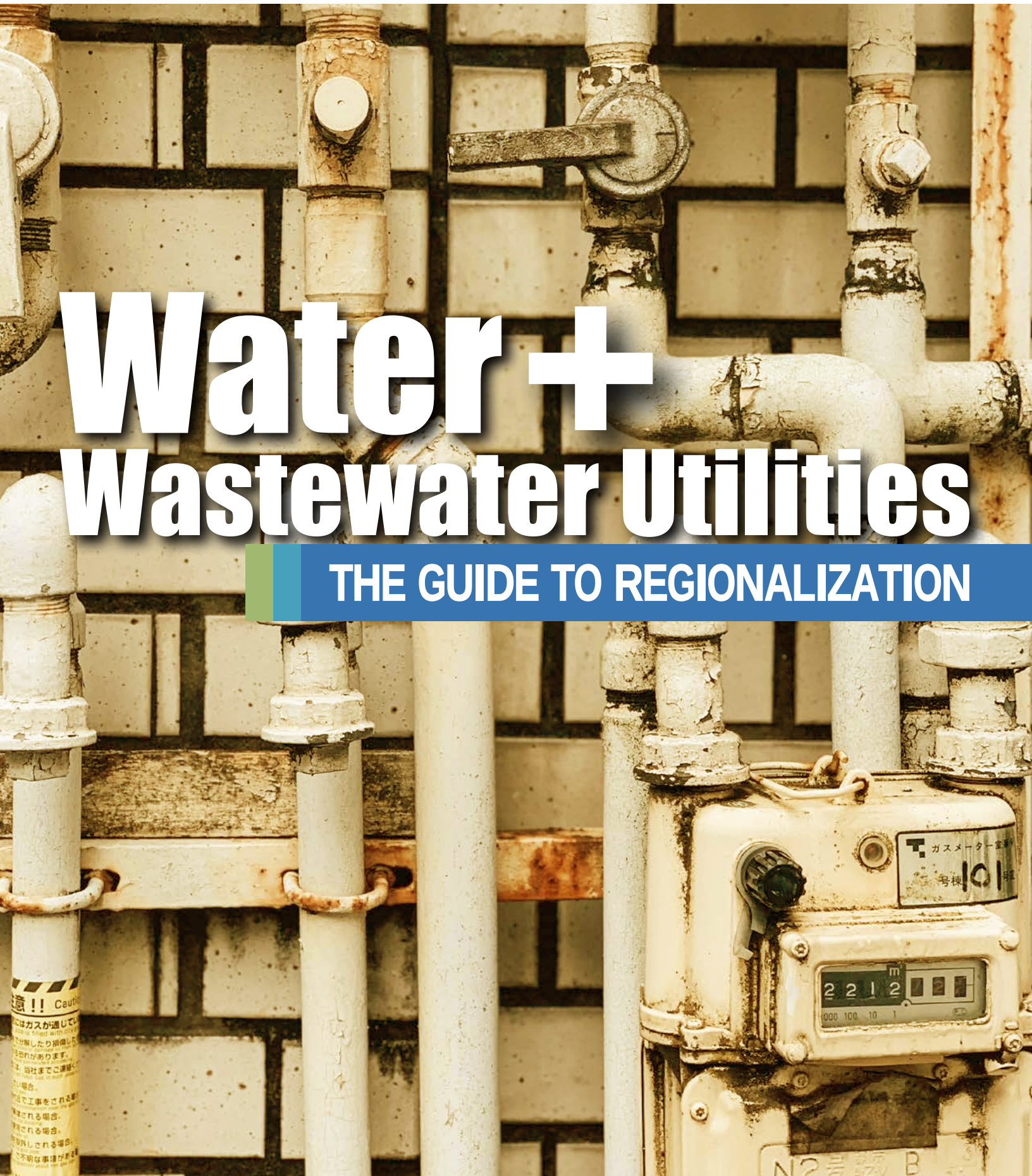
RCAP

REGIONAL COLLABORATION FOR



Water + Wastewater Utilities

THE GUIDE TO REGIONALIZATION

WE envision

a resilient,

equitable,

and thriving

rural America

Rural Community
Assistance Partnership

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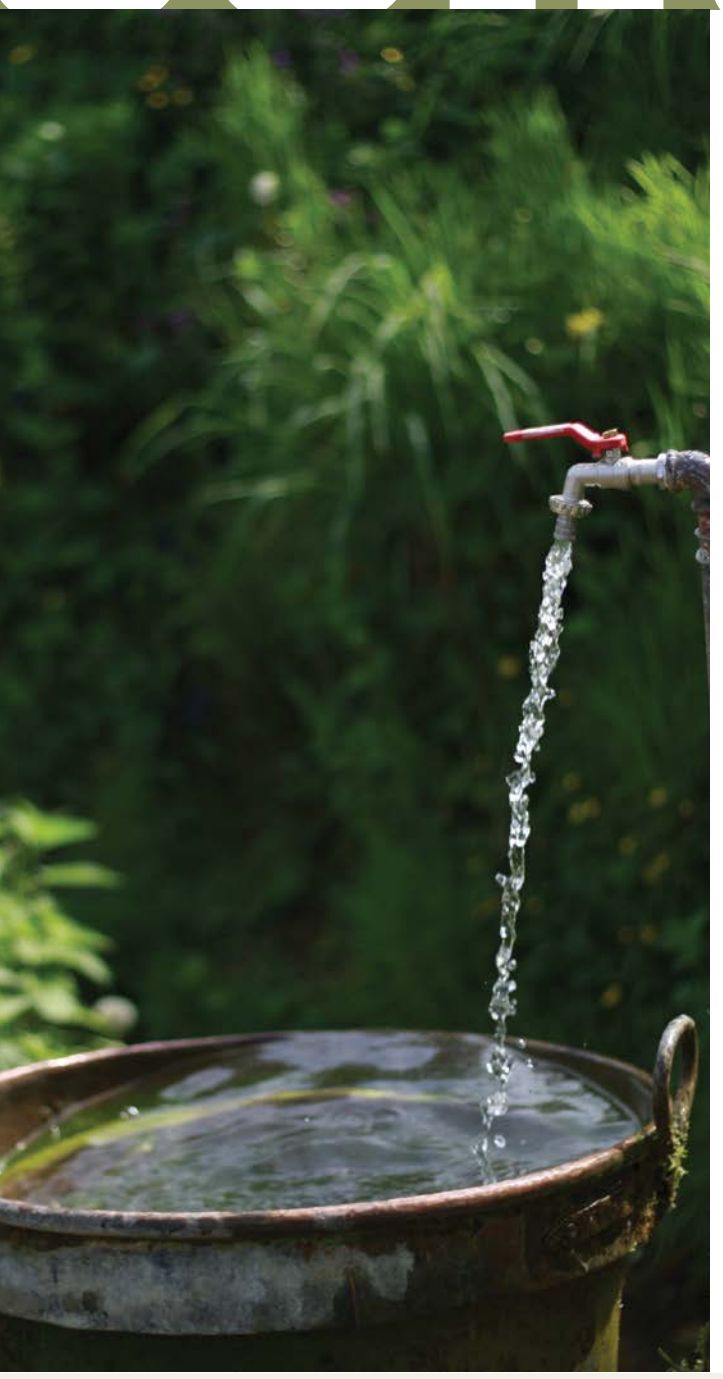

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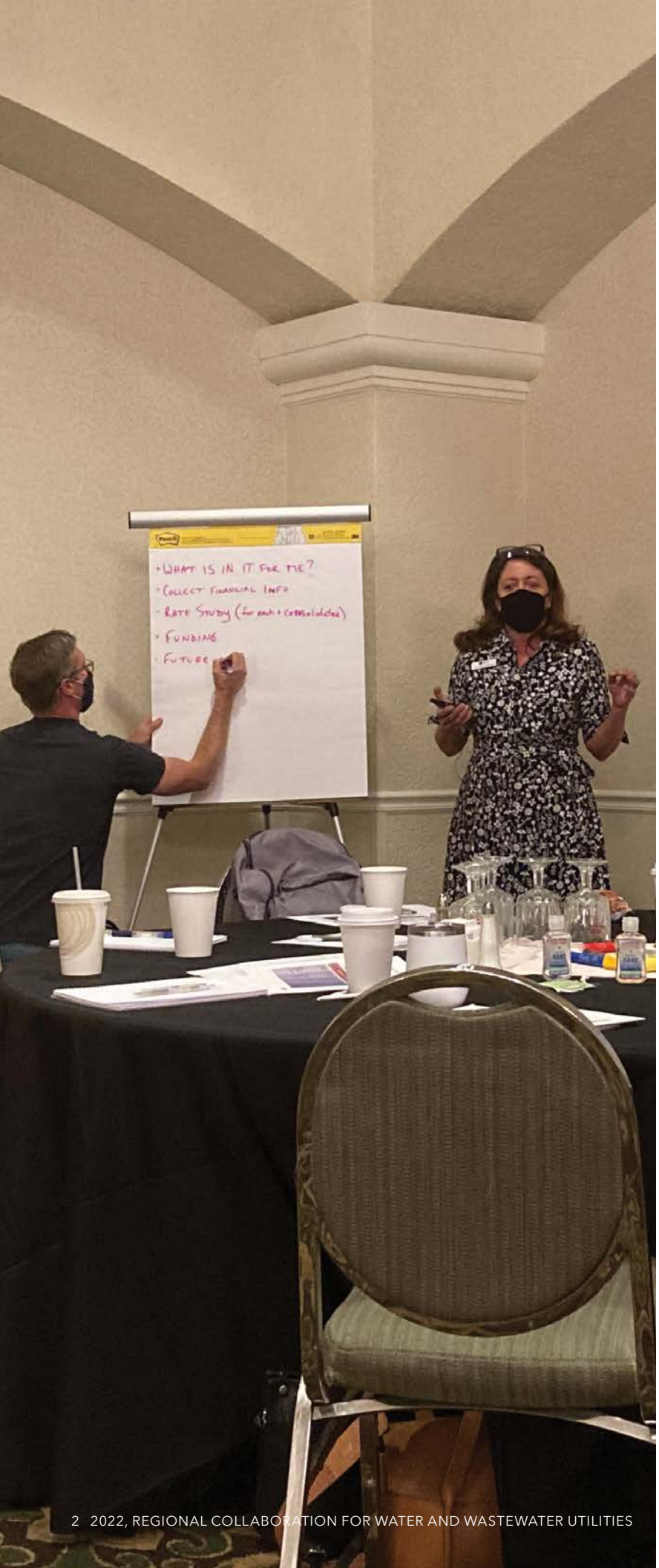

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Rural Community Assistance Partnership

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INTRODUCTION

All water and wastewater systems across the country are challenged by several compounding factors such as new regulations, a lack of staff, the increase in severity and frequency of natural disasters, and the need to maintain affordable rates that cover the full cost of providing service. For small systems, these struggles are exacerbated by a lack of economies of scale, limited capacity, and a short supply of resources.

Regionalization is one of many options in a water or wastewater system's toolbox to address these challenges. Regionalization, also known as regional collaboration or partnership, is any means of collaboration between two or more utilities for mutual benefit. Regional solutions can help a system build technical, managerial, and/or financial (TMF) capacity, achieve and maintain compliance, provide affordable rates, and be more solvent, sustainable, and resilient in the long term. However, because regionalization is only successful and sustainable when there is genuine buy-in from all parties involved, regionalization may not be the right option in every circumstance.

This publication will explain the diverse spectrum of regional collaboration options available, with examples of how they have been implemented successfully including best practices, benefits, and barriers, as well as tools and resources to help navigate the process. This guidebook is meant for both community and water/wastewater utility leaders and staff as well as for the technical assistance providers (TAPs) that serve them.

Chapter 1 provides an overview of regionalization. Chapter 2 discusses how to evaluate the right regional solutions for your community. The next four chapters describe the four general types of regionalization: Informal Cooperation (Chapter 3), Contractual Assistance (Chapter 4), Shared Governance (Chapter 5), and Ownership Transfer (Chapter 6). Chapter 7 identifies potential funding sources for regional collaboration. Chapter 8 explains how to sustain regional collaboration over time. Finally, the Appendix includes resources from the EPA Partnerships Training Toolkit.

Throughout this guidebook, blue boxes appear that identify tools and resources available to help you lead your water and wastewater utility more effectively.

Engaging Technical Assistance Providers

Exploring, implementing, and sustaining regional solutions is complicated. As a result, you may wish to engage the services of a TAP with experience working with similar utilities. Small systems may be able to receive free technical assistance from the Rural Community Assistance Partnership (RCAP), which produced this guide. Also, there are consultants for hire for most areas of utility operations, finance, and management. The inside back cover of the guide provides information about RCAP's national network of nonprofit organizations working to ensure that rural, small, and Tribal communities throughout the United States have access to safe drinking water and sanitary waste disposal. This service is free of charge to eligible communities other than your time to work closely with RCAP's staff.

TAPs often play one of two main roles when it comes to regionalization:

1. Subject matter expert, performing or assisting with feasibility analyses including not just physical feasibility but also looking at rates, affordability, and management. TAPs can also assist with preplanning, planning and construction funding applications, reviewing preliminary engineering reports (PERs), asset management, GIS mapping, acting as a liaison between regulators/funders and the community, and often acting as a convener.
2. Third-party facilitator, serving as a mediator, moderator, and/or negotiator. Having a neutral, third-party facilitator to guide the process can often ease the path to successful and sustainable long-term solutions.

TAPs bring an array of ideas and experience from working with multiple water and wastewater systems across a geographic area. TAPs also often have more time to invest in analyses and evaluations than utility staff and boards may have on their own.

Funding agencies tend to look more favorably on applications from water and wastewater systems that have engaged with TAPs. Your customers may also be more accepting of your actions when they are proposed by a neutral, third-party expert rather than from the utility, community staff, or the state/federal government.

If you decide to engage the expertise of a TAP, it is important to find one who can best assist your community. Find out what services the TAP can offer to you and determine what skills and services the TAP provide for your system. Ensure that the TAP is familiar with the regulations in your state, territory, or Tribal Nation. Ask for references from water/wastewater systems that have worked with them previously that are similar to you in size, demographics, and ownership.

CHAPTER ONE

Overview of Regionalization

Regionalization exists on a spectrum from the least formal, such as mutual aid agreements and sharing of heavy equipment, all the way to the most formal, such as full managerial and/or physical consolidation, and accounts for everything in between such as contract operations and joint ownership of source water. Figure 1 below shows the four major "buckets" of regionalization and the various types of collaboration that fall under each. Please note, this list is not exhaustive of all options. Some partnership examples can fall under more than one category depending on how they are set up and if there are legally binding contracts attached, such as buying chemicals in bulk.

Later in this guide, we will take a deep dive into each of these four "buckets" including what each one entails, examples of where they have worked from different regions of the country, and helpful tips, tools, and best practices for implementation. There are even more case studies and examples available on EPA's Partnerships Site with additional relevant tools and resources.

Communities often move along the regionalization spectrum once trust is built, and they have started to reap the benefits of collaboration. Many utilities are already practicing regional collaboration and do not even know it—or they may be aware but may not think of it as regionalization. As part of its Partnerships Training Toolkit, EPA developed a worksheet exercise for systems to consider existing partnerships and easy, logical ways to explore expanding them. The worksheet and an example can be found in the appendix. The next three sections identify drivers that sometimes propel regional solutions, common benefits associated with successful regionalization efforts, and some of the common barriers along with potential solutions on how to overcome them.

EPA'S RESOURCES

EPA's Water System Partnership Handbook, as well as resources for beginning a partnership and case studies of successful regionalization efforts, are available at *epa.gov/dwcapacity/about-water-system-partnerships*

INCREASING TRANSFER OF RESPONSIBILITY

Informal Cooperation

work with other systems, but without contractual obligations

EXAMPLES

- sharing equipment
- sharing bulk supply purchaces
- mutual aid agreements

Contractual Assistance

Requires a contract, but contract is under systems' control

EXAMPLES

- contracting operation and management
- outsourcing engineering services
- purchasing water

Shared Governance

Creation of a shared entity by several systems that continue to exist independently (e.g., regional water system)

EXAMPLES

- sharing system management
- sharing leadership
- sharing source water
- JPA

Ownership Transfer

Takeover by existing or newly created entity

EXAMPLES

- acquisition and physical interconnection
- acquisition and satellite management
- one system transferring ownership to another to become a larger existing system or a new entity

Graphic adapted by RCAP and RCAC from U.S. Environmental Protection Agency resources

FIGURE 1—Regionalization Spectrum

RCAP's RESEARCH

RCAP's research into regionalization and other resources are available at *rcap.org/special-initiatives/regionalization*

Common Drivers of Regionalization

What drives systems and communities to be early adopters or eventually decide to move towards a regional approach?? There are many reasons to look for regional solutions to your community's challenges, but the two most common reasons are:

- Cost considerations, such as achieving financial sustainability, economies of scale, and accessing infrastructure funding, or
- Regulatory pressures, such as meeting state and federal water and wastewater quality rules.

Water industry leaders such as the US Water Alliance and the American Water Works Association also document a long list of other potential drivers including greater efficiency, improved water quality/quantity/redundancy, and better and more robust service.

DISCUSSIONS OF REGIONALIZATION

The US Water Alliance names advancing regional collaboration on water management as the number one "big idea" in their One Water for America Policy Framework, which is available at *uswateralliance.org/initiatives/listening-sessions*

Benefits of Regionalization

RCAP's definition of regionalization includes "mutual benefit," but what exactly are some of those potential benefits? The four most common are:

- cost savings and improved operations,
- additional access to funding,
- improved ability to work with regulators/meet regulatory requirements, and
- advances in economic development.

Barriers to Regionalization

No one who has participated in regionalization would tell you that it is easy. It is often both time-consuming and resource-intensive. Successful regionalization projects can take years, especially for more formal projects that include leveraging infrastructure funds and construction. The most common barriers to regionalization include:

- local politics and interests,
- a lack of trust,
- questions about local control,
- fear of the unknown, and
- financial challenges (funding projects, distributing the costs and benefits of a project, and diseconomies of scale).

Some barriers are easier to overcome than others. At the 2019 RCAP Regional Collaboration Summit held in Springfield, Illinois, participants identified potential solutions to the most common and difficult barriers to regionalization. See these barriers and potential solutions in Figure 2.

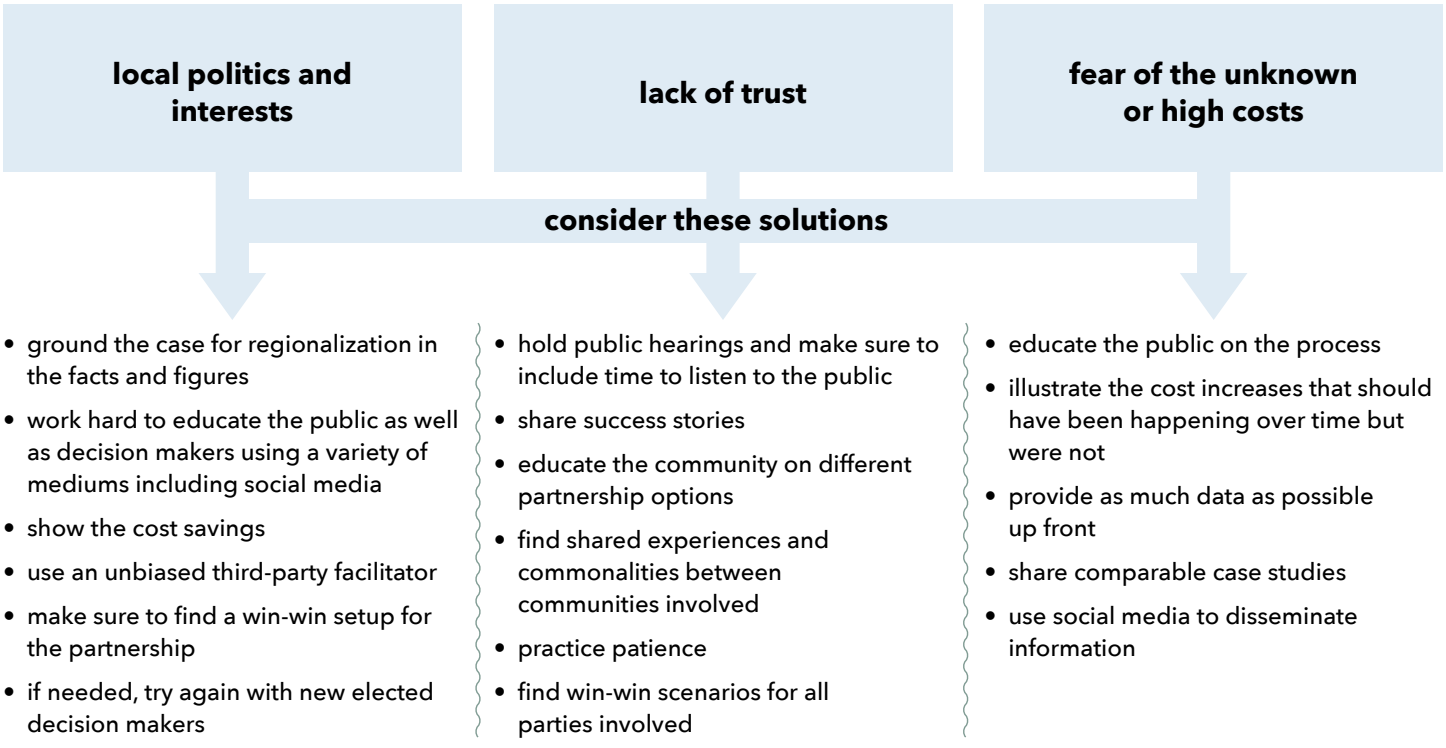

FIGURE 2—Barriers and Solutions to Regional Collaboration

CHAPTER TWO

Evaluating Regional Solutions

Lessons Learned from Community Leaders

RCAP published a research report in March 2020 titled "Resiliency Through Water and Wastewater System Partnerships: 10 Lessons from Community Leaders." As small, rural, and Tribal communities across the country seek solutions for common economic, operational, and compliance challenges, this report highlights the experiences of those who chose water and/or wastewater system regionalization as a solution. Systems are collaborating to build capacity and become more resilient, enabling them to successfully sustain their systems not only financially, but technically and managerially, for years to come. The report highlights ten lessons from community leaders who undertook and facilitated regionalization projects – the successes they saw, the challenges they overcame, and the difficult questions they faced throughout the process. The goal of the report is to serve as a resource for community leaders in small, rural, and Tribal communities who are interested in learning more about implementing regionalization.

The ten lessons are easily understood as part of three broad categories: things to understand to get the process started or building blocks necessary before getting started; lessons to keep in mind while going through the process; and key lessons to keep in mind throughout. Each of the ten lessons also comes with "key questions" that communities considering regionalization should ask themselves.

TEN LESSONS

RCAP's Resiliency Through Water and Wastewater System Partnerships: 10 Lessons from Community Leaders report is available at *rcap.org/resources/regionalizationresearch/*

Beginning the Collaboration Process/Building Blocks

LESSON 1

Determine whether a partnership may be right for your community

Remember there is a wide spectrum of types of partnerships, and the examples given in this guidebook and described in Figure 1 are not an exhaustive list of appropriate and feasible solutions—whatever works for your community is the best approach. Consider all your options, and educate yourself and your community. Is a partnership right for your community? If so, what kind of partnership?

There are many nuances to keep in mind when considering whether regionalization is the right solution for your community. Regionalization may not be the right solution in every situation, but you should understand the potential benefits of regionalization, as well as all other options. For example, feasibility studies are often a crucial tool to review and understand all the possible solutions for a community.

LESSON 2

Find out what resources are available and build your team

Resources include current and potential financial, physical, and human capital. Local champions and outside experts can help in different ways. Look for your internal champions and external assets.

Remember that champions aren't the only human resources that are important—all stakeholders can influence the outcome of your regionalization project. Some related resources elsewhere in this guidebook include the partnerships matrix that can be found in the appendix.

LESSON 3

Commit to transparency from the start

Transparency and trust go hand-in-hand and are key to building a successful partnership. Honesty and straightforwardness will work out better in the long run. Honesty and transparency are crucial, and a lack of either can derail a project. Don't forget to include your community members and key stakeholders in the process!

LESSON 4

Commit to a willingness to listen, be respectful, and find mutual benefit

Successful partnership building requires respect, plus a willingness to listen, compromise, and meet the needs of all parties involved. Set these as ground rules at the beginning.

Without these pieces, a regionalization effort will never be sustainable, even if those leading it manage to get it started. Finding "win-win" solutions can carry a project over many of the common barriers to regionalization, like complex local politics and a lack of trust. Trusted third-party facilitators, like RCAP TAPs, can be especially helpful – in recognizing the big picture and being able to point out possible win-win scenarios.

LESSON 5

Recognize the importance of thinking through, and reaching an agreement on, governance

There is no one-size-fits-all governance model, nor is there a one-size-fits-all solution to picking the right governance structure for your community/regional partnership; it requires careful thought. A TAP can help your community consider different governance structures. Also, you and your community can refer to an example that was developed in California to help walk communities through the various available governance models located in the appendix.

LESSON 6

Keep a patient mindset, and know that this is a long-term discussion focused on sustainability

Be patient and realistic—sustainable partnerships don't happen overnight. Regional projects, especially those that involve funding applications and construction can take five to eight years on average. Take the time to do it right and remember good things are worth waiting for! Rushing a partnership could create an unsustainable foundation that could falter.

One of the best examples of a long-term regionalization process that built upon itself over time and became sustainable is the Lower Rio Grande Public Water Works Authority in New Mexico. It took six years to build the regional authority into the sustainable system it is today, and untold patience and hard work. The authority is now a sustainable business with happy customers, who are receiving high-quality services their communities could not have provided on their own and is continuing to grow as more surrounding small systems and communities see the benefit.

Once in the Collaboration Process

LESSON 7

Be realistic about long-term costs and capacity to maintain new infrastructure

Before taking on new infrastructure loans and grants—however tempting they may be—think about your community's long-term ability to operate and maintain what you build. Don't take on more than you can handle! Chapter 8 includes examples and success stories of how to sustain regional partnerships. There are many facets of sustainability that entail building technical, managerial, and financial capacity.

KEY QUESTIONS

LESSON 1

What challenges does my system face, and what is the nature of those challenges, i.e., technical, managerial, and/or financial?

How might my system be able to work with another nearby system to address these challenges, informally or through a more formal arrangement?

LESSON 2

Who can help? What experts are available to me?

Am I connected with a local TAP, accountant, or engineer? If not, how do I reach them?

Who in the community can be a champion?

What financial resources are available? Small grants for feasibility studies from the state, territorial, or federal government? Can I issue bonds? See Chapter 7 for more information on funding opportunities.

LESSON 3

What information do I need to make an informed decision?

What information does my community need to be kept in the loop?

How can I create a culture of transparency?

LESSON 4

What ground rules can I set to ensure all parties respect one another's opinions?

What decision points can I be flexible on?

How can I find a "win-win" situation?

LESSON 5

What is important to my community regarding how our system or a new regional system may be governed? How will my community want to be represented?

How will my covvmmunity handle it if a governance agreement needs to be changed later?

LESSON 6

What is the ideal outcome in 5 years? 10 years? 20 years?

What could drive partnership? Maintain momentum?

KEY QUESTIONS

LESSON 7

Will my community be able to pay off any loans and maintain new infrastructure in the long run?

LESSON 8

What skills or knowledge do board members already have? What do they need to have?

Can my community afford to offer stipends to board members or cover travel costs for attendance to board training?

LESSON 9

What is the one thing that my community needs the most from this effort, and do I have buy-in from the right stakeholders that this is the priority?

Have I clearly communicated that need?

Have I considered different paths to reach that goal?

LESSON 10

What can I do to earn the trust of my community and our neighbors?

What processes can I establish to ensure trust is maintained?

LESSON 8

Help system leadership and boards develop an understanding of their roles and responsibilities

Boards and other leaders play a huge role in determining the success of the system and potential partnerships. Everything works better when leaders can make informed decisions. Considering providing and taking advantage of training when possible or try to ensure board members and others have opportunities to build expertise.

The makeup and setup of boards (used as a general term for the governing bodies of water/wastewater systems) vary greatly. The most successful partnerships are between communities where the boards are comprised of people who understand the value of water/wastewater infrastructure and are committed to the process and to making the system sustainable for both their community and their larger region.

THE LOWER RIO GRANDE STORY

RCAP's western partner, RCAC, helped five unincorporated *Colonia* communities in southern New Mexico merge into a single drinking water system, the Lower Rio Grande Public Works Authority, which is documented in the following video. Since this video was published, additional progress has been made and additional communities became interested in becoming involved. The video story of this regionalization effort is available at *rcac.org/videos/lower-rio-grande-public-water-works-authority*

Things to Keep in Mind

LESSON 9

Keep your goal in sight, but be open to possibilities

Collaborative solutions might not always look as first envisioned; they might evolve. Make sure everyone is on the same page about the end goal but keep an open mind about how to get there. Consider the broad spectrum of partnership types, from informal to formal. See the case study about the Kankakee Alliance in Illinois in Chapter 5 for an example of how projects can evolve.

LESSON 10

Ensure building and earning trust is prioritized throughout the process

No partnership can achieve true success without trust, and building trust takes time. Trust should be fostered in three ways:

1. Between partnering communities and the third-party facilitator (if applicable),
2. Between the involved/partnering communities, and
3. Within each community.

Trust is important in any type of regionalization effort, but it becomes more crucial as partnerships become more formal. Trust can be built in many ways. Take, for example, the Kankakee Alliance project referenced in the Shared Governance Section. Stakeholders in that project have built trust over the years by working together closely on projects that may or may not be related to their overall effort to secure new source water. Every win the group achieves, no matter the size, serves as another stepping stone in the trust-building process.

Unfortunately, when trust is broken, it can be almost impossible to get it back and go on to have successful, sustainable regionalization solution. Maintaining trust is a top priority. Consider this an example of trust breaking down between two communities with a water purchase agreement. The community selling water failed to inform the community purchasing water that service had been temporarily cut off and that treated water was not available—a significant misstep. The purchasing community lost trust in the selling community and felt that they had to pursue solutions independently for storing their water, which came at a significant cost.

Guidance from the Broader Water Sector

EPA, key water organizations, and other TAPs have all produced guidance on how to make regionalization efforts successful and sustainable.

EPA hosted a series of webinars on regionalization to identify best practices to promote water system partnerships. The presentation about the Logan-Todd Regional Commission in Kentucky included advice for dealing with historic community rivalries. The presenters pointed to the "need to address this directly by talking about it with other potential partners," and said that it helped to "hold meetings in communities other than the county seat." Also, the presentation about the Logan-Todd Regional Commission also suggested shifting the focus to "the ability to gain control over other aspects of the system" and bringing "decisions about a partnership to the broader community." It's also important to focus on commonalities, the long-term goal (in this case, potable water), and the basic facts about costs and savings, as well as to focus on the "wins" of the partnership.

The leaders of the partnership recommended careful communication with the communities involved by explaining the need, going door-to-door, and explaining the partnership processes directly from the start. They also recommended using regulatory agencies as helpful partners, such as to help with messaging and explaining technical information to communities and connecting with funding partners as early and as frequently as possible. This is important because almost any regionalization project, beyond the most basic and informal agreement, will require funding at some point in its lifetime. The sooner communities know what requirements they will need to meet to access funding, the better prepared they will be.

Another presentation given in the series jointly by the Lower Rio Grande Public Water Works Association (LRGPWWA) and the El Valle Water Alliance included lessons learned from each, including themes of the need for an impartial third-party facilitator, building a team, developing leadership early on, consensus on both short and long-term goals, and frequent and consistent communication.

The Council of Infrastructure Financing Authorities (CIFA)'s 2020 Workshop included a series of presentations on regionalization. Eddie Rhandour of Oklahoma's Drinking Water State Revolving Fund encouraged communities to "ensure the public in the area are a part of the project" and encouraged communities "to not be surprised that projects take time."[1] Erin Riggs of the University of North Carolina (UNC) Environmental Finance Center added that it is "critical to have a 3rd party mediator who has no vested interest" in the outcome, and that "Regionalization is not just for failing systems—there are benefits and opportunities for all systems in regional partnerships.[2]

Panelists at an event hosted by RCAP in May 2021 emphasized the need to start conversations early. This applies to conversations with funding agencies as well as conversations between communities. It is ideal to begin an open dialogue early on, with all potential stakeholders, because progress can take a long time.

In 2019, the US Water Alliance and the UNC Environmental Finance Center partnered on a report titled *Strengthening Utilities Through Consolidation: The Financial Impact*.[3] The report breaks down eight specific and varying examples of utility consolidations and the financial benefits that were achieved in each, such as economies of scale, access to lower-cost loans and bonds, lower customer rates, revenue stability, fewer penalties, and increased compliance, improved planning, and increased opportunities for economic development. Most of the examples include large cities but understanding the details of these may still inspire leaders of small, rural, and Tribal communities. Additionally, some of the examples include small communities consolidating with cities for services,

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3 HTTP://USWATERALLIANCE.ORG/SITES/USWATERALLIANCE.ORG/FILES/PUBLICATIONS/FINAL_UTILITY%20CONSOLIDATION%20FINANCIAL%20IMPACT%20REPORT_022019.PDF

GUIDANCE FOR BOARDS

RCAP's The Big Guide for Small Systems is a comprehensive resource for drinking water and wastewater board members and leaders. It outlines the responsibilities of governing boards and contains practical advice on how to be more effective, how to manage finances, and how to obtain and implement infrastructure funding. The guide also contains best practices for utilities, including regionalization. The guide can be downloaded for free from *rcap.org/managerial-financial/big-guide-small-systems*

RCAP'S REGIONALIZATION POLICY RECOMMENDATIONS

In May 2021, RCAP released the report, "Regionalization: RCAP's Recommendations for Water and Wastewater Policy," which focuses on local, state, and federal policies that encourage and those that hinder regional solutions and includes recommendations at all levels of government to better support regionalization moving forward. The report highlights 22 recommendations from RCAP that should be integrated into policy decision-making and is available at *rcap.org/resources/regionalizationresearchtwo*

EPA'S WEBINAR SERIES ON WATER PARTNERSHIPS

Resources from EPA's webinar series on Water System Partnerships are available on the agency's Resources for Beginning a Partnership website, *epa.gov/dwcapacity/resources-beginning-partnership*

RESEARCH FROM THE US WATER ALLIANCE

The US Water Alliance is a non-profit organization that advances policies and programs that build a sustainable water future for all. Their research includes several documents related to utility consolidation, including the financial impact report mentioned in this section. Their research is available at *uswateralliance.org/initiatives/utility-consolidation.*

and the case study on the Iowa Regional Utilities Association, a member-owned regional non-profit utility serving communities across parts of 18 counties, provides a perfect example of many rural communities working together to create a vast regional utility which has supported improved services and opportunities in the region.

A 2018 workshop summary from the Center for Law, Energy & the Environment, UC Berkeley School of Law includes a detailed table of barriers, potential solutions, and who could implement those solutions.[4] Some of the barriers and solutions which they found could be addressed by local entities include:

- **Water rate and affordability issues**
  Solution: Ensure that receiving systems charge newly consolidated customers rates that reasonably reflect the costs of serving them, for example, by including a "social equity" clause in consolidation agreements that preserves community and public participation, prevents unregulated privatization, and establishes rate protections.
  Phase in rate increases related to consolidation over time, rather than all at once.
- **Resistance from small systems and their residents**
  Solution: Provide community members with specific, relevant information about why consolidation may be helpful and why and how water rates would change after consolidation.
  Ensure representation and/or involvement of subsumed communities (e.g., by maintaining the board of a subsumed water system as an advisory body, by adding representatives of the subsumed community to the board of the receiving system, etc.).
- **Resistance from receiving systems and their residents**
  Solution: Articulate the costs and benefits (e.g., increasing local water security, improving economies of scale, etc.) of consolidation to receiving systems.

Advice from RCAP's Field Staff

Finally, here are some thoughts and best practices from RCAP's field staff who work directly with small communities to implement regional solutions.

4 HTTPS://WWW.LAW.BERKELEY.EDU/RESEARCH/CLEE/RESEARCH/WHEELER/LEARNING-FROM-CONSOLIDATIONS

EPA TOOLS AND RESOURCES

EPA has compiled and continues to offer information on types of partnerships and an interactive map with case studies for each type. Also accessible from that page is a one-stop-shop of resources helpful for beginning partnerships. This site breaks available EPA resources into five categories: building capacity, managerial resources, workforce resources, financial resources, and EPA's webinar series. The webinar series provides pieces of advice from communities that have successfully done regionalization projects. These categories are not all exclusively relevant to regionalization projects, but it is important to address them early on when thinking about regionalization solutions. These resources can be accessed at *epa.gov/dwcapacity/about-water-system-partnerships.*

REGIONALIZATION STORIES IN VIDEO

The University of Illinois, in collaboration with RCAP, maintains a website titled *WaterOperator.org* which compiles resources from all over the web and stories from all over the U.S. in one location. The featured videos on the site often contain helpful information related to regionalization for small communities (there are also many helpful resources available on a broad range of topics, which are worth checking out). Some key featured videos and stories on *WaterOperator.org* include:

Small Communities Benefit From Shared Resources
Hear experiences first-hand from those who have succeeded with regionalization projects in smaller communities. *wateroperator.org/blog/featured-videos-small-communities-benefit-from-shared-resources*

WARNs in Action
Understand the benefits of mutual aid networks called a WARNs, short for "Water and Wastewater Agency Response Networks". *wateroperator.org/blog/featured-video-warns-in-action*

Alaska Rural Utility Collaborative
Discusses options in the middle of the regionalization spectrum, including billing and other services, and can include other management and operations services, assistance on topics such as rate-setting, and more. *wateroperator.org/blog/featured-video-alaska-rural-utility-collaborative*

CHAPTER THREE

Informal Collaboration

Defining Informal Collaboration

Informal collaboration is a broad category of regionalization practices where communities work together for mutual benefit. The least formal of these collaborations often exist without legal agreements or contracts. Examples range from asking advice on a challenge you are experiencing from colleagues in neighboring communities to borrowing equipment to holding a shared community event. Many communities that participate in these very informal collaborations don't realize that it is a form of regionalization, but these interactions are important. There are many stories of informal collaboration between communities evolving into more formal arrangements or long-term cooperative relationships. These informal arrangements are often taken for granted, but when they work well, they provide tangible benefits to the participating communities.

Other examples of informal collaboration are more official and do include some type of signed agreement between communities, such as agreements to purchase treatment chemicals, supplies, and services in bulk and agreements to assist in times of crisis, known as mutual aid agreements. Remember, you should always consult with your attorney or another legal expert before entering into any signed agreements with other utilities.

Regional collaborations are often formed by stakeholders at the local level, and at first, a more informal collaboration approach may be preferable. When a partnership is first formed, trust between the communities is being built, and informal collaboration is a way to work together without giving up any local control or community sovereignty. Most informal regional collaborations impose few restrictions on participants and don't involve many risks, but their benefits are often more limited than those of more formal arrangements between communities.

Examples of Informal Collaboration

One example of informal cooperation is between the communities of Moore Haven and Everglades City, two small cities in South Florida, that executed an equipment exchange. A TAP working with both communities discovered that each city's water plant possessed a chlorinator that would work better for the other city's system. Realizing this, the TAP facilitated an equipment exchange and taught the operators how to build and maintain the exchanged chlorinators. This exchange was only possible because someone working with both communities was able to see the potential connection and mutual benefit, highlighting the value of increased communication and sharing of information between systems.

Another example of informal collaboration efforts comes from Centre County, Pennsylvania. The limestone geography of the county's Penns Valley creates water quality issues in the area's aquifers, and it is difficult for the small systems there to pay for the expensive infrastructure upgrades needed to circumvent these contaminations due to each system having a limited customer base. The supervisor of one of the small systems, Haines Township, convened an informal collaboration meeting with 22 other individuals representing seven small water systems in the area. Discussions included cost-saving suppliers and methods, opportunities to share operator expertise when staffing issues arose, and updates on regulatory changes. The group hopes this initial, informal gathering will develop into more regular cooperation amongst the participating utilities.

BULK PURCHASE OF CHEMICALS

Two long-running collaboratives in New England allow water utilities to purchase treatment chemicals in bulk: the Northeast/Merrimack Valley Chemical Consortium, which operates in Massachusetts and New Hampshire, and the Southern Maine Regional Water Council. Both entities can negotiate lower rates on treatment chemicals for all their member utilities because they can offer chemical sellers a high volume of sales. Bulk purchases are often enacted as handshake agreements between communities; these two examples, however, actually have formal contracts signed by all participating utilities. Details on the two programs, including supporting documentation, are available on their respective websites.

Northeast/Merrimack Valley Chemical Consortium
nemvcc.com

Southern Maine Regional Water Council
smrwc.org/copy-of-regional-services

WARNs

Water and Wastewater Agency Response Networks (WARNs) are comprised of "utilities helping utilities" within a state that respond to and recover from emergencies by sharing resources. WARNs are governed by a common mutual aid agreement. EPA maintains resources related to WARNs such as example mutual aid agreements as well as a list of contacts for all existing WARN programs here—*epa.gov/waterutilityresponse/mutual-aid-and-assistance-drinking-water-and-wastewater-utilities*.

CHAPTER FOUR

Contract Services

Defining Contract Services

The simplest formal regionalization option is contract services, which provides for the delivery of some aspect of water supply and/or wastewater treatment service. This basic contract involves the creation of a legal agreement between water/wastewater systems, or between a utility and a water supply services company or waste treatment company. Most often, the utility contracting for services retains ownership over their system and controls policymaking and financing, while the contracted provider performs the agreed-upon service functions.

Basic service contracts are the most widely used method of regional cooperation among local government units, public entities, and private companies and present a flexible, yet enforceable arrangement.

Examples of Contract Services

Many specific functions of water and wastewater services may be contracted. A few common examples include:

- water purchase contracts-wholesale and retail,
- wastewater treatment contracts,
- contracts for Operations and Maintenance (O&M)—emergency and repair,
- water plant operation and maintenance,
- distribution system maintenance, and
- billing and collection.

The most common use of basic water supply service contracts is to provide water on a wholesale or retail basis. Many of these contracts are to provide raw or treated water regularly—it is one of if not the primary source of water for the receiving system. These contracts usually arise when raw water source quality or quantity becomes unacceptable, requiring either the construction of a treatment system or the development of a costly new water source. These two factors alone, unacceptable water quality and quantity, have given rise to the creation of more of these regular water contracts than any other factors. Other contracts establish an opportunity for a utility to receive water from a neighboring utility in times of emergency only.

Wastewater utilities can also enter into contracts for treatment. One utility will collect raw wastewater from its customers and deliver it through its collection system to a neighboring utility for treatment. This contractual arrangement can be more economical for small systems in particular if they are facing large capital costs to meet regulatory requirements.

As with any legal agreement, you should consult with your attorney or another legal expert before entering into any agreements.

Contractual agreements can also make available various types of specialized services to small water and wastewater systems that are unable to obtain the necessary facilities or qualified staff to provide the services for themselves. Contract provision of O&M and laboratory services are finding increasing use as water and wastewater systems are attempting to both upgrade the quality of service to their customers and to comply with federal and state/territorial regulatory requirements. Larger water and wastewater systems and water supply service companies offer these types of services to smaller systems. For example, a small community that does not require an operator on-site every day may contract for operations services from a neighboring system or from a private company that provides that service.

In Bell County, TX, the Certified Water Service Company now contracts with 14 water systems, each of which serves 100 to 800 customers. The Certified Water Service Company provides O&M and water sampling services, prepares water quality monitoring reports, distributes monthly bills, and collects revenues.

Cowlitz County, WA, implemented its satellite water system support concept by entering into contracts with several counties, and organizations to operate and maintain their water and wastewater systems. As a part of the contract, the county regularly sends qualified water system operators to verify the proper operation of the water treatment and distribution systems; these operators also provide regular and emergency maintenance and repair services.

GETTING YOUR WATER PURCHASE OR WASTEWATER COLLECTION CONTRACT RIGHT

When one water system wishes to sell either raw or treated water to another system, either regularly or during times of emergency, the two systems must sign an agreement. This is also true for a wastewater system that wishes to deliver its raw wastewater to another utility for treatment. Getting that contract right will save the participating systems headaches in the years to come. The UNC Environmental Finance Center has created a guide on Crafting Interlocal Water and Wastewater Agreements that identifies what should be covered in the contract and provides examples from actual agreements. The guide is available at *efc.sog.unc.edu/resource/crafting-interlocal-water-and-wastewater-agreements.*

ADVANTAGES AND DISADVANTAGES OF BASIC SERVICE CONTRACTS

ADVANTAGES

- Easy to create
- No restrictions on local autonomy or policy control
- No governmental reorganization
- Adjustable to meet changing service needs and demands
- Realization of unit cost savings via larger quantity purchases (economies of scale)
- Able to provide specialized services not otherwise available
- No voter approval required

DISADVANTAGES

- Easy to terminate
- Solutions are possibly only temporary
- Can be expensive

Source: EPA, Regionalization Options for Small Water Systems, Office of Drinking Water (WH-550); https://bit.ly/3qJjv3d

CHAPTER FIVE

Shared Governance

Shared governance is another common approach to regionalization in the water and wastewater space. Shared governance occurs when two or more entities create a shared entity while continuing to exist and operate independently of one another. Shared governance, like all other forms of regionalization, exists on a sliding spectrum. On one end you might have multiple systems coming together to share management. While on the opposite end of the spectrum, you might have multiple systems coming together to form a common regional treatment system. It's completely dependent on the goals of the systems involved. Oftentimes each participating system maintains most of its existing staff, its board, its infrastructure/facilities, and the joint entity, made up of multiple individual systems, may have shared staff, a shared governing board, and/or shared infrastructure/facilities.

Shared governance has many advantages that are not dissimilar from the advantages of the other regionalization approaches reviewed in this guidebook. Systems across the US are being faced with a plethora of problems: rising costs, staffing constraints both on the operational and managerial side of things, supply chain issues, increasing regulatory oversight, a widening technological gap, political constraints, failing infrastructure, and source water protection challenges. Systems are being forced to tackle these issues while nationally we continue to battle record inflation numbers in the wake of COVID-19—bringing affordability to the forefront of everyone's mind.

Shared governance is an approach that can be used to solve or at least alleviate most of the problems mentioned above. Costs could be limited by spreading out any and/or all expenses across a wider customer base (This is called economies of scale). Similarly, staffing constraints can be alleviated as the over-arching entity will be able to pool resources from all its members or if the partnership eliminates redundant positions. Supply chain issues could potentially be solved by consolidating certain operations under one large umbrella (e.g. chemical purchasing). Regulatory oversight would not necessarily be reduced but could become less of an issue for smaller systems if they were to consolidate and deal with the issue jointly as opposed to on their own. The technological gap between systems whether it be rural and urban, private and public, big and small becomes much easier to bridge when systems reach scale. Political constraints can be alleviated with the formation of a new entity that operates separately from its member entities while each engaged system still maintains some local control over its system. Shared governance can also open the door to new funding opportunities that can solve underlying infrastructure issues. Finally, systems can come together to form an entirely new entity/new joint infrastructure whose sole purpose is related to source water protection/planning.

A key drawback for many regional approaches is the loss of local control. Shared governance is an approach that many systems use to overcome issues related to an actual or perceived loss of local control. This approach allows systems to structure the project how they see fit. For example, how many members will the new entity have? What powers will the members hold? How will voting powers be distributed? How will new members be added? How will new services be added? How will rates be structured? All these questions can be answered by systems on the front end in whatever manner they see fit to best achieve their goals/vision.

While shared governance as an approach can solve a wide variety of problems, it can also bring about a new list of challenges. Time and efficiency are challenges with shared governance. Bringing multiple systems together to pursue a singular mission is a task that can take days, months, years, and decades. It can be difficult for some systems to see that far down the road as they are often more focused on achieving more short-term goals. Shared governance can also create additional layers of operational complexity at a time when many systems are looking to remove unnecessary redundancies to operate as efficiently and affordably as possible. Most of the challenges systems face with a shared governance approach are situational and will largely depend on the goals they are trying to achieve and the block from which they are starting.

When considering the creation of a new joint entity there are two key things systems will need to work through. First, what will the core functions of the newly created entity be? Second, what governance attributes does the group find to be the most desirable? These two things can typically be achieved across multiple meetings with discussions on the group's shared history, shared concerns, strengths, weaknesses, values, and goals. Successfully coupling core functions with desirable governance attributes should give the group a path to its goals.

Step-By-Step Regionalization Process

The framework below should give you a better understanding of how this process can play out.

1. Form Initial Leadership Team

- Identify Stakeholders
  - Local Governments
  - Service Providers
  - TAPs
  - National, State, and Local Agencies
  - Other
- Identify Common Needs
  - Old Infrastructure
  - Funding
  - Regulatory Requirements
  - Staffing

2. Kick-off Sessions

- Identify Region
  - Who needs to be involved?
- Identify Challenges
- Identify Benefits
- Identify Needed Information
- Identify Risks Associated with No Action and Moving Forward

3. Evaluate Need, Purpose, and Intent

- Regional Structural Options
  - Mutual Aid Agreement
  - Sharing Agreements
  - Purchase Agreements
  - Regional Planning
  - Contract Services
  - Partial Consolidation
  - Full Consolidation

4. Establish Steering Committee

- Develop Mission Statement
  - Obtain agreements
  - Community Outreach Campaign
- Funding
  - Postage, Legal, Engineering, etc.

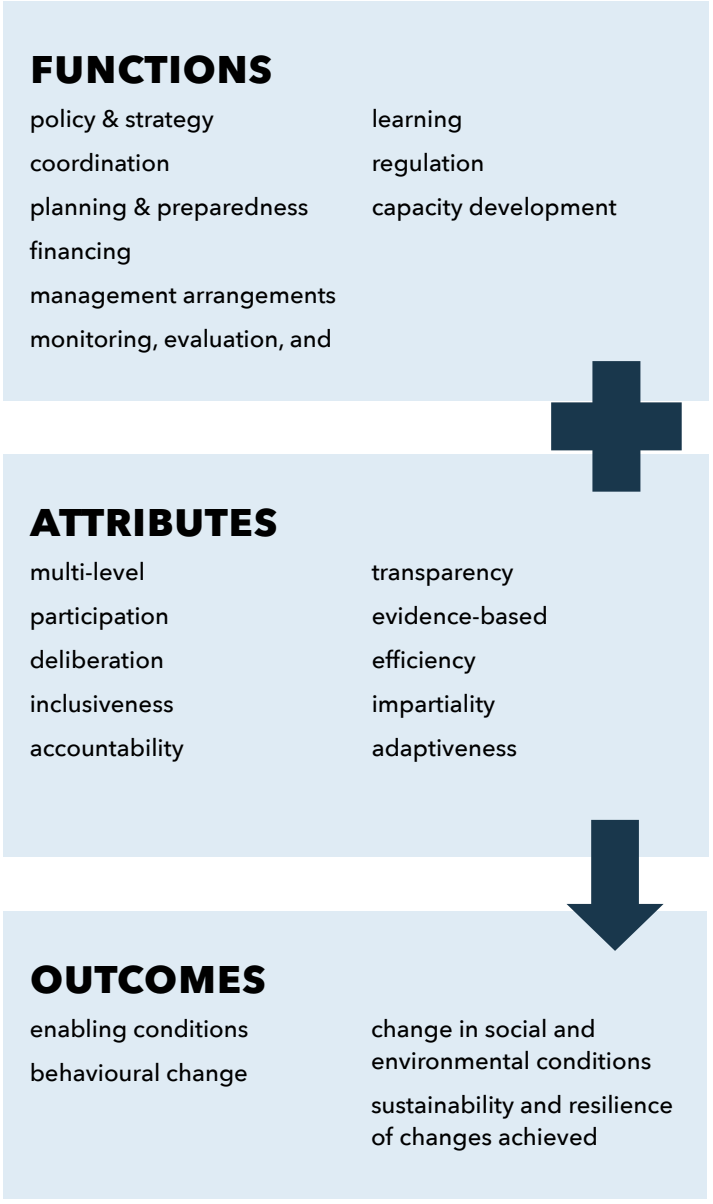
5. Agreement (Governance Structure)

- MOU/MOA
- JPA
- District
- Authority
- Cooperative
- Other

6. Maintain and Implement

- File for and Acquire Funding
- Document program successes
- Develop organizational documents
- Comply with funding requirements

Source: Blanca Surgeon, Olga Morales, RCAC Regionalization Process Map



Alejandro Jimenez, Panchali Saikia, Ricard Gine, Pilar Avello, James Leten, Birgitta Liss Lymer, Kerry Schneider, Robin Ward (2020) Unpacking Water Governance: A Framework for Practitioners [5]

5 HTTPS://WWW.MDPI.COM/2073-4441/12/3/827/PDF

Jumping through these hoops from start to finish and reaching consensus can be intimidating for most systems. One thing RCAP has found from years of experience providing boots-on-the-ground technical assistance is that an unbiased third-party facilitator can often be a key component in getting systems across the finish line. Having a facilitator on hand provides systems with another tool in their tool belt. Facilitators can help move the project by sharing relevant information, coordinating, and leading healthy conversations. This role must be filled by someone who is unbiased towards all parties in the project and the general project outcome itself. The latter becomes more important the further along the regionalization spectrum systems are considering going. Facilitation will likely become ineffective if stakeholders begin to believe that the facilitator is simply trying to sell a project that they are vested in seeing succeed. Below are some examples of shared governance projects that RCAP has facilitated.

Kankakee River Valley Water Planning Area Alliance (Kankakee Alliance or KA), IL

In the late 1990s, Godley, IL, a small village about an hour southwest of Chicago, formed a water utility district to provide safe, sustainable, and affordable drinking water to the village's residents. However, the Godley Public Water District was also formed in part to pursue more advanced long-term regional water solutions for the area. For decades the communities in Will and Grundy County have been looking down the road at a future that may or may not present several issues with their source water sustainability. Aquifers in their part of Illinois have been depleted because of decades of population growth. In recent years, systems in their area have also been battling high radium levels. Increasing regulatory requirements and rising costs associated with treatment/disposal have added pressure to the issue. Since its inception, the Godley Public Water District has been working hard to come up with solutions to these issues.

As a result of their efforts – the Kankakee Alliance was created. The Alliance is an organization dedicated to long-term planning for the region's water assets. The Alliance consists of multiple communities in Will and Grundy County. However, the group promotes inclusivity and allows a wide range of stakeholder participation. An average Kankakee Alliance meeting can have upwards of ~10 communities in attendance (members and non-members), multiple fire districts, multiple economic development planning agencies, multiple engineering firms, several TAPs, and sometimes even a state legislator. Below is a table identifying systems involved with the alliance and their system size and median household income.

For many years, this group has been collaborating to solve the region's water issues. During the Summer of 2019, the group identified several challenges, strengths, and concerns for the region. Poor well water quality, lack of adequate fire protection, and long-term source water supply were all identified as common challenges. The group identified Godley's river withdrawal permit as their biggest strength. The permit allows Godley to construct a new water intake on the Kankakee River and ultimately switch water sources from the region's ground wells to the Kankakee River. Doing so would allow them to potentially alleviate every single challenge identified.

Kankakee Alliance Meeting with IL State Senator, Patrick Joyce

Identifying challenges, strengths, tools, assets, etc. is the easy part. Acting on that information is where things can get tricky. The group has been working tirelessly in recent years to hammer out the details of their options. Several concerns they're working to address include but are not limited to funding, local control, rates, fire protection, regulatory constraints, and policy changes.

The group is currently in the process of exploring governance models that would allow the entire area to shift from its groundwater wells to the river. The goal is to create a new

KANKAKEE ALLIANCE BACKGROUND DEMOGRAPHIC INFORMATION

Community/ System Name	Population Served	Connections	Median Household Income
Godley Public Water District	660	232	$49,531
Village of Diamond	2508	880	$60,417
City of Braidwood	6200	2102	$63,651
Village of Coal City	5587	2330	$71,406
Village of South Wilmington	681	321	$68,750
Village of Braceville	900	322	$63,077
Village of Essex	0	0	$72,406
Custer Park (Unincorp.)	0	0	N/A

*This table does not include all member communities; but illustrates some of the participants in the process.

organization that would be responsible for treating and distributing the water to each community. The group has walked through several options for governance structure but has yet to finalize and move forward with one single option.

RCAP has been assisting the group through this process on an as-needed basis. Thus far, RCAP has served in the crucial third-party facilitator role. In that capacity RCAP has educated the group on their regional solution options, coordinated monthly meetings, and provided technical assistance. From a technical assistance standpoint, RCAP has provided the group with water rate analyses, water audits, water production rate analyses, and GIS mapping to help them better understand their system needs.

The Kankakee Alliance project is a great example of the various phases that a regional project can pass through. It started as a small group within a village identifying a potential problem. Then it turned into a water district. Then a regional planning agency. Now they're looking at creating an entirely new organization that will provide affordable, safe, and sustainable drinking water for an entire region.

Jefferson Communities Water System, FL

Jefferson County is an economically distressed rural area in the Florida panhandle, with roughly13,000 residents in the county. Lloyd Water Works Authority (LWWA) was a small water system in the County that served a portion of one community—32 total connections. LWWA could not extend service beyond these 32 residents. Meanwhile, residents throughout Jefferson County were battling health issues because of well contamination from high concentrations of coliform bacteria.

The County and the LWWA both lacked the capacity to deal with the issue. From a technical standpoint, the residential wells lacked depth and proper casing to avoid contamination. The LWWA did not have a formal management structure in place and lacked the financial resources needed to expand its services.

Residents refused to accept this situation and sprung to action creating a new county-wide system to replace and expand the LWWA. They launched a public awareness campaign that included community meetings, political and health department support, and newspaper coverage. Jefferson Communities Water System (JEFCOM) was formed as a result.

JEFCOM is a new system that serves over 1,000 connections and more than 2,500 customers. JEFCOM operates under a Joint Powers Agency (JPA) structure which consists of one system manager and a board with one representative from each of the nine communities served. JEFCOM received grant and loan funding from the Drinking Water State Revolving Fund and USDA Rural Development for the system creation/expansion.[6]

Joint Powers Agency

Joint Powers Agency (JPA), also called Joint Powers Authority in some states, is a common avenue in many states for a shared governance approach, so to provide further clarity on the model, below is a summary of JPAs in California.

JPAs can be formed in California with the execution of a joint powers agreement that meets the statutory requirements of California Government Code Sec. 6500 et seq.[7] Such an agreement allows two or more public agencies to act together as a single entity presiding over an area that is coextensive with their territories unless otherwise stated in the agreement.

Structure

The JPA is governed by its members as outlined in the agreement. This gives communities the flexibility to design an agreement that they are comfortable with. However, they must have a treasurer or designee to perform such duties. Most JPAs are formed with one director from each governmental agency member with nongovernmental agency members participating in an advisory capacity. Each board member would typically have one vote, but again, this can be changed within the agreement itself. Regulatory oversight for the JPA is provided by the public entity members and those that oversee them.

Authority

From a general authority perspective, the JPA agreement will define what powers will be exercised by the JPA. However, a JPA may only exercise those powers that are consistent with those of one of its members. For example, JPAs typically have the power to acquire property by any means available and may incur debt, but the members may decide that they would like to limit the organization's ability to incur debt without certain parameters being met. Another example is the power of eminent domain (the ability to seize private land for public use) – so as long as at least one of the member organizations has it, the JPA can have it. As a final example, JPAs can serve outside their district so long as a member organization has such power, and then if the agreement permits this.

Financial & Legal Capabilities

Similar to the JPA's authority outlined above – the JPA's financial and legal capabilities are governed by the agreement and the underlying member obligations/powers. For example, JPAs can do the following so long as it is consistent with the agreement and a governing member's powers: incur debt, issue bonds, charge for services, levy taxes, levy assessments, and maintain and defend actions in its name. The JPA agreement can also serve to protect individual members from liability.

North Tulare County Regional Water Alliance, CA

An example of a JPA would be the North Tulare County Regional Water Alliance which is a JPA organized by five unincorporated communities in the Central Valley of California in 2017. The driver of the collaboration was the unattainable ability to access contaminant-free groundwater. Over 100 years of continuous farming contaminated the groundwater sources to the point that treatment was not a viable option, particularly not for small communities without the ability to afford treatment. For that reason, the communities formed the JPA to explore regional solutions. The specific purpose of the JPA was to identify and secure funding to develop, construct, own and operate a regional surface water treatment facility that will serve safe drinking water to five communities located in the northern part of Tulare County.

Ultimately, the Joint Powers Agency model and any shared governance approach, for that matter, serves as a useful regionalization tool for systems that are looking to act but want to maintain a higher level of autonomy and local control versus the next option we will be exploring—Consolidation.

6 EPA EXISTING WATER SYSTEM PARTNERSHIPS: CASE STUDY SUMMARIES; HTTPS://WWW.EPA.GOV/SITES/DEFAULT/FILES/2017-11/DOCUMENTS/WATER_SYSTEM_PARTNERSHIPS_-_CASE_STUDY_SUMMARIES.PDF
7 SOURCE: HTTPS://LEGINFO.LEGISLATURE.CA.GOV/FACES/CODES_DISPLAYSECTION.XHTML?LAWCODE=GOV&SECTIONNUM=6500

CHAPTER SIX

Full Managerial and/or Physical Consolidation

Consolidation is considered the most formal type of regionalization for water or wastewater utilities. Consolidation occurs when two or more entities become one entity this can be a new entity or the absorption into an existing entity. This, however, does not necessarily require all utilities under the same structure to be physically interconnected. A consolidated or merged system could be several physically separate systems that are managed, operated, and maintained under one entity or could entail a full physical and managerial consolidation.

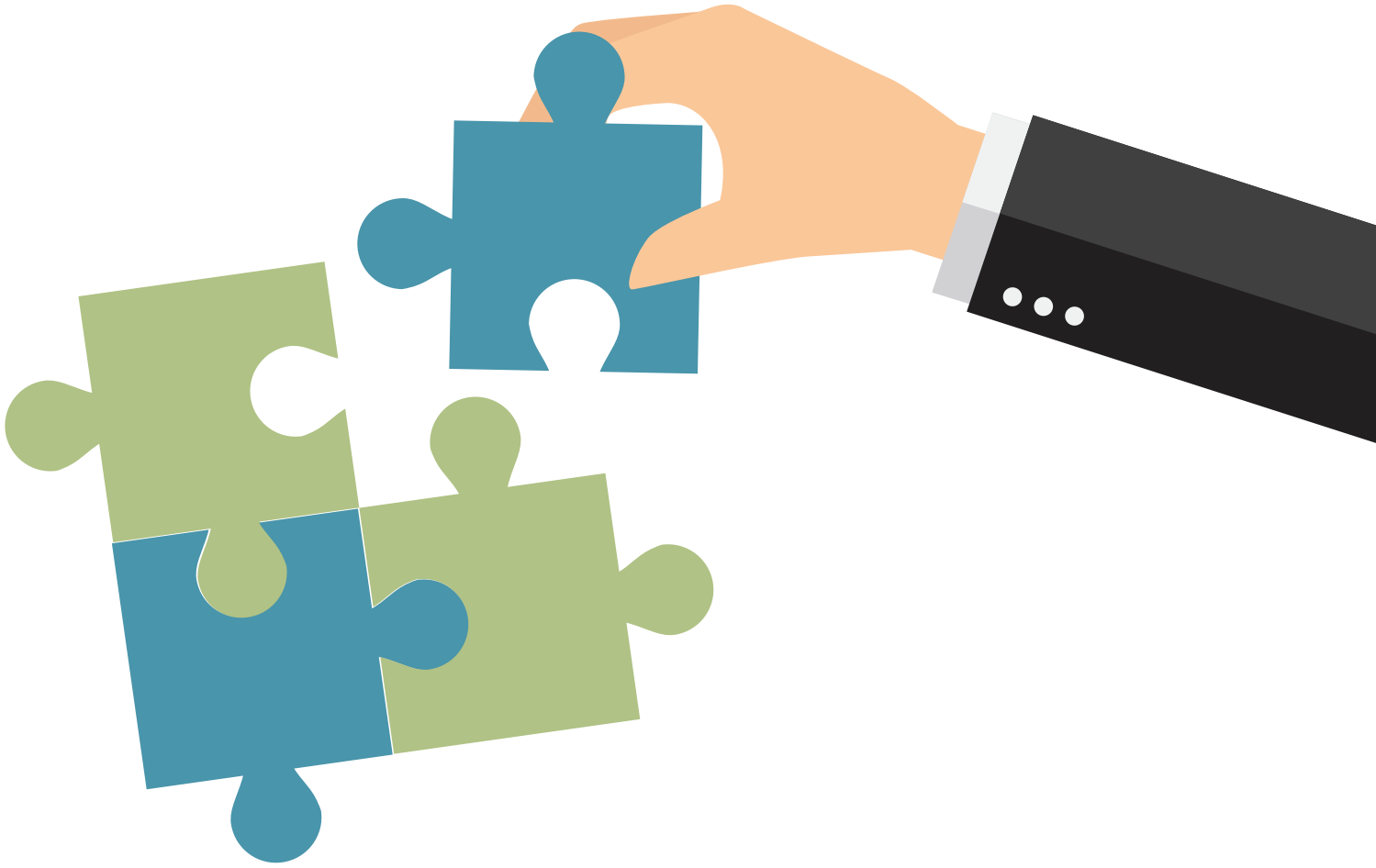
Many small systems are continually faced with increasing regulatory compliance and costly infrastructure needs. Consolidation of public water systems or treatment works can often meet these needs in ways the more informal types of regionalization may not. Consolidation can help communities with their operations through economies of scale and give them the ability to access and provide better resources and opportunities. Consolidation can be used to increase the capacity of the systems by broadening the systems' customer base, eliminating duplicative services, and most importantly, improving the infrastructure for the system. Many times, consolidation is considered because of the need to improve infrastructure within the systems involved and the regulatory compliance challenges of those systems. With the newly expanded capacity of a consolidated system, much-needed improvements are made viable. Customers within the consolidated system can expect higher quality service at affordable rates as the system can spread the cost of improvements and operations across a wider customer base.

Consolidation is not only defined by a physical connection between systems. Consolidation can also be a managerial and/or an operational consolidation. For example, a water or wastewater system continues to operate and maintain its distribution system and Public Water System (PWS) but is managed by a satellite system. Likewise, consolidation may only involve assisting with emergency preparedness through a physical interconnection but with no managerial or financial ties/overlap. Consolidations can also be both physical and managerial/financial, what we would refer to as a "full" consolidation. There are pros and cons to all these models, as there have been with all forms of regionalization. Sometimes consolidations occur years after another regionalization type has been in practice, namely a joint power agency or even a type of contractual service. Small systems that have long been operated by volunteer board members that are approaching retirement often find themselves looking at the consolidation approach since oftentimes younger generations are not interested in this kind of public service to their community. Many small systems do not recognize the true cost of service and historically established superficially low rates. While low rates are favorable for the customer in the short term and often help leadership with re-election, needed repairs and upgrades to the system are not feasible with limited revenue and the much-needed repairs only grow worse and compound and become more expensive over time.

Through consolidation, the acquiring system may need to invest heavily in the infrastructure of the acquired system(s). Regulatory impacts may be realized due to an expanded customer base, a new distribution system, or newly acquired water sources that demand increased sampling and monitoring. If there is a physical interconnect with a merged system the dynamics of water pressure, flow, water chemistry, and storage capabilities must be thoroughly analyzed as part of the project. If the consolidation is managerial/operational only, fully executed terms of service would be paramount in this approach.

One of the biggest challenges/barriers presented by consolidation is the loss of local control for some of the systems. Not everyone agrees that consolidation is a good way to meet these challenges. Fear of loss of control is most often the primary impediment to the consolidation approach. Differing points of view increase controversy about consolidation and have led to tension among industry leaders. This can be mitigated to some degree by appropriate representation on the governance board that operates the combined system. If the consolidated system is privately owned, typically the system is regulated by a utility commission with the customers' best interests in mind. Ratepayers in a newly formed consolidated system may experience a rate increase as the system adjusts to the true cost of operations and maintenance. Some arguments for consolidation are more focused on improving infrastructure and protecting the public and environmental health than reducing costs. Cost savings from a consolidated system may not be realized for years to come.

It may be easier for a consolidated system to maintain compliance with state and federal regulations than smaller independent systems. The cost to maintain sampling and monitoring requirements per customer decreases as the population of the system increases. In general, a larger more capable system would have more resources to



COURTESY OF EVA CORNEJO ON VECTEEZY

comply with regulations versus a smaller system.

Consolidation can spread debt service over a larger customer base, increasing the financial leverage a system may need to adequately reinvest into its infrastructure. Public financing agencies often incentivize consolidation projects garnering more favorable rates for these scenarios. It is important to note that states differ on the regulatory implications and financial incentives around consolidation. Consolidation can also help systems be more financially stable and sustainable over the long term and more resilient to factors such as natural disasters, climate change, and other emergencies such as the COVID-19 pandemic.

Lycoming County Sewer and Water Authority, Lycoming County, PA

Lycoming County, Pennsylvania is in the north central section of the state. The county is predominately rural and has numerous small public water and wastewater systems serving the small villages and towns throughout the region. Many of the small communities at this time were failing to invest in infrastructure, struggling with compliance, and experiencing high water loss in their distribution systems. This county-wide authority was formed in 1989 by the Commissioners of Lycoming County as they recognized many communities were challenged with more complex regulations, rising management costs, lack of proper asset management, and no plans for long-term sustainability. The Authority operates as an independent authority serving systems throughout the county. The Authority is guided by a nine-member board as an independently operating authority funded only by user fees and billed services. The Authority's first project was to build a regional sewer plant that served a couple of municipalities. Over the years, the Authority has continued to serve more communities, offering services that were needed throughout the county. Currently, the Authority serves 10 water and sewer systems in 12 municipalities and reaches 8,500 customers. The Authority provides varying levels of service to the communities involved from billing, operations and maintenance, leak detection, or fully owning and operating systems. Some of the Authority's goals are to develop cost-effective solutions and to build partnerships and ultimately infrastructure, and one of the keys to their success is to honor communities' characters, desires, and requests.

The visionaries of this case study are the commissioners in 1989 who had the foresight for this opportunity in the county. This is a great example of a mix of full consolidation, shared governance, and contract services—different systems in the county and the Authority have the flexibility to decide which form of partnership is best for them at this point which presumably can be readdressed and changed later if desired.

Aqua PA—Mifflin Township, Columbia County, PA

Located in central Pennsylvania, along the Susquehanna River, lies a small water system formerly operated by the Mifflin Township Water Authority. The system serves 1,200 customers and has one groundwater well. The system was challenged with failing infrastructure that resulted in persistent leaks and high unaccounted-for water. The well-drained alluvial material in the

subsurface complicated finding leaks and between 2007-2010, unaccounted-for water approached 85%. Customers experienced routine water outages due to major leaks and repairs. The only well that served the community was pumping nearly 24 hours per day to keep up with demand because of all the leaks. The authority was not in a financial position to repair or replace all the necessary mains that needed to be fixed. During this time, the authority was under a Consent Order and Agreement from the primacy agency to repair the leaks and lessen their unaccounted-for water percentage. In 2011, two neighboring private water systems approached the authority with an interest in acquiring the system. At this point, the authority did not have much of a choice but to sell the system. In 2012, after the private water company, Aqua PA, acquired the system they heavily invested in infrastructure upgrades. Over the next two years, most of the community's water mains were replaced. Customers experienced less frequent outages, better pressure and improved customer service. The unaccounted-for water percentage dropped from 85% to 25% within two years after acquisition. The private company retained the original operator of the system. This example is a case where one needs to look at cost and benefit. The local authority lost local control of its water system; however, they gained a more sustainable water system that will provide sufficient and affordable water to the community in the future. The primary driver for this partnership was the historically failing of the water authority not properly investing in the distribution system, placing them in a position where they had no other option but to sell the system. During this transition, the local champion was the chairman of the authority. At first, the authority chairman was not considering selling the system as they thought they could rehab the system themselves. After engineering studies were completed, including a leak detection survey, it became clear to the authority that selling the system was inevitable.

Some controversy exists in the industry about private water system takeovers. RCAP's preference is public to public partnerships where possible but we understand there is a time and a place where private acquisition is the only/best option.

Isle of Pines Water System, Lexington County, SC

The Isle of Pines is a small water system with eighteen service connections. The groundwater source that traditionally served the community was of poor water quality and was not monitored for many contaminants. Distribution line breaks were common within the community leading to service interruptions. The water outages and boil water orders led many members of the community to rely on purchasing bottled water. The community's only storage tank had leaked resulting in water loss and unnecessary pumping of the well. The water system had no financial resources to invest in upgrades for the system. The South Carolina Capacity Development program planned two community meetings to determine options for the system to be compliant and assess the potential of connecting to the nearby public water system in the town of Chapin.

In 2004, the Lexington County Public Works Department received a Drinking Water State Revolving Fund loan to extend a water line from the town of Chapin and interconnect with the Isle of Pines system. In 2005, over 4,000 feet of water main was installed to connect the Isle of Pines system to the Chapin system. The agreement was that Chapin would assume ownership of the system.

THE PROCESS BEHIND CONSOLIDATION

Consolidation can be complex and challenging to implement. The UNC Environmental Finance Center has created a guidebook called Consolidation of Water and Wastewater Systems: Options And Considerations to help systems through the process. The guide is available at *efc.sog.unc.edu/resource/consolidation-of-water-and-wastewater-systems/*.

Since the consolidation, the Isle of Pines community now has high-quality water and is operated by a properly trained and certified operator. The community no longer experiences frequent outages or boil water orders.[8]

Considering Consolidation

When considering consolidation, it is imperative to create a transparent team approach from the outset. All sides of the project need to be accurately represented to create a collaborative effort to obtain a solution. The primary key to the team approach is communication. Communication between parties on each of their respective goals is fundamental to reaching a potential solution when considering consolidation. Another key is to seek state-specific resources. Some states incentivize the consolidation of public water systems with low-interest rates on public funding sources or offer grant monies for these projects. One of the first tasks should be to determine if any incentives exist within your state. Third-party involvement can be a great way to ease the workings of a consolidation project at any stage of the process. Involving an unbiased third party, like RCAP, to mediate and guide progress during a consolidation project can be beneficial.

Extensive data collection and background information gathering is fundamental in any consolidation project. The information is used to determine the feasibility of such a project. A solid feasibility analysis will be used to determine the benefits, challenges, and costs of the consolidation. A projected cost determination, system value, and customer benefits are important when considering consolidation. When exploring consolidation, it is important to recognize the implications if consolidation does not occur. Can the systems involved continue to operate as stand-alone systems? What is needed for the systems to be sustainable? What does the future hold for the systems? All these types of questions need to be answered in the overarching feasibility study for the communities affected so that they can make an informed decision in the best interest of their community now and in the future.

8 EPA SYSTEM PARTNERSHIP SOLUTIONS TO IMPROVE PUBLIC HEALTH PROTECTION—VOLUME II HTTPS://WWW.EPA.GOV/SITES/DEFAULT/FILES/2017-07/DOCUMENTS/P100399Z.PDF

CHAPTER SEVEN

Infrastructure Funding

Determining the type of regional partnership that is the best fit for your system/community and what a joint regional project will look like is just the first step in a very long process; once the plan is agreed upon, then you have to implement it.

RCAP FUNDING RESOURCES

RCAP's *Big Guide for Small Systems* is a comprehensive desk reference that is ideal for small utility managers, board members, and leaders. The guide contains an entire chapter on infrastructure funding, including several federal programs, as well as guidance on increasing your chances for success and managing funding. The guide is available at *rcap.org/managerial-financial/big-guide-small-systems*.

Startup Funding for Preplanning and Planning

Having funding to support the planning process including bringing the communities together and doing the hard work of coming to a consensus on a regional solution is often time and resource-intensive. But how do the utilities/communities involved pay for it and where does RCAP come in?

Some local, state and federal funders have grants or loans for preplanning. Some examples include:

Federal Funding Opportunities

The US Department of Agricultural Rural Development (USDA RD) Water Environmental Programs (WEP) Predevelopment Planning Grant (PPG): assists low-income communities with populations under 10,000 with initial planning and development of applications for the USDA Rural Development Water and Waste Disposal direct loan/grant and loan guarantee programs. Additional information on eligibility and other requirements can be found here: *rd.usda.gov/programs-services/water-environmental-programs/water-waste-disposal-predevelopment-planning-grants*.

USDA RD WEP Special Evaluation Assistance for Rural Communities and Households (SEARCH) grant: helps financially distressed very small (populations of 2,500 or less) rural communities with predevelopment feasibility studies to support applications for funding water or waste disposal projects, preliminary design and engineering analysis on proposed projects, and technical assistance for the development of an application for financial assistance. Additional information on eligibility and other requirements can be found here: *rd.usda.gov/programs-services/water-environmental-programs/search-special-evaluation-assistance-rural-communities-and-households*.

State Funding Examples

Pennsylvania Professional Engineering Services Program

An example to look to for inspiration is the Pennsylvania Department of Environmental Protection (DEP)'s Professional Engineering Services Program. The DEP offers free professional engineering services to water systems serving 10,000 or fewer people. Services are available to support capital improvement projects or consolidation and include feasibility studies, assistance with funding applications, design work, and more. Additional information can be found here: *dep.pa.gov/Business/Water/BureauSafeDrinkingWater/Pages/Professional-Engineering-Services-Program.aspx*

IL Unsewered Communities

The Illinois Environmental Protection Agency (IEPA) has two grant opportunities available for unsewered communities: the Unsewered Communities Planning Grant Program (funded through a portion of loan repayments to the state's Clean Water State Revolving Fund (CWSRF)) and the Unsewered Communities Construction Grant Program (funded through state bond funds). IEPA recognized an affordability gap to access SRF funds for unsewered communities, as many communities cannot pay engineers and consultants to do the necessary system design to become eligible for an SRF loan. RCAP TAPs in Illinois have assisted communities with applications for these grants to create regional solutions to wastewater challenges. Additional information can be found here: *www2.illinois.gov/epa/topics/grants-loans/unsewered-communities/Pages/default.aspx*

CA SAFER Program

In California, the Safe and Affordable Funding for Equity and Resilience program (SAFER) incentivizes utilities to consolidate where feasible. In cases where one of the utilities is facing compliance issues, the state, through TAPs, identifies the project, provides technical assistance, funds the predevelopment work, including the feasibility studies to evaluate all viable alternatives, and the implementation phase, all the way to final construction.

RECOMMENDATIONS

3 The federal government should work with state and local governments to administer funds to those communities and systems which most need the assistance and encourage (or require) regionalization studies in those communities. It should also provide funding specifically for technical assistance to rural and tribal communities and colonias to help them through the regionalization process.

4 Anyone encouraging feasibility studies (such as by providing grants to perform them) should also consider supporting capacity-building training (such as board trainings), third-party facilitators, and technical assistance, as well as setting requirements for transparency.

5 Recognize the importance of and provide for planning and capacity-building as well as actual project construction.

10 Use DWSRF set-asides to place more emphasis on regionalization.

14 USDA should allocate funds intentionally focused on helping small water and wastewater systems achieve regionalization and annual appropriations by Congress should prioritize regionalization projects and technical assistance for regionalization efforts.

The funder, regulatory agency, TAP, and community work towards the most viable and sustainable long-term solution. The funding is 100% grant money for communities designated as disadvantaged or severely disadvantaged. You can find more information on the SAFER program here: *waterboards.ca.gov/safer.*

Funding from Other Forms of Government

California is one of the states that has invested the most in encouraging consolidations. Initially, the funding for these types of projects, including the planning phase, was secured and awarded by the counties. In recent times, the State Water Resources Control Board has allocated significant amounts of funding to consolidation efforts. The state has prioritized the consolidation of systems, particularly systems that are out of compliance. If you live in a state where county government is pretty powerful, they may be someone to look to for a funder and/or partner.

Philanthropy/Private Sector

New Mexico is one of the states across the nation that has been at the forefront of regionalization. However, one of the main challenges in obtaining funding to make regional entities happen. There is not one specific funding source identified for the planning or implementation of regional projects. There have been opportunities for planning and facilitating regional projects using private and philanthropically funded grants to supplement where public funding has not been available.

Fortunately, technical assistance is available and supported by many funders—USDA, EPA, HHS, etc., though there are limitations to some of these available predevelopment funding sources. RCAP's 2021 research report: "Regionalization: RCAP's Recommendations for Water and Wastewater Policy" highlights 22 local, state, and federal policy recommendations to help better support and incentivize regional solutions. A few of those recommendations touch on how systems may overcome some of these limitations including recommendations 3, 4, 5, 10, and 14.

For more information and context on these and the other 19 policy recommendations, please see the full report, executive summary, and one-pager here: *rcap.org/resources/regionalizationresearchtwo.*

Grant and Loan Infrastructure Funding Opportunities

Although the best practice is for water and wastewater systems to function as a business and utilize user rates to cover all of their costs, that is not always the reality nor is it always feasible especially for very small, low-income communities. Federal, state, and local governments have several programs that can help fund infrastructure improvements and upgrades as well as the development of new systems. Many of these major funding sources may be used for regional projects and in some cases, regional solutions are incentivized. However, putting together funding packages for regional projects can often be complicated.

EPA provides the basic requirements and the capitalization grants for the drinking water and clean water state revolving loan funds (SRFs). Each state has SRF programs that function similarly but vary depending on the state agency. It is certainly worth researching what set-asides are available from the SRFs in your state – there may be specific funds set aside for small systems and/or regionalization efforts. EPA compiled information from 2015 on how states use set-asides in the SRFs which may be a helpful starting point. It is available at *epa.gov/dwcapacity/use-drinking-water-state-revolving-fund-dwsrf-set-asides*. It may also be a good

idea to check the intended use plan for the clean water or drinking water SRF in your state for the most recent year to learn more about how the state plans to use funds.

There may be additional opportunities for principal forgiveness or priority points in scoring an SRF application based on the use of regionalization in your project. This varies by state. In 2017, EPA published a thorough review of policies by the state that support drinking water partnerships. This is called the state compendium for short (full title: "Water System Partnerships: State Programs and Policies Supporting Cooperative Approaches for Drinking Water Systems," available at *epa.gov/dwcapacity/state-programs-and-policies-supporting-water-system-partnerships*).

One of the key types of policies included in this review of states is "consolidating systems prioritized for DWSRF funding." When RCAP was conducting research for the report on policies that encourage or incentivize regionalization, we used the EPA compendium as a starting point to develop our spreadsheet of state policies. We expanded our search to include wastewater systems as well as drinking water systems, and we gathered information on similar questions as the EPA compendium from each state, as well as some added questions from RCAP. We decided to dig into whether SRFs also allowed for prioritization of systems undertaking forms of regionalization besides just consolidation. This spreadsheet became Appendix A to the research report and is available at the same link as the report. The spreadsheet differentiates between prioritization for consolidation and prioritization for other types of regionalization. The spreadsheet may serve as a helpful starting point for anyone interested in seeing what policies exist in their state and includes links to state websites, programs, and documentation. RCAP's research into state policies was current as of March 2021. For state-by-state information, please download RCAP's Regionalization Policy Report Appendix A. This can be found here, *rcap.org/wp-content/uploads/2021/09/Appendix-A-State-Regionalization-Policies-DW-and-WW-1.xlsx*. EPA is in the process of updating its compendium and will make a new, updated version available in the future, which will also serve as a very helpful resource for determining what policies exist in your state, though EPA's resource is currently limited to the drinking water SRF only.

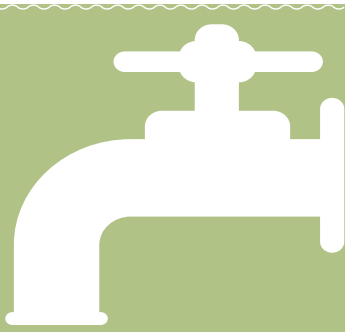
Additionally, EPA published a short write-up on how the drinking water SRF (DWSRF) can help with regionalization projects.[9] It also provides several examples of small community regionalization projects that successfully used the DWSRF in their state.

While USDA funding opportunities have a less explicit focus on regionalization, there may be opportunities to take advantage of regionalization to access better loan terms and some additional scoring points. Some programs at USDA incentivize projects that serve a greater rural population.

Funding Regionalization Projects

EPA will be releasing a tool in 2022 called "Water System Partnerships: Funding Resources". This easy-to-use guide is meant to help water systems, TAPs, and communities learn more about available resources that could be used to fund water system partnerships activities. It describes and offers examples of funding and financing options available on the national and regional levels as well as partnerships partnerships funding resources for individual states are explored. The State-Level Funding Sources sections include state-specific funding resources for water system partnerships and projects that were implemented using these resources in eight different states across the country: California, Florida, Massachusetts, New Mexico, Ohio, Pennsylvania, Washington, and West Virginia. State-level examples can help you visualize how funds have been used and identify and access similar funding resources in your state. Please look for this resource once published as well as others including the new "Water Systems Partnerships: Getting Started Guide" on EPA's partnerships site: *epa.maps.arcgis.com/apps/Cascade/index.html?appid=cfccb8b4975d4d72869bd0770510c1b0.*

Refinancing and consolidating debt is an option to help overcome some financial barriers to regionalization but is not an easy lift. In cases where full consolidation will be the ultimate goal, refinancing existing debt is one of the options to explore. As entities move towards merging assets and liabilities, particularly small utilities often have multiple outstanding loans, and in some cases, very old loans with very small balances and high-interest rates. It makes sense to delete those debts if possible, rather than going through a transfer and assumption process. However, one challenge entities



THE UNIVERSE OF FUNDING PROGRAMS

There are dozens of funding programs available from federal, state, and territorial governments that can be used for water and wastewater infrastructure projects, as well as several more options from TAPs and private lenders. This guidebook only highlights a few of the major programs at the federal level and a few examples at the state level. For a more thorough list of infrastructure funding programs available to your utility, please consult the Funding Sources by State or Territory resource maintained by the Environmental Finance Center Network: *efcnetwork.org/funding-sources-by-state*

EPA also maintains a database of funding sources for water and wastewater as part of their Water Finance Clearinghouse: *epa.gov/wfc*

9 DEVELOPING WATER SYSTEM PARTNERSHIPS WITH THE DRINKING WATER STATE REVOLVING FUND. HTTPS://WWW.EPA.GOV/SYSTEM/FILES/DOCUMENTS/2021-08/DEVELOPING-WATER-SYSTEM-PARTNERSHIPS-WITH-THE-DWSRF_1.PDF

run into when looking into refinancing their old debt is that the regional entity as a new entity does not have an established credit history, even if the founding entities do, making it difficult to prove financial solvency. It takes funding agencies with an "out-of-the-box" approach willing to take a chance and ignore some of their requirements to finance the newly formed entity. Another challenge is that, as stated before, in some cases the loans are very old, and the infrastructure originally funded no longer exists as it has outlived its life expectancy while the loan remains.

Incentives

Some funding programs, like several DW and CW SRFs, provide incentives for regional projects which may include additional points for competitive application scoring, principal forgiveness, etc. Regionalization incentives are not universal across all states and do not exist for all funding programs. RCAP's research report has a few closely related policy recommendations to expand incentivization, including recommendations 2, 9, and 15-16. For more detailed information on these recommendations and others, please see the report.

RCAP has been helping small, rural, and tribal systems access infrastructure funding for more than 40 years and there are many field staff who have specifically helped with regional funding packages. If your system needs assistance, please ask your local RCAP or other experienced TAPs.

FUNDING STRATEGIES TO PROMOTE REGIONALIZATION

EPA's Environmental Financial Advisory Board (EFAB) has identified and evaluated financing strategies designed to assist and/or incentivize water and wastewater systems to implement governance strategies that include system consolidation, regional projects, and shared service arrangements. Their report is available at: *epa.gov/waterfinancecenter/funding-strategies-promote-system-regionalization*

RECOMMENDATIONS

2

Incentivize regionalization efforts through intentional, targeted, and more favorable funding terms. This could include increasing grant funding, increasing grant/loan ratios, reducing match requirements, capping interest rates, and/or increasing the availability of principal forgiveness.

9

Extend funding prioritization in SRFs beyond consolidation to all types of partnerships.

15

USDA should prioritize regionalization projects within scoring criteria. USDA should also allow for a higher grant to loan ratio for regionalization projects based on said scoring criteria.

16

USDA should consider regionalization activities as progress towards financial sustainability.

CHAPTER EIGHT

Sustainability for Regional Solutions

The most often quoted definition of sustainability comes from the UN World Commission on Environment and Development: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

How is sustainability achieved? Sustainability is a journey, not a destination. There are many elements involved in getting a utility to achieve sustainability, but it isn't something that is done once, it is an ongoing practice. Utility sustainability is not generated from a prescribed formula, it is self-defined. Every utility must determine what sustainability looks like for them and how they will achieve it.

Elements of a Sustainable Regional Project

A regional project has several elements that are critical to creating sustainability in the region.

Comprehensive Planning

Communities are comprised of more than a water and wastewater system. Regional projects need to assess the current and future needs of all the communities that make up the region. Economic development, land use planning, and population growth trends are among the many tools a regional entity should use to evaluate its current capacity and future demand. It is important to evaluate every industry, needs, gaps, and opportunities within the region and the plans for growth for the next 10, 20, and 40 years as part of a comprehensive plan. All the information gathered helps the regional entity determine its demand and ability to meet it.

Shared Vision

A regional project can only be successful and sustainable if all the stakeholders involved move in the same direction. A common vision needs to be identified at the onset of the project and it needs to be revisited regularly. Everyone involved in a regional project needs to be on board as to where they are going and how they are going to get there. To get to a shared vision, the regional stakeholders need to refer to themselves as "we" or "us", as part of a unit vs. "me" as an individual utility. Until all entities are on board with a common vision, it is not only difficult for a project to move forward, but the project can fail.

Reasonable Expectations

Regional projects can give the impression that they are/have the silver bullet for the many problems and challenges a region might have been plagued with for years. That is a false and unrealistic expectation. It can create a lot of pressure and a sense of failure if expectations are not met. There is a perceived notion that as soon as the regional entity forms, all the problems will go away, which is far from what will happen. Regional projects at the onset are chaotic as part of settling into their new reality. For that reason, reasonable expectations need to be identified, discussed, prioritized and outlined. A realistic timetable needs to be developed on how priorities will be met and how they influence expectations. Process maps, as found in Chapter 5, are great tools that can be used to layout a timetable of how long each step will take and how each step in the process influences others. Having everyone involved in the project walking together is important to minimize mistrust, enhance transparency, and create ownership.

Decision Making

Trust is a very important element of successful and sustainable regional projects. From the onset of a regional entity, the decision-making processes must be established. Every entity should identify, by appointment, a designated representative and an alternate to represent them at the table, to make decisions for them, and to be the bridge that brings the information to the originating entity. Not only is it important to establish a delegate but it is also critical to establish how decisions will be made whether it is by consensus, majority rule, or other ways of voting.

Feasibility Studies

Feasibility studies are tools that can provide a road map for how regional projects will materialize. The function of the feasibility studies is to answer critical questions about the regional projects in key categories such as technical, operational, financial, and governance.

Technically, feasibility studies should evaluate alternatives such as physical connectivity, treatment alternatives, condition of assets, redundancies, efficiencies, infrastructure conditions, and needs, among other things.

Operationally, a feasibility study should provide enough information for the decision-makers to evaluate all the alternatives evaluated on the technical side and determine the most viable operational alternative. Regional projects are by nature more sophisticated than individual systems; however, if no one is paying attention to the details, they can end up with a treatment or operations system that they do not need and/or cannot afford. The ability to operate and maintain a system in the long term after it is built is not something most grants/loans fund but is a reality that needs to be thought out during the planning stage.

The financial review of a feasibility study tends to be the most , and is not often top of mind for engineers tasked with completing feasibility studies, so it is helpful to have someone like RCAP pushing boundaries to ensure all facets of regional solutions are analyzed and considered. Decision-makers want to know how all the alternatives being evaluated might impact the customers' rates. They will want to understand what financial implications the technical and the operational alternatives being evaluated might have over the short and long term. Most projects come to a halt if the financial information is either not available or not understood by decision-makers. The feasibility study needs to be presented transparently and concisely; otherwise, decision-makers might stand their ground until they have a clear understanding of what they are committing themselves and future decision-makers to. The average user might not have a clear understanding of the technical and operational part of the feasibility study, but they will want to know how any of the alternatives are going to impact their rates.

Decision-makers must be able to articulate their decision both to the general public and more specifically the ratepayers. Decision makers need to be able to articulate broadly how a decision has been made. It is important they can share with the general public and impacted ratepayers what information and process was used to arrive at the preferred solution. Customer education and buy-in are essential for a solution to be sustainable.

Business Plans

Most regional entities operate under a higher level of scrutiny than the average utility. They have larger budgets, larger revenues and expenses, and more resources that they need to be accountable for to both their customers and regulatory agencies/funders. One of the expectations for regional utilities is to operate in a business-like manner. A business plan is part of the new operational best practice as a regional entity. One of the opportunities a regional entity will have is the ability to incur debt. Depending on the size of the entity and how they were organized, they might be able to apply for and secure new and/or higher bonding rates. Funding agencies will want to see how the finances are handled beyond the revenue and expense budgets; they want to know the short- and long-term financial plans and more about their governance and management structure. A regional utility business plan should include plans for one-, three-, and five-year projections. They need to identify who will lead, how to evaluate risks, and how often they will revisit and revise the plan.

Strategic Approach

Developing the foundation of a successful regional project takes time and intention, requiring extensive strategic planning and engaged implementation. Regional projects have one thing in common -- they are very fragile. There are many ways a regional project could fall apart. Every phase needs to have a thoughtful risks assessment, weighing out options before it is executed. Regional projects should not be reactive; the risk is too great and can cause entire projects to fail. While frequently slow to move and are often highly complex, sustainable regional projects provide great benefits to the communities that take the time to shape a solid strategic approach. Therefore, engaging with technical assistance providers to guide communities through this challenging process and onto success is encouraged.

Leadership

For a regional project to be sustainable, the leadership needs to be able to work together, share the same vision, and move in the same direction. Leadership comes in many shapes and forms and that is what makes a team strong. The diversity of leadership is important, and it adds value to the process. The ability to listen and negotiate win-win agreements for everyone involved speaks of strong leadership. Every successful regional project has one element in common – a visionary leader who is the sparkplug of the project and can connect all the pieces and has everyone's trust. In places where there is the absence of such a sparkplug, a successful region can be developed, but leadership will have to be developed at the same time. One cannot succeed without the other.

Communication

Utilities, especially small ones, normally do not invest a lot of funding or effort in communications simply because they have too many other things to focus on that they need to allocate their limited resources to. However, when it comes to the creation and operation of a regional entity, communication with the public is critical. In rural areas, regional entities may be the largest entity, outside of a municipality or county government, creating the need for a higher level of scrutiny. Regional entities usually represent the needs of a large population group which makes them politically powerful. Constituents want to know how they are using those political powers to benefit their region. Not every resident can attend decision-maker meetings, but they want to stay current with what the regional entity is doing and why. It is important to find the best communication options to keep customers informed. Setting up a social media account or utilizing a paper media outlet and updating the information regularly is part of the effort needed to reach customers and provide the opportunity for input.

Transparency

Communication content and delivery are important. In small communities where everyone is either related to everyone else or everyone knows everyone else, perception goes a long way. Sometimes it isn't what was done, but the perception that something was done incorrectly is sufficient to delay progress. The resource every entity has is proper documentation. Documenting the process, holding public meetings, making decisions in public, inviting the public to be part of the process, and setting up advisory boards that provide input to the decision-makers are among the techniques available to bring transparency and credibility to the process.

Summary

Water and wastewater systems across the United States are facing many problems: rising costs, inability to find and pay qualified staff, supply chain issues, increasing regulatory oversight, a widening technological gap, political constraints, failing infrastructure, and source water protection challenges, to name a few. We are only now beginning to focus on the true cost of safe water and sanitary wastewater and its countless effects on human and environmental health and economic development. Here at RCAP, we have first hand examples of the benefits of regionalization and how collaborative opportunities can benefit public utilities. Not only does regional cooperation allow for more resilient and sustainable systems, but also saves utilities money, improves operations, improves access to funding, helps meet regulatory requirements, and it also allows for more advances in economic development in communities.

Regionalization can be complicated, but RCAP hopes these best practices will increase the chances of success; best practices such as using a third-party facilitator to smooth conversations between entities, starting conversations early, being patient, and recognizing that trust is crucial to the development of any collaborative process. No matter if you are in the informal collaboration stage or are needing the last bit of help with your full consolidation, you can find the right resources or pathways to achieve shared regional success and meet your public utility's goals. Remember, you are not in this alone—RCAP and its six regional partners are always available to help.

Contact us at *info@rcap.org* for information and assistance!

APPENDIX

Part A: Identify Partnership Opportunities

If a community has existing partnerships, adding additional partners or activities is much easier because a foundation of trust has already been built or a framework for how to complete a project or task collaboratively already exists. It is easier to work with partners you know and has worked with, and it is also easier to complete joint projects you already have experience. The tables below serve as a quick guide to identifying opportunities for collaborating with another system. This exercise was developed by the EPA as part of the Partnership Toolbox.

Review the example matrix below. Opportunities are classified as existing partnerships (partnerships and activities you already identified), new activities with entities you already partner with (Opportunity A), and activities you already do but could be done with new partners (Opportunity B). The final quadrant (top right) holds future partnership opportunities that may fall into the Opportunity A or B category in the future.

Example

	PARTNERS	
	People you have worked with	**People you have not worked with**
Activities you have not done	**Opportunity A** (a new activity with an existing partner) **Activity** Develop a mutual aid agreement to borrow and lend equipment between the PWSs **Partner** Tremonton, Utah	**Future opportunities to work towards** (a new partnership activity with a new partner)
Activities you have done	**Existing partnership** (from the current partnership activities exercise) **Activity** Have held informal calls with a PWS in Tremonton, UT regarding treatment information **Partner** Tremonton, Utah	**Opportunity B** (an existing activity with a new partner) **Activity** Start holding quarterly calls with PWSs in Tremonton and Elwood, Utah to discuss treatment information **Partner** Elwood, Utah

Matrix

To complete, select a partner/partnership activity that you identified in the Current Partnership Activities exercise. Fill in the activity and partner organization in the "Existing Partnership" box. Consider ways that your existing partnership activities may have prepared you to engage in new partnership activities. Could you work with that same partner on another activity (Opportunity A)? Could you take your experience with that partner and replicate the partnership activity with another organization (Opportunity B)? What about trying the same activity in another form (e.g., using experience contracting billing services to develop a contract for administrative support)? Fill in the "Opportunity A" and "Opportunity B" boxes with a couple of options for potential future partnership activities.

	PARTNERS	
	People you have worked with	**People you have not worked with**
Activities you have not done	**Opportunity A** (a new activity with an existing partner) **Activity** **Partner**	**Future opportunities to work towards** (a new partnership activity with a new partner)
Activities you have done	**Existing partnership** (from the current partnership activities exercise) **Activity** **Partner**	**Opportunity B** (an existing activity with a new partner) **Activity** **Partner**

Part B: Governance Example

This is an example of the varying aspects of different types of governance in the State of California. This is not necessarily reflective in all states. This is only an example.

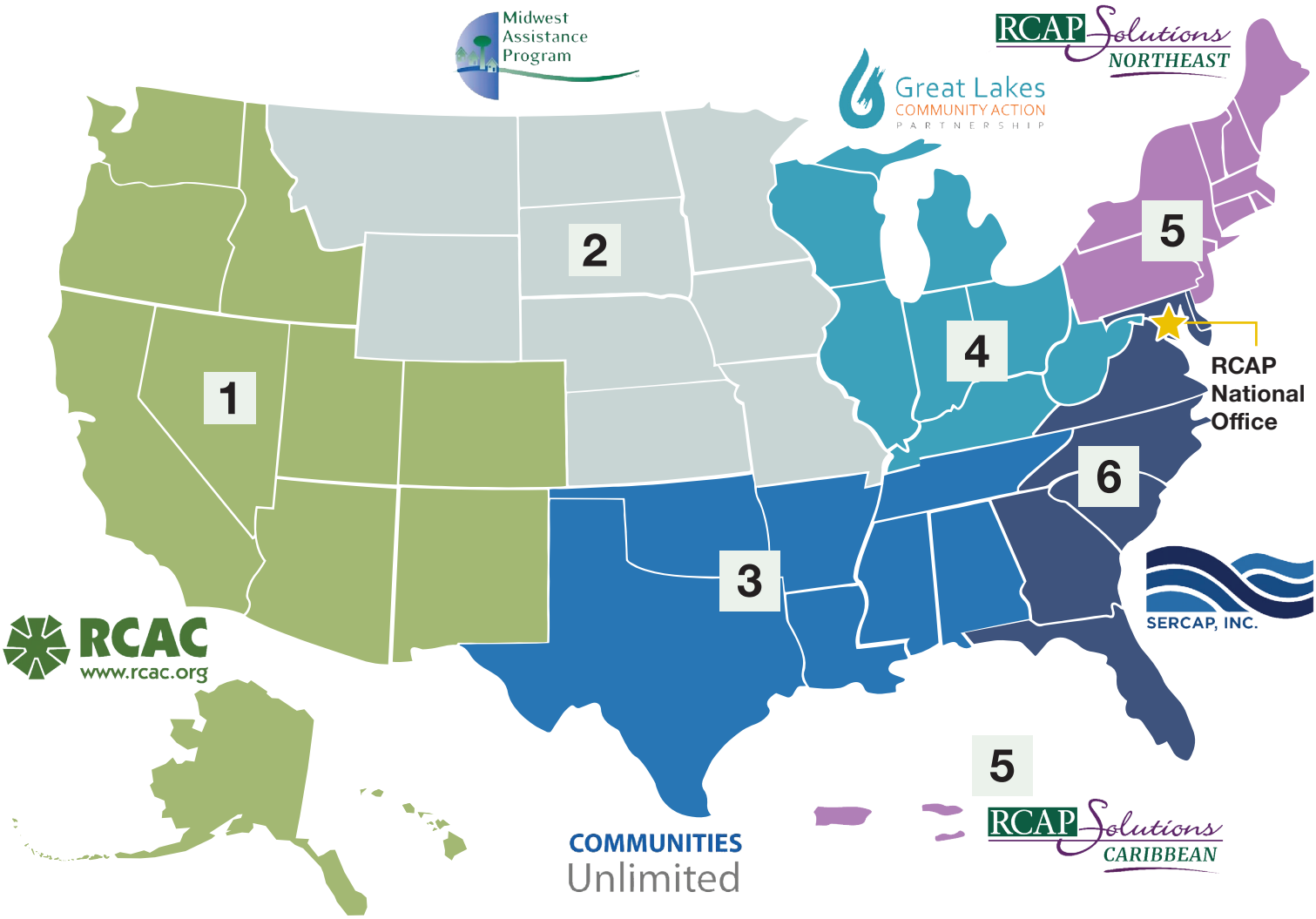
AGENCIES	Community Services District (CSD)	Public Utility District (PUD)	Joint Powers Agency or Authority
Purpose	To provide wide range of governmental and utility services, including water services, in an unincorporated area.	To provide wide range of governmental and utility services, including water services, in an unincorporated area.	To enable two or more public agencies to act together as a single entity
Formation	Petition to county board of supervisors; approved by LAFCO and voters in district.	Petition to county board of supervisors; approved by voters in district.	Execution of a joint powers agreement that meets the statutory requirements of Gov't Code Sec. 6500 et seq. must file agreement (and notice) with Sec. of State and Controller.
Territory	Any unincorporated area. Need not be contiguous.	Any unincorporated area. Unincorporated territory not contiguous to a district may not be annexed if the district does not possess facilities for supplying utility service to that territory. An exception for private property of 10 acres or more in another district within 3 miles of the boundaries of the PUD.	Coextensive with the territory of its members or as limited by agreement. Members may include out of state entities or fed gov't.
STRUCTURE			
Internal Organization	Governed by county board of supervisors, or elected board of directors.	Governed by elected board of directors.	Governed by its members as set forth in the agreement. Must have a treasurer or designee to perform such duties.
Directors	Three or five directors elected at large, if applicable.	Three or five directors if district all in one county, otherwise additional board members depending on size of district.	Typically, one director from each government agency member. If there are nongovernmental members, they may participate in an advisory capacity.
Employees	The board retains employees and fixes compensation.	The board retains employees and fixes compensation.	The JPA may have employees subject to the terms of the agreement.

Voting	Resident voting.	Resident voting.	Typically, each board member has one vote but nongovernmental members may have an advisory vote.
Regulatory Oversight	Established and governed by legislature, otherwise only subject to the electorate and judicial review.	Established and governed by legislature otherwise only subject to the electorate and judicial review.	By the public entity members and those that oversee them.
Tax Liability	Property exempt from taxation.	Property exempt from taxation.	Typically, not subject to taxation.
AUTHORITY			
General Powers	Has power to supply inhabitants with water for domestic, irrigation, sanitation, industrial, fire protection and recreational uses.	Has power to acquire and construct works for production, transmission, and delivery of water for irrigation, domestic, industrial, and municipal purposes.	The agreement will define which entity's powers will exercised by the JPA. A JPA may only exercise those powers consistent with those of one of its members (which member to be determined by the JPA).
Acquisition of Property	Can obtain property by any means to carry out its purposes; can contract with state or U.S. for water supply.	Can obtain property by any means necessary for district works, and to supply the lands with sufficient water; can contract with any public agency, including U.S., for water service.	Subject to the powers of the entity that the agreement specifies will define the scope of powers. Typically, a JPA may acquire property by any means available and may incur debt.
Eminent Domain Power	Has power of eminent domain.	Has power of eminent domain.	May have the power of eminent domain if the governing member has the power.
Service Obligation	No specific requirements.	No specific requirements.	No specific requirements.
Ability to Serve Outside District	Can only transfer surplus water outside district, on a temporary basis.	Can only transfer surplus water outside district, on a temporary basis.	As limited by the powers of the governing member entity or the agreement.
Other Powers	Can also provide refuse, fire protection, public recreation, street lighting, mosquito abatement, police protection, public library, street work, airport, electric power and ambulance services.	Can also provide light, power, heat, transportation telephone services, and refuse, sewage, fire protection, public recreation, and street lighting services.	May exercise any common powers.

FINANCIAL

Ability to Incur Debt	Can borrow money and incur indebtedness.	Can borrow money and incur indebtedness.	May incur debt consistent with the powers of the governing member entity.
Ability to Issue Bonds	Can issue bonds to pay for projects of district, after election.	Can issue revenue and general obligation bonds for projects of district, after election.	May issue bonds consistent with the powers of the governing member entity.
Charges for Services	Can fix and collect charges for services, including water delivery. Can impose "standby" charges.	Can fix and collect charges for services, including water delivery can impose "standby" charges.	May charge for services consistent with the powers of the governing member entity.
Assessments	Has power to levy taxes and assessments on property in district if revenues inadequate, and to cover operating expenses and bond and interest principal.	Has power to levy taxes on real property; can levy assessments on all land in district if revenues inadequate and to cover operating expenses and bond and interest principal.	Have the power to levy taxes or assessments if either agency has such power.

NOTES



Rural Community Assistance Partnership

We envision a resilient, equitable and thriving rural America.

The Rural Community Assistance Partnership (RCAP) is a national network of nonprofit organizations that works with rural communities across the country to elevate rural voices and build local capacity to improve quality of life, starting at the tap. Through RCAP's regional partners, more than 300 technical assistance providers (TAPs) support communities in building their own capacity through technical assistance and training focused on access to safe drinking water, sanitary wastewater, solid waste, and economic development. RCAP works across every U.S. state, the U.S. territories, and tribal land

To learn more, visit **rcap.org**.

1. Western RCAP
Rural Community Assistance Corporation (RCAC)
916.447.2854
rcac.org

2. Midwestern RCAP
Midwest Assistance Program (MAP)
660.562.2575
map-inc.org

3. Southern RCAP
Communities Unlimited (CU)
479.443.2700
communitiesu.org

4. Great Lakes RCAP
Great Lakes Community Action Partnership (GLCAP)
800.775.9767
glcap.org

5. Northeastern and Caribbean RCAP
RCAP Solutions
800.488.1969
rcapsolutions.org

6. Southeastern RCAP
Southeast Rural Community Assistance Project (SERCAP)
866.928.3731
sercap.org