships Exercise

Review and complete Part 1 and Part 2 in the worksheet. In Part 1, you will document which activities you already do (current activities) and who you are already working with (current partners). Understanding your current efforts will help you identify new partnership opportunities later in the workshop (in Module 6). In Part 2, you will pick one of your activities from Part 1 to share with your group. Hearing from your group might spark additional ideas for potential partnership opportunities you can engage in. If at any time you are having trouble filling out this worksheet, please reach out to workshop facilitators, organizers, or other support personnel for help.



# Part 1a. Identify Current Partnership Activities (Individual work)

Are you working with other water systems, technical assistance providers, or your state's drinking water program staff on any of the activities below? Next to each activity that you are currently engaged in, indicate if you are working with another water system (WS), a technical assistance provider (TA), and/or the state (S). If you work with multiple organizations, list all applicable acronyms. In the space next to "Other" add any other activities you do that are not in the list below and indicate who you are working with (WS, TA, or S).

Informal Cooperation Activities Call or receive calls to get or give advice Create informal mutual aid agreements Have informal check-in meetings/calls Have standing meetings/calls Provide or receive training	Have a physical interconnection to another water system for emergenciesProvide or receive services at costShare an operator  Joint Power Agency ActivitiesBelong to a regional water system
Purchase chemicals in bulk with other water systems	Construct a shared water system
Purchase equipment for joint use (e.g., emergency generators)  Purchase lab testing services in bulk with	Coordinate with water systems in your region to plan for drought/resiliencyHave satellite managementManage sampling for multiple water
other water systemsPurchase other supplies in bulkReceive or lend equipment/parts	systems  Program of shared operation and/or management
Contractual Assistance Activities	Ownership Transfer Activities
Contract administrative supportContract billing services	Have a permanent interconnection to another water system
Contract management	Acquisition and physical interconnection
Contract operations	Acquisition and satellite management
Formal agreement with another local government entity	Transfer of privately-owned water system to a new or existing public entity

Other:	
1.	
2.	
3.	
•	

# •

# Part 1b. Current Partnership Activities Table (Individual work)

In the table below, list the formal **name** of each water system, technical assistance provider, or state partner you identified above, whether they are a **WS**, **TA**, or **S** program, the **challenge** your partnership with them addresses, the **activity** your partnership with them entails, the element(s) of technical, managerial, and financial **(TMF) capacity** your partnership with them addresses, and a **benefit** the water systems or communities experience due to your partnership.

Name of Partner(s)	WS, TA, or	Challenge	Activity	T, M, or F Capacity	Benefit
Tremonton	WS	Need to switch treatment techniques	Hold informal calls regarding treatment techniques and best practices	Т	Understanding and upgrading treatment techniques

Please wait for instruction from your facilitator before moving onto Part 2.



# Part 2. Share a Current Partnership Activity (Group work)

Take turns with those in your group as you each highlight one of your current partnership activities identified in Part 1. Hearing from other water systems about their partnership activities might help you consider future partnership opportunities. Keep in mind that you'll refer back to your highlight in Module 6.

If you haven't already, start by introducing yourself and sharing which organization or organizations you work with.

### 1) Describe one of your current partnership activities from Part 1. Be sure to include:

- a. The partner(s) involved.
- b. How and why the partnership formed.
- c. What made or could have made the partnership successful.
- d. Any other details about the partnership.
- e. Optional items to include:
  - i. What type of partnership is this? (i.e., informal cooperation, contractual assistance, joint power agency, or ownership transfer).
  - ii. Ask your group if they have advice for improving or expanding the partnership.
- 2) Share why you are attending the workshop and what you hope to gain by attending.

# Water System Partnerships Training Workshop

# **Expanding Partnerships Exercise**

Review and complete Part 1 and Part 2 of the worksheet. In Part 1, you will explore how to use a partnership to solve an example problem that a water system may face. In Part 2, you will expand upon the previous exercise from Module 3, Current Partnerships, to consider new partnership activities you could engage in with a current partner or how to expand a current partnership activity to a new partner. You'll see how it can be easier to build something new from something that already exists. If at any time you are having trouble filling out this worksheet, please reach out to workshop facilitators, organizers, or other support personnel for help.



# Part 1. Solving Problems with Partnerships (Group work)

Using your knowledge of the four types of partnerships and their advantages and disadvantages, read through your group's assigned scenario to propose a possible partnership solution. Then, answer the questions below. Remember there may be more than one possible answer for how a partnership activity could benefit the water system or systems in each scenario.

- 1) What scenario were you assigned?
  - a. Scenario #1
  - b. Scenario #2
  - c. Scenario #3
  - d. Scenario #4
- 2) What activities could benefit the water system(s)? (refer back to Module 3 for a list of example activities)

- # Scenario
- A water system suffers from a poor-quality groundwater source, an untrained operator, and frequent distribution line breaks.
- A certified operator has been working at a medium-sized water system for 40+ years and is about to retire. The water system is well-run and has not experienced any major health-violations in the past 5 years. The owner of the plant is having a hard time locating a qualified replacement.
- Apple County Water is a small water system that does not have any recent compliance issues. They are working on creating their first emergency response plan to ensure everything is in order during the time of a crisis.
- 4 The local School District operates three separate water systems for the schools in the district. Each school experiences recurring violations of the maximum contaminant level (MCL) for total coliform bacteria.
- 3) How would the activities listed above benefit the water system(s)?
- 4) What type of partnership would you recommend the water system(s) participate in? (select one)
  - a. Informal Cooperation
  - b. Contractual Assistance
  - c. Joint Power Agency
  - d. Ownership Transfer
  - e. Multiple Partnership Types (i.e., a layered partnership)

Please wait for instruction from your facilitator before moving onto Part 2.



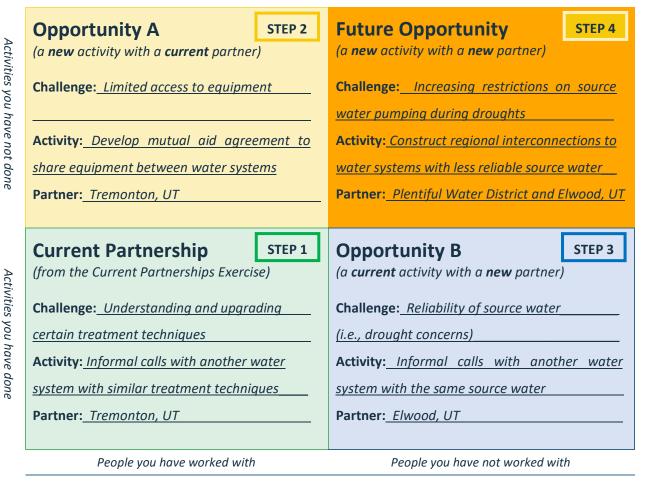
# Part 2. Identify Partnership Opportunities (Individual work)

As we learned, understanding your strengths and challenges can help you identify opportunities to create successful partnerships by building relationships to address water system challenges. Review the example below to see how a water system used a current partnership to identify other partnership opportunities and address other challenges.

### **Example Matrix:**

As you'll see in the example boxes below, partnership opportunities are classified as:

- Current Partnership (Step 1): A partner and partnership activity you have already implemented.
- Opportunity A (Step 2): New activity with a current or past partner to solve a challenge.
- Opportunity B (Step 3): Current or past activity with a new partner to solve a challenge.
- **Future Opportunity (Step 4)**: Future opportunity to work towards to develop a new partnership activity with a new partner.



# **Partners**

Now it's your turn! Use the blank matrix on the next page to identify partnership solutions relevant to your water system.

- **STEP 1**. To begin, select a partnership you identified in the previous exercise, Part 1b in Module 3, and fill-in the Current Partnership box with the challenge being addressed, the activity, and name of your current partner.
- **STEP 2**. To complete the **Opportunity A** box, consider a different challenge at your water system and how a new activity with the same partner could address this new challenge. Having that existing foundation of trust can benefit the partnership.
- STEP 3. To complete the Opportunity B box, consider how your "current partnership" activity could be implemented (maybe from a fresh angle) with a new partner to address a challenge at your water system. Having previous experience with an activity can make it easier to implement with a new partner.
- STEP 4. The top-right box of the matrix, the Future Opportunity box, shows how you could build off of your current partnerships' relationships and experiences to develop a new partnership activity with a new partner in the future. You can also use this matrix to identify what steps may help you get to a future partnership. For example, if you ultimately want to create a regional entity to oversee and manage multiple water systems, there may be smaller activities to pursue with partners first to help build relationships, trust, and relevant experience.

Activiti	Opportunity A (a new activity with a current partner)	STEP 2	Future Opportunity (a new activity with a new partner)	STEP 4
Activities you have not done	Challenge:		Challenge:	
e not done	Activity:		Activity:	
	Partner:		Partner:	
	Current Partnership	STEP 1	Opportunity B	STEP 3
Act	(from the Current Partnerships Exercise)		(a <b>current</b> activity with a <b>new</b> partner)	
Activities you have done	Challenge:		Challenge:	
nave done	Activity:		Activity:	
	Partner:		Partner:	
	People you have worked with	People you have not worked wit	1	

# **Partners**

# Water System Partnerships Training Workshop

# Partnerships Action Plan Exercise



In this exercise, you will begin to develop an Action Plan to implement one of the partnership opportunities (Opportunity A or Opportunity B) you identified in Part 2 of Module 6: Expanding Partnerships. The purpose of this exercise is to document the plans for the partnership including the possible stakeholders, benefits, and considerations. This individual Partnerships Action Plan can be incorporated into your water system's broader planning efforts. Example Implementation Steps are included at the end of this exercise as a resource for completing Part 5, Partnership Implementation Schedule.

The five components of an Action Plan detailed in this exercise are:

- 1) Proposed Partnership Information
- 2) General Contacts
- 3) Champions, Allies, and Stakeholders
- 4) Considerations to Implement a Partnership
- 5) Partnership Implementation Schedule

If at any time you are having trouble filling out this worksheet, please reach out to workshop facilitators, organizers, or other support personnel for help.

1) Proposed Partnership Information (Opportunity A or Opportunity B)

The information in this section can be used to create an introduction for the Action Plan to provide key background information and key players.

Challenge to address:

				٠.			
Λ	C.	п	11/	11	٦.	,	•
$\overline{}$		u	ıv		. V	,	

Partner(s):

Point of Contact (your information):

# 2) General Contacts

List out the contacts for each category below and fill-in discussion points for each. Consider the key points you want to communicate to each contact including why the partnership is a good solution, any incentives for the partnership, feasibility, and more. Refer back to Module 2 of the workshop slide deck to review specific partnership benefits that may resonate with different audiences.

- Your water system's decision maker(s): Who will need to be contacted to discuss forming the partnership? How could they play a part in the partnership process? What information do they need in order to understand the partnership's benefits and approve next steps?
- **Potential partners:** Who at the potential partner organization do you need to contact to discuss forming the partnership? What reservations could they have about partnering? How can you address their possible concerns?

Category	Contact Name and Affiliation	Discussion Points
Your water system's decision maker(s)		
Potential partners		

# 3) Champions, Allies, and Stakeholders

To improve communication and partnership success, various stakeholders and other support groups can be engaged to help build relationships and gain support for the partnership. Use the table below to brainstorm a possible champion as well as allies and stakeholders to be involved with this partnership. Additional champions, allies, or stakeholders can be added using the blank rows at the end of the table. General descriptions of each role are described below. Refer back to Module 7 of the workshop slide deck for possible examples of each.

- **Champion:** A strong proponent of the partnership, preferably a local leader. Someone who can propose, endorse, encourage, and defend the partnership ideas.
- **Ally:** They provide support in communicating about the project to the local community. Someone who already has the public's trust or who is already working closely with the water systems.
- **Stakeholders:** They may or may not be proponents of the partnership. If appropriate, engage them in facilitated discussions to understand different types of stakeholders and their concerns or perspectives early on in the process.

Role	Contact Name and Affiliation	Discussion Points
Champion		
Ally		
Ally		
Stakeholder		
Stakeholder		

# 4) Considerations to Implement a Partnership

Now consider the feasibility of moving forward with the partnership. The information provided below should be included in the Action Plan.

1.	How will this partnership address a particular challenge or increase TMF capacity?		
2.	What might make this organization a good partner?		
2			
3.	How will the other partner benefit from this activity?		
4.	What will make this new partnership a success?		
5.	What are some possible challenges to implementing the partnership?		
6.	For each challenge, consider and propose a solution that either or both parties could implement.		

7.	What resources are available to support and sustain the partnership?
8.	What, if any, examples are there of other partnerships that might provide helpful lessons learned?
9.	How long will you be willing to make a commitment to the partnership?
10.	Have there already been some studies or regional planning efforts that could provide information for the communities on water sources, availability, and quality issues?  a) Yes  b) No
11.	Have the entities (or their engineering and financial consultants) done any preliminary studies on options or costs for the activities you are considering?  a) Yes b) No
12.	Could you and your team help set up a workshop or training with the champions or allies that the water systems already trust and work with?  a) Yes b) No

# 5) Partnership Implementation Schedule

Fill in the table below to start organizing a schedule to implement your partnership. Use the first column to identify each step and the middle column to explain your role in each step. On the next page are example steps that you may choose to add to the table if they are applicable to your partnership. Carefully consider the order to implement each step to make sure you're following a schedule that works for your scenario and partners. Review the example implementation steps on the following page for suggestions.

Step in Forming Partnership	Additional Information on Water System Role	Order to Implement
		1 <sup>st</sup>
		2 <sup>nd</sup>
		3 <sup>rd</sup>

#### **Example Implementation Steps**

- **Gain buy-in and build trust**: Shared activities, open communication, and developing relationships with personnel are important steps to convince potential partners that a partnership will result in mutual benefit. This is an ongoing process that may take some time.
- **Develop a business plan**: Focus on areas where there may be ways to reduce redundancy of managerial and financial operations. The business plan should provide guidance, tips, resources, and tools to use in the partnership as well as information provided in this Action Plan.
- **Obtain the necessary approvals**: If any of the participating water systems are privately/investor owned, state PUC approval may be required.
- **Obtain financing**: 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 water systems have utilized funding for partnership.
- **Approve plans and specifications**: If part of the partnership involves engineering changes, a plan review is usually required.
- **Identify sources of technical assistance**: Contact and obtain necessary technical assistance from providers who are willing to help in the partnership effort.
- **Support regional planning activities**: Hold community meetings to gain buy-in for partnership options and to educate others on how the partnership will help the water systems overcome present and future challenges.



# Acronym List

# Water System Partnerships Workshop

ACWA Association of Clean Water Administrators

ASDWA Association of Safe Drinking Water Administrators

AWWA American Water Works Association

AWE Alliance for Water Efficiency

CWA Clean Water Act

CWSRF Clean Water State Revolving Fund

EFC Environmental Finance Center

EPA U.S. Environmental Protection Agency

DWSRF Drinking Water State Revolving Fund

HUD Housing and Urban Development

MOU Memorandum of Understanding

NACWA National Association of Clean Water Associations

NRWA National Rural Water Association

O&M operations and maintenance

PTT Partnerships Training Toolbox

PWS public water system

RCAC Rural Community Assistance Corporation

RCAP Rural Community Assistance Partnership

SDWA Safe Drinking Water Act

SRF State Revolving Fund

TA technical assistance

TMF technical, managerial, and financial

USDA U.S. Department of Agriculture

WSP water system partnership





# Resources Guide

# Water System Partnerships Workshop

This guide is for attendees to strengthen their understanding of water system partnerships and to help them create their own partnerships. These resources can also help with identifying next steps and additional resources to support water systems after a Water System Partnerships Workshop.

## **EPA Water System Partnerships**

Water System Partnerships Homepage

https://www.epa.gov/dwcapacity/water-system-partnerships

EPA's website for water system partnerships is a one-stop-shop for states, water systems, and the general public to find cooperative tools to address their drinking water challenges. The website leads the user through the story of partnerships, exploring the different types of partnerships to consider, and outlining examples of successful partnerships across the country. There are pages with resources, at the national and state-level, to assist water systems in the partnerships process.

#### Water System Partnership Handbook

#### https://www.epa.gov/dwcapacity/water-system-partnership-handbook

EPA's Water System Partnership Handbook is an interactive tool to assist state drinking water programs in identifying, assessing, and implementing water system partnerships. Technical assistance providers may also find this tool useful. Additionally, it is intended to provide states and their drinking water programs, including tribal water systems, an opportunity to identify potential water system partnerships, by walking states through a series of interactive steps.

#### Types of Partnerships and Examples

https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=a99dcae5390449e88ea74e4a7e3fcb07

EPA's interactive website contains a map of partnership case studies organized by location and by partnership type (informal cooperation, contractual assistance, joint power agency, ownership transfer, and layered partnership). Each case study includes a summary and an overview of key players and benefits.

Water System Partnerships – Collaborative Approaches to Address Drinking Water Challenges https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=cfccb8b4975d4d72869bd0770510c1b0

EPA's Water System Partnerships website allows users to explore an overview of water system partnerships, learn about partnership benefits, and review resources including an in-depth case study and state programs supporting partnerships.

#### Resources for Beginning a Water System Partnership

https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=b66053d1b56747df9a66c1a4057afc1c

EPA's Resources for Beginning a Water System Partnership website allows users to explore capacity development, managerial resources, workforce resources, financial resources, and relevant webinars.



## **Capacity Development**

Capacity development is a wide-ranging topic that focuses on a water system's ability to have adequate technical, managerial, and financial (TMF) capacity, which can help a water system consistently provide drinking water that meets federal regulations. Every state is required to implement a Capacity Development program. Water systems and technical assistance providers can use the following tools and resources to learn more about capacity development:

- Prior to entering a partnership, water systems may find it helpful to assess their TMF capacity. There are many available tools and examples of how to conduct this analysis <u>including this form from the California</u> Department of Public Health Drinking Water Program.
- The Association of State Drinking Water Administrators (ASDWA) has guidance documents and tools to
  help water systems learn more about capacity development practices. These can be found on the <u>ASDWA</u>
  <u>Capacity Development Resources</u> website.
- <u>The Effective Water Utility Management Initiative</u> includes resources that can help utilities improve utility management (i.e., through TMF and overall capacity development).
- EPA has a webpage devoted to providing capacity development resources to water systems.

## **Funding**

Funding for partnerships work can come from many sources. EPA has established Environmental Finance Centers (EFCs) in each of the 10 EPA Regions, which may have funding available for partnerships that struggle to find funding sources. The contact information for these sources can be found on EPA's <a href="EFC website">EFC website</a>. The following resources can help water systems find available funding sources:

- EPA's <u>Water Finance Clearinghouse</u> allows users to browse through hundreds of resources and funding
  opportunities. The Clearinghouse also hosts learning modules on drinking water funding and financing
  topics.
- Each state implements a state revolving fund (SRF); one for drinking water activities and one for clean water activities.
  - Information on project eligibility for the Drinking Water State Revolving Fund (DWSRF) is available in the DWSRF Eligibility Handbook.
  - o Information on project eligibility for the Clean Water State Revolving Funds (CWSRF) is available in the Overview of CWSRF Eligibilities document.
- National organizations, such as the Alliance for Water Efficiency (AWE), produce online guides and tools
  for water systems focused on financing water projects. <u>AWE's website</u> includes information about
  maintaining financial sustainability.
- If considering a feasibility study, see the California State Water Resources Control Board's <u>Feasibility Study</u> template.
- If considering a rate study, see <u>RCAP's Formulate Great Rates Guidebook</u>.

## **Asset Management**

Asset management is an important part of any water system partnership where resources will be shared or transferred. Developing or implementing a robust asset management program may be challenging, but there are many resources that can help:



- <u>The American Water Works Association</u> (AWWA) has created multiple technical resources to improve asset management including manuals and standards.
- An important component of asset management includes developing an asset management plan. The Pennsylvania Department of Environmental Protection created a <u>spreadsheet to develop a basic asset</u> management program.
- EPA has a webpage dedicated to asset management resources for states and small systems.
- New York Department of Environmental Conservation developed an <u>asset management guide</u> specific to municipal sewage systems.

#### Communication

Ensuring appropriate communication between a water system (or multiple systems) and stakeholders is vital to creating a partnership that customers understand and support. There are many tools that can help water systems communicate with stakeholders, including:

- A sample utility communications plan from AWWA.
- An example communications plan for a sanitation district.
- A list of resources on WaterOperator.org including tools available to <u>facilitate communicating with</u> customers.
- Some states provide drinking water communication tools or risk communication toolkits for water systems, like this example from <u>Minnesota's Department of Health</u>. Water systems can check their state websites for additional resources.

## Setting up a Partnership Agreement

Appropriately documenting partnership activities and services in a way that establishes partners' roles and responsibilities can be invaluable to setting up, organizing, and maintaining a successful partnership. This could be done through a contract, memorandum of understanding (MOU), or other clear and binding document. The following resources could be used by water systems to draft such contracts:

- The Department of Homeland Security has developed a guide on how to draft an MOU.
- The Centers for Disease Control has published a <u>sample template</u> of an MOU, which water systems could utilize when establishing their partnership.
- The Water and Wastewater Agency Response Network's (WARN's) Utilities Helping Utilities initiative published <u>a guide that serves as an action plan</u> for water systems to establish mutual aid and assistance networks to increase their resilience.

# Other Helpful Organizations

National Rural Water Association (NRWA)

#### https://nrwa.org/

NRWA is a water and wastewater utility membership program. NRWA resources provide training for problem solving and water system optimization, support, and technical assistance to utilities. These resources cover utility operation, management, financing, and more.







#### Environmental Finance Centers (EFCs)

#### https://www.epa.gov/waterfinancecenter/efcn

EPA EFCs partner with and provide technical assistance to states, tribes, local governments, and the private sector. Technical assistance can include leadership development, capacity development, and training. Assistance is provided to water systems for innovative solutions and program management, which may be helpful to water system partnerships. There is an EFC for each of the 10 EPA Regions.

## Rural Community Assistance Partnership (RCAP)

#### https://rcap.org/

RCAP provides assistance to small and rural communities' water systems. RCAP can help with water system assessment, problem-solving, project management, and long-term support. RCAP also provides trainings across the U.S., including trainings specific to compliance and other trainings for drinking water operators. The RCAP online library contains resources for developing plans, financial auditing, and troubleshooting.

#### Rural Community Assistance Corporation (RCAC)

#### https://www.rcac.org/

RCAC provides assistance to rural communities, including trainings, technical and financial resources, and advocacy. Trainings cover a broad range of topics including for rule compliance, asset management, and capacity building. RCAC guidebooks have been created for utilities, small rural water systems, and project development.

#### American Water Works Association (AWWA)

#### https://www.awwa.org/

AWWA has a variety of technical reports, resources, programs, and tools to help water systems with management. Their programs "Partnership for Safe Water" and "Partnership for Clean Water" are successful alliances of water systems to optimize water system performance for delivering drinking water. Their Benchmarking Tool can help improve water systems efficiency, and their resources can mitigate risk and resilience and improve infrastructure needs.

#### Association of State Drinking Water Administrators (ASDWA)

#### https://www.asdwa.org/small-systems/capacity-development/

ASDWA has a variety of resources for state Drinking Water Programs including capacity development of small water systems, regulatory guidance, data management, and drinking water utilities partnering for success.

#### National Association of Clean Water Agencies (NACWA)

#### https://www.nacwa.org/home

NACWA has technical resources regarding water management and sustainability that support the development of partnerships across the U.S.

#### Association of Clean Water Administrators (ACWA)

#### https://www.acwa-us.org/

ACWA strives to protect and restore watersheds to achieve clean water everywhere for everyone. They have resources that will be applicable to wastewater systems as they begin their partnerships.





# Business Plan Outline

# Water System Partnerships Workshop

A professional business plan will prove beneficial in the long-term success of a partnership. Below is an outline of a business plan to support the formation of a regional partnership. Water systems can use information from the Module 8 Partnerships Action Plan Exercise (e.g., background information, leadership roles, goals of the partnership) to support the development of a formal business plan.

#### Section 1: Introduction

- Background on any past regional efforts in the area or partnerships between the water systems
- Introduction of the challenges the water systems faced
- How the business plan development was funded

## Section 2: Organization Structure and Services Agreement

- Organizational chart showing how personnel will work together
- Services that will be covered under the partnership
- Description of what each partner will be responsible for under the agreement

## Section 3: Forming the Partnership

- Mission statement
- Key steps to initiate the partnership (e.g., how a management entity is formed)
- Detailed roles and responsibilities of all partners
- Goals and priorities of the partnership
- · Discussion of how the goals will be met

#### Section 4: Best Management Practices

- Shared policies or programs (e.g., organizational policies, employee benefits packages, human resources policies and procedures, or IT policies and programs)
- A detailed record of water systems' liabilities and assets

#### Section 5: Financial Information

- Current financial information for all partners
  - Financial policies and procedures
  - Current bank statements and operating budgets
- Rate structures and outcomes of a rate study
- An Asset Management Plan

#### Section 6: Community Information and Outreach

- Public messages and meeting materials
- Discussion on the public involvement
- Planned meeting dates



## Section 7: Job Descriptions

- Descriptions of specific roles required under the partnership (e.g., bookkeeper, coordinator/facilitator, or water operator)
- Discussion on responsibilities of the various jobs

## Section 8: Questions and Concerns

• Frequently asked questions and responses (e.g., timeline, rates)

#### Section 9: Resources and Other Tools

• Additional resources and tools that the water systems may find valuable in forming a partnership





# Partnerships Checklist

Opportunities to Solve Water System Challenges with Partnerships

Use this checklist to determine if your water system, or water systems in your community, might benefit from a partnership.

Is your water system or a water system in your community
$\square$ Struggling to meet technical, managerial, and financial (TMF) capacity? (see specific T, M, and F sections below)
$\square$ Facing similar challenges as a nearby water system?
☐ Within 5-10 miles of another water system?
$\square$ Currently working with another water system either directly or indirectly (e.g., providing treatment chemicals, sharing an operator)?
$\square$ Able to share and expand upon strengths to help other systems (e.g., strong TMF capacity)?
Technical (T)
$\square$ Experiencing inadequate or aging infrastructure?
☐ Experiencing limited/poor source quality/quantity?
$\square$ Lacking an operator with the appropriate level of certification for their treatment?
☐ Other:
Managerial (M)
$\square$ Operating with a part-time manager whose attention is stretched thin?
$\square$ Lacking expertise in long-term water system planning or operations?
☐ Other:
Financial (F)
$\square$ Lacking economies of scale (few households = high costs)?
$\square$ Experiencing a history of water rates that are set too low to cover costs?
$\square$ Experiencing limited knowledge of financing options?
☐ Other:

If you checked at least one box above, the water system(s) could benefit from a partnership and may consider some of these next steps:

- Strategize how to conduct outreach to the water systems you identified above.
- Facilitate partnership building between the water systems (e.g., host an informal meeting).
- *Identify* potential stakeholders, allies, and champions who could facilitate partnership building or support a workshop.
- Host a Water System Partnerships Training Workshop for the water systems. For more
  information visit: <a href="https://www.epa.gov/dwcapacity/water-system-partnerships">https://www.epa.gov/dwcapacity/water-system-partnerships</a>.





# Attendee Information

Water System Partnerships Workshop

# Attendee Contact Information





# Feedback Form

# Water System Partnerships Workshop

Thank you for participating in the workshop! To help the workshop planning team and the facilitator, please take a few minutes to answer the following questions. We appreciate your assistance and want to assure you that this information will be kept strictly confidential.

#### General Information

- 1. Please select the option that best identifies the group you represent.
  - a. Drinking water system
  - b. Wastewater system
  - c. Association
  - d. Contractor or consultant
  - e. Tribal Government/Nation/Community
  - f. Local government
  - g. State government
  - h. Federal government
  - i. Technical assistance provider
  - j. Other
- 2. How would you rate the workshop overall?
  - a. Excellent
  - b. Very Good
  - c. Good
  - d. Fair
  - e. Poor
- 3. Would you recommend this workshop to your peers?
  - a. Yes
  - b. No
- 4. How effective was the workshop facilitator?
  - a. Very Effective
  - b. Somewhat Effective
  - c. Not Effective



## Workshop Content and Relevance

- 5. Which modules did you find *most* helpful? (Please select all that apply) (*Note: some modules may not have been presented during your workshop*)
  - a. Module 1: Capacity Development
  - b. Module 2: Partnerships Overview
  - c. Module 3: Current Partnerships Activities Exercise
  - d. Module 4: Identifying Strengths and Challenges
  - e. Module 5: Identifying and Assessing Partnerships Opportunities
  - f. Module 6: Expanding Partnerships Activities Exercise
  - g. Module 7: Implementing Possible Partnerships Solutions
  - h. Module 8: Partnerships Action Plan Exercise
- 6. Which modules did you find *least* helpful? (Please select all that apply) (*Note: some modules may not have been presented during your workshop*)
  - a. Module 1: Capacity Development
  - b. Module 2: Partnerships Overview
  - c. Module 3: Current Partnerships Activities Exercise
  - d. Module 4: Identifying Strengths and Challenges
  - e. Module 5: Identifying and Assessing Partnerships Opportunities
  - f. Module 6: Expanding Partnerships Activities Exercise
  - g. Module 7: Implementing Possible Partnerships Solutions
  - h. Module 8: Partnerships Action Plan Exercise
- 7. Which case study was the *most* relevant for you?
  - a. Birmingham Water Works implemented an internal regional training system
  - b. Beckham County Rural Water hired contractor to take over the majority of operations
  - c. Lower Rio Grande Public Water Works Authority a formal merger of five associations
  - d. Vinton and Jackson County Case Study hired another water system to operate the water system; they eventually took ownership of the water system
  - e. Other –

- 8. What, if any, additional topics would you recommend be included in future workshops?
- 9. Do you have any other recommendations to improve this workshop in the future?

