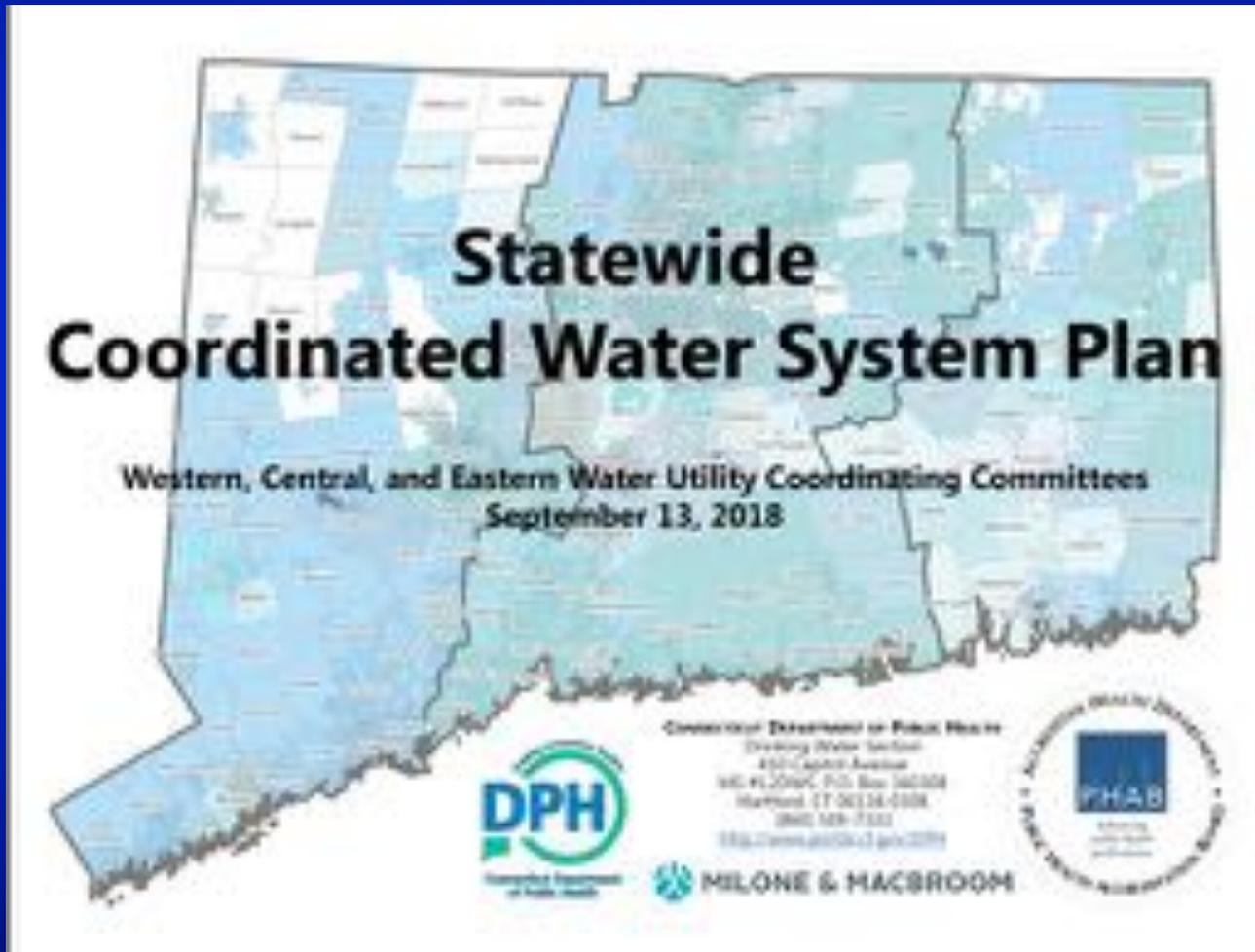


WUCCs as a Regionalization Tool



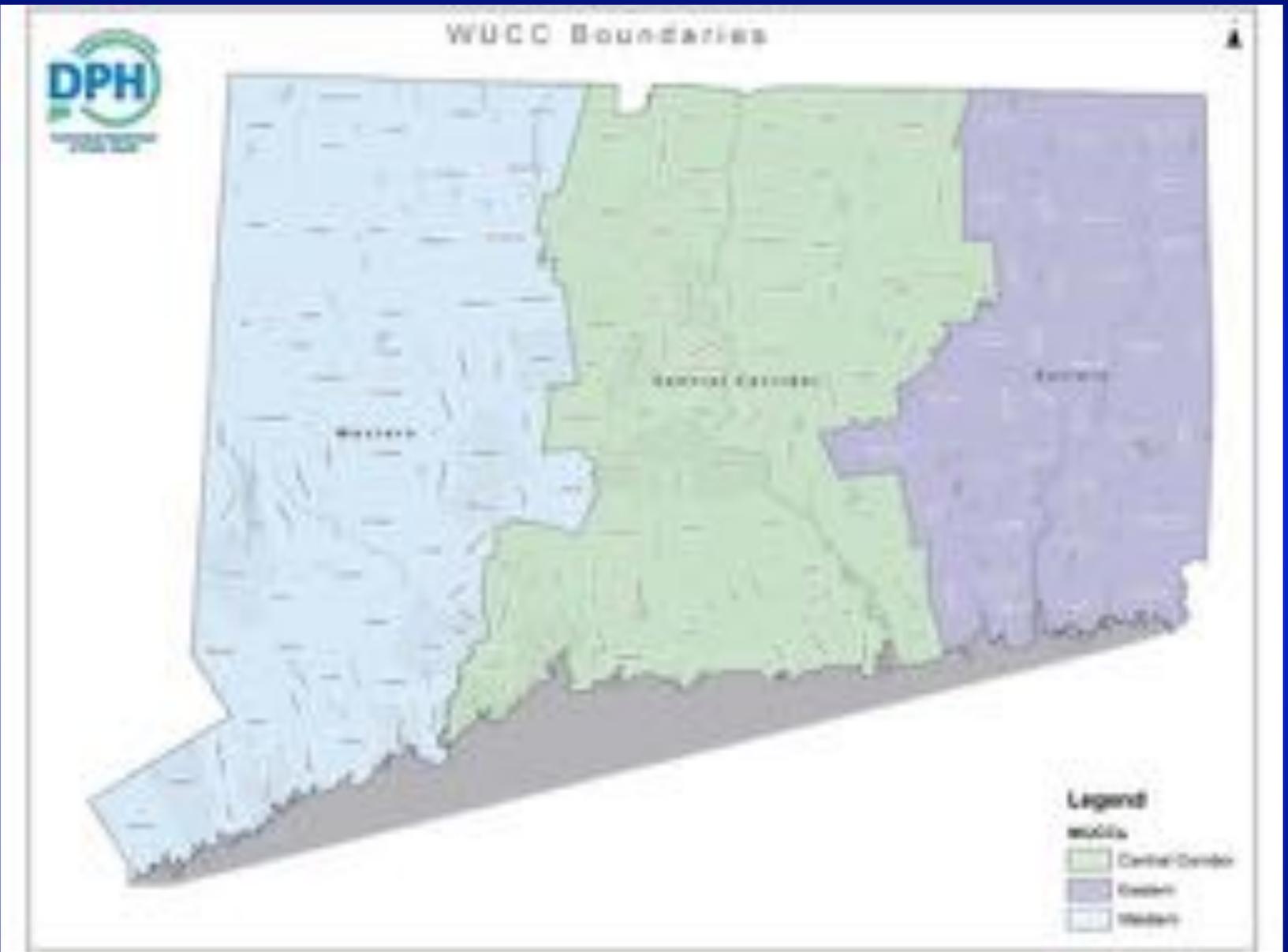
What are WUCCs?

- 💧 WUCC –Water Utility Coordinating Committee
- 💧 Members are public water systems and Councils of Government
- 💧 State Agencies, Public, NGOs also participate



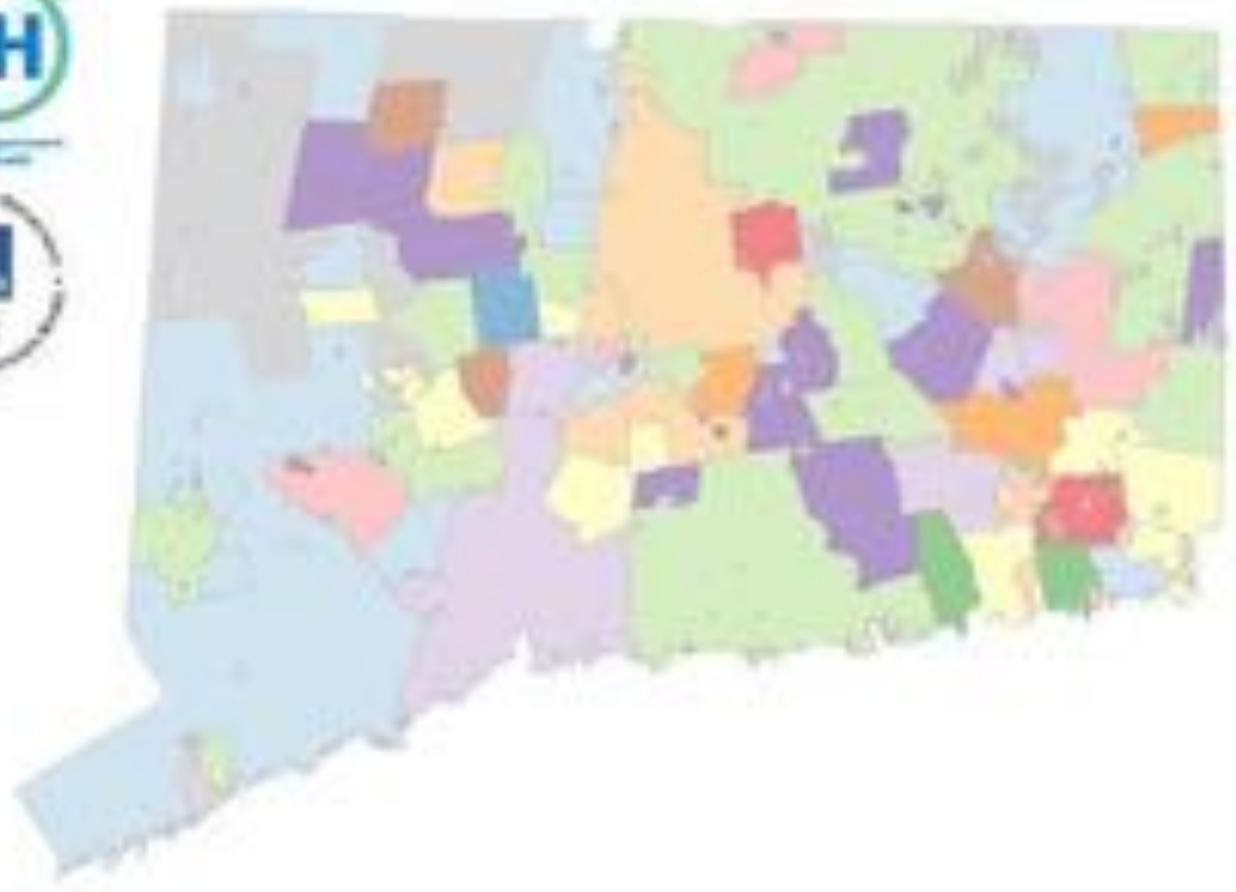
WUCCs exist to Ensure Smart Planning

- ◆ Connecticut General Statutes Sec. 25-33c. Legislative finding. The General Assembly finds that an adequate supply of potable water for domestic, commercial and industrial use is vital to the health and well-being of the people of the state. Readily available water for use in public water systems is limited and should be developed with a minimum of loss and waste. In order to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety and welfare, **the Department of Public Health shall administer a procedure to coordinate the planning of public water supply systems.**



Exclusive Service Areas

WATER UTILITY COORDINATING COMMITTEE
FINAL EXCLUSIVE SERVICE AREAS





4.2 Small System Challenges and Viability

The WUCCs believe it is inappropriate to assign single actions to individual small CWSs. Instead, a toolbox of options has been developed, and each CWS has been placed into a bin with several tools available for achieving improved resilience. The following tools were identified:

- A. Conduct internal improvements and remain a small, independently owned CWS;
- B. Pursue acquisition by a larger CWS and remain a satellite system owned and operated by the larger CWS;
- C. Interconnection with a larger or more viable CWS; and
- D. Interconnection and eventual consolidation with a larger or more viable CWS.

Integrated Reports - Bins

Recommendations – Small System Bins



- Options for small systems to become more resilient / improve capacity:
 - A: Seek resources for internal improvements
 - B: Pursue interconnection
 - C: Pursue acquisition and remain a satellite
 - D: Pursue acquisition and consolidation
 - E: Seek new management

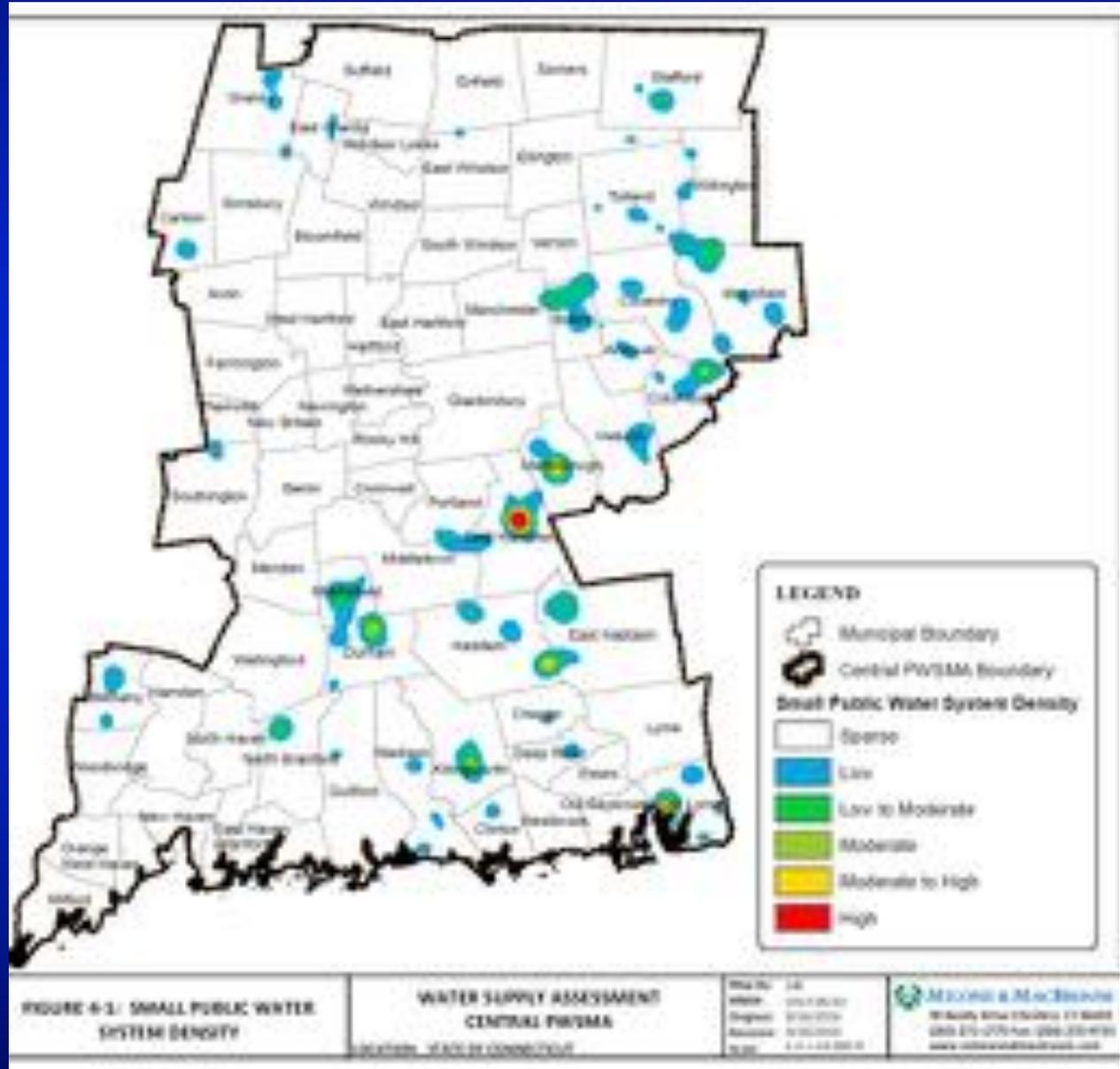




Regionalization Bins – Example from Western WUCC

1. A and B: 17 CWSs. These systems are typically too distant for an interconnection or consolidation to be a viable option. There are many examples in the region.
2. A and C: zero CWSs. Examples can be found in other regions.
3. A and D: zero CWSs. Examples can be found in other regions.
4. A, B, and C: three CWSs. These systems may be sufficiently close to another system that interconnection is feasible, as is acquisition by a larger system. An example is AWC - Hickory Hills system in Brookfield, which could interconnect with the adjacent Candlewood Shores Taxing District but would be unlikely to consolidate with Candlewood Shores Taxing District. This CWS was recently acquired by the ESA holder in Brookfield (AWC) to be operated as a satellite.
5. A, B, and D: one CWS. These systems are in areas where acquisition and operation of satellites is common, but eventual consolidation might make sense. The sole example is Quassuk Heights in Woodbury.
6. A, C, and D: 29 CWSs; these systems are typically within 1,000 feet of another CWS and should therefore focus on becoming interconnected or consolidated.

Density of Small PWSs



THE COORDINATED WATER SYSTEM PLANNING PROCESS

Connecticut's regional public water supply planning process was prompted by the state's extended drought in the early 1980s. During the 1985 legislative session, the Connecticut General Assembly passed Public Act 85-535, "An Act Concerning a Connecticut Plan for Public Water Supply Coordination," initiating the first statewide water supply planning program. The [Connecticut Department of Public Health](#) (DPH) in consultation with the [Public Utilities Regulatory Authority](#) (PURA), the [Connecticut Department of Energy and Environmental Protection](#) (DEEP), and the [Office of Policy and Management](#) (OPM) was given the charge of developing a coordinated approach to long-range water supply planning to assure future supplies. The legislative finding, as reflected in Connecticut General Statutes [\(CGS\) Section 25-33c](#), states the following: *"In order to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety, and welfare, the DPH shall administer a procedure to coordinate the planning of public water supply systems,"* a charge that specifically states that water supply development be performed with *"a minimum of loss and waste."* The specific regional approach to water supply planning is contained in the [Coordinated Water System Plan \(CWSP\)](#) of the Eastern, Central, and Western [water utility coordinating committees \(WUCCs\)](#).

The Regulations of Connecticut State Agencies [\(RCSA\) Section 25-33h-1\(d\)](#) requires the following for each regional CWSP:

- Completion of a [Water Supply Assessment](#) of current regional public water supply conditions and problems;
- Establishment of [exclusive service area \(ESA\) boundaries](#) delineating each public water system's potential service area;
- Completion of an [Integrated Report](#) providing an overview of public water systems and addressing areawide water supply issues, concerns, and needs to promote cooperation among public water systems; and
- Completion of an [Executive Summary](#) to serve as an abbreviated overview of the CWSP.

Each of the three WUCCs was required by [RCSA Section 25-33h-1\(f\)](#) to submit each of the four components of the CWSP to DPH within a specified timeframe, resulting in a two-year planning process. The process began in June 2016 with completion of the regional [Water Supply Assessments](#) in December 2016, establishment of ESA boundaries in June 2017, and completion of regional [Integrated Reports](#) and [Executive Summaries](#) in May and June of 2018.

Although the two-year CWSP process has concluded, the WUCCs are continuing their efforts to facilitate regional water supply planning and implement the recommendations of the regional CWSPs.

THE TOP TEN NEEDS FOR PUBLIC WATER SYSTEMS

As envisioned in [CGS Section 25-33c](#), *"an adequate supply of potable water for domestic, commercial and industrial use is vital to the health and well-being of the people of the state."* This **vision statement** guided the CWSP process and requires constant vigilance by state agencies and public water systems to ensure adequate water quality and quantity is maintained. Each regional CWSP includes more than 60 specific recommendations in the [Integrated Report](#) for responsible planning, drought management, source protection, water conservation, resiliency, and funding to be pursued through 2030. These recommendations are reflected in the following top ten needs for public water systems statewide, each of which is discussed further on the following pages.

1. **Regionalization and Interconnections**
Ensure redundant and environmentally responsible supplies.
2. **Water Conservation and Water Efficiency**
Reduce future demands and unnecessary water use.
3. **Reduction in Clustering of Small Water Systems**
Encourage system consolidations and ensure responsible planning to prevent proliferation of adjacent (but independent) small systems.
4. **Assistance to Small Public Water Systems**
Ensure proper technical, managerial, and financial capacity of small public water systems.
5. **Investment in Infrastructure**
Replace aging infrastructure, including century-old piping.
6. **Funding**
Provide grants and loans for planning, projects, and small systems in line with the above needs.
7. **Drought Management and Resilience**
Increase awareness of drought impacts and standardize responses to the extent practicable.
8. **Resiliency to Storms and Climate Change**
Reduce recovery time and adapt to future conditions.
9. **Protection of Watersheds and Supplies**
Continue to ensure adequate water supplies with high water quality.
10. **Improvements to Water Demand and Water Quality Planning**
Avoid the development of unnecessary new sources and ensure proper consideration of regulated and unregulated contaminants.



WUCCs/Small Systems

- Take a look at your PWS and your WUCC: what are the options/opportunities
- <https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee>



Capacity Development

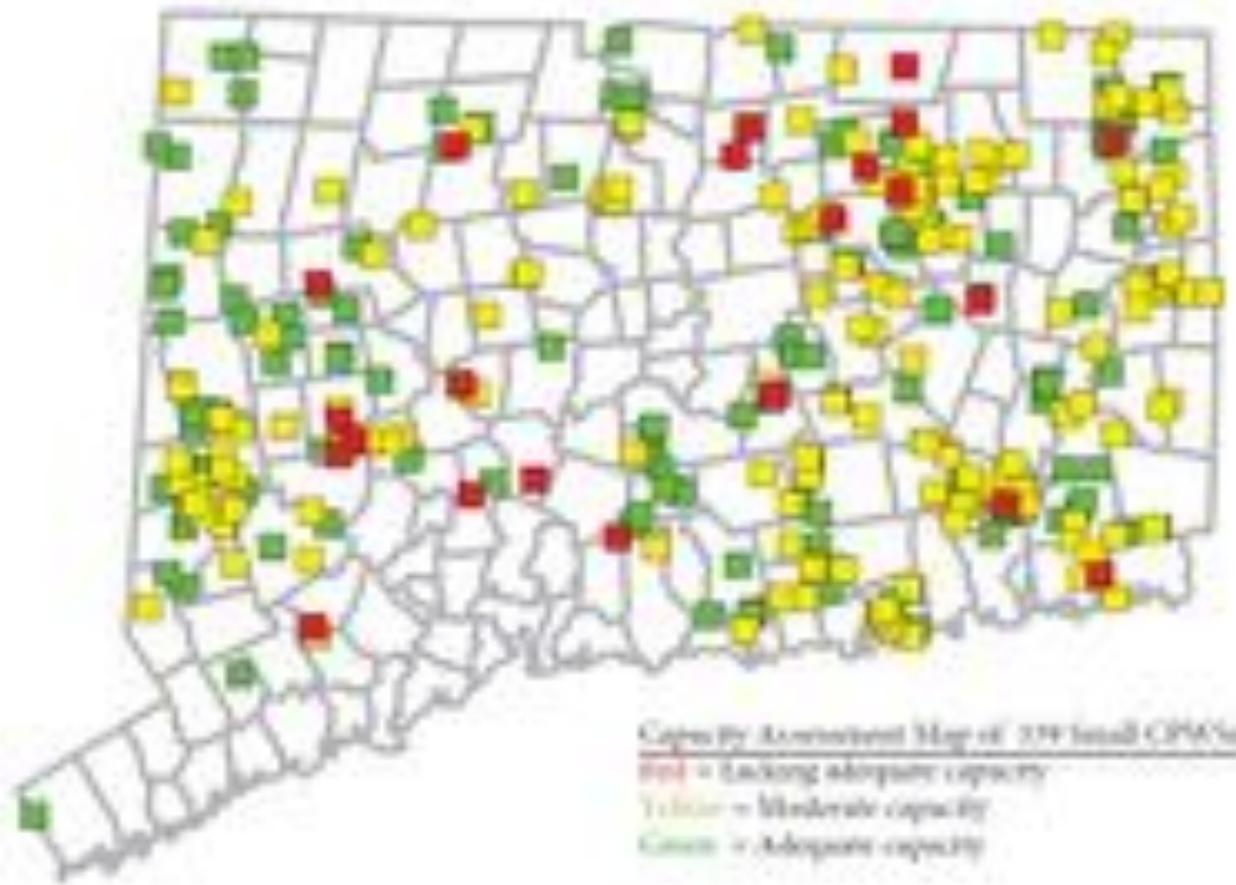
[Capacity Development](#)

Capacity Assessment Tool

The Capacity Assessment Tool (CAT) is a self-administered assessment tool that provides a comprehensive overview of a health care organization's current and potential capacity to address the health care needs of the community. The CAT is a self-administered assessment tool that provides a comprehensive overview of a health care organization's current and potential capacity to address the health care needs of the community. The CAT is a self-administered assessment tool that provides a comprehensive overview of a health care organization's current and potential capacity to address the health care needs of the community.

- [CAT \(Self-Assessment\) \(English\) \(PDF\)](#)
- [CAT \(Self-Assessment\) \(Spanish\) \(PDF\)](#)
- [CAT \(Self-Assessment\) \(Portuguese\) \(PDF\)](#)
- [CAT \(Self-Assessment\) \(Vietnamese\) \(PDF\)](#)
- [CAT \(Self-Assessment\) \(Tagalog\) \(PDF\)](#)

Small Community Public Water System Capacity Assessment Map





Capacity Assessment Query

Thursday, September 22, 2016

30 Sec 2nd Act

Team	FACID #	Public Water System	Total Capacity Score	Technical Score	Managerial Score	Financial Score	WQCT
UNASSIGNED	CT000001	POKESSE APARTMENTS- WELLS	94	95	92	90	WESTERN
UNASSIGNED	CT000002	POKESSE APARTMENTS- WELLS	94	100	92	90	WESTERN
UNASSIGNED	CT000003	WALTONS WELLS APARTMENTS	93	95	97	93	WESTERN
UNASSIGNED	CT000004	ROCKTREE APARTMENTS	93	95	97	90	WESTERN
STAFF	CT000005	WYANDER MOBILE HOME PARK	94	10	94	90	WESTERN
STAFF	CT000010	BLANKING COURT WELLS	93	95	96	90	WESTERN
STAFF/STAFF	CT000008	WOODHULL SCHOOLS, INC	93	100	92	93	WESTERN
STAFF/STAFF	CT000007	NORTH FURNACE SCHOOLS	93	100	97	90	WESTERN



DWSRF Program

- ◆ The Drinking Water State Revolving Fund (DWSRF) program provides long-term below market rate loans to community and non-profit, non-community public water systems (PWSs) to finance infrastructure improvement projects. Examples include storage tanks, treatment works, and water mains.
- ◆ Loans have interest rates at approximately half the market rate and repayment terms can be up to 20 years.
- ◆ Certain projects may qualify for Federal or State subsidization as detailed annually in the IUP.
- ◆ The program supports and recognizes strong infrastructure sustainability programs that emphasize prevention as a tool for ensuring long term safe and affordable drinking water to Connecticut's residents.
- ◆ The program also places an emphasis on providing loans to small water systems and communities most in need. PWSs which serve fewer than 10,000 persons are strongly encouraged to apply.



Thanks!

eric.mcphee@ct.gov

860-509-7333

<https://portal.ct.gov/DPH/Drinking-Water/DWS/Drinking-Water-Section>

Drinking Water Section



Small Water System Partnerships and Regionalization Considerations

Tom Roberts

Environmental Finance Center

The University of North Carolina at Chapel Hill

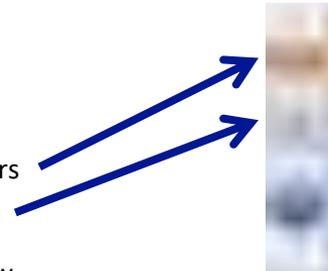
919-455-5647

tom_roberts@sog.unc.edu

Logistics

At the top right corner of your screen:

Show your control panel to submit questions and see answers



Toggle between full screen/window screen view

Control Panel:

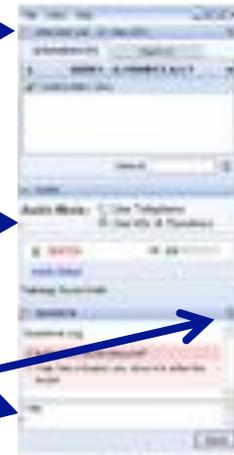
Attendee List



Audio: please choose between speakers and telephone. If you do not hear audio right now, please check your speaker volume or enter #[audio pin]# if using phone.



Submit questions in the Questions box at any time, and press [Send]. To undock and increase the size of the box, click on top right corner icon.





About the Environmental Finance Center Network (EFCN)

About the Environmental Finance Center Network (EFCN)

The Environmental Finance Center Network (EFCN) is a university-based organization creating innovative solutions to the difficult how-to-pay issues of environmental protection and improvement. The EFCN works with the public and private sectors to promote sustainable environmental solutions while bolstering efforts to manage costs.

The Smart Management for Small Water Systems Program

This program is offered free of charge to all who are interested. The Program Team will conduct activities in every state, territory, and the Navajo Nation. All small drinking water systems are eligible to receive free training and technical assistance.

What We Offer

Individualized technical assistance, workshops, small group support, webinars, eLearning, online tools & resources, blogs



Session Objectives

- Understanding of what system sustainability means to you
- Understanding of the spectrum of partnership options for water systems
- Provide an overview of regionalization and it's potential benefits to small system sustainability



What is system sustainability?

- Managerial
 - Engaged governance and operational management
 - Succession plan
- Technical
 - Understanding of current regulations
 - Ability to adapt to future regulations
- Financial
 - Rates provide enough funding for O&M and CAPEX investments
 - CAPEX plan for 5-20 year needs

Why consider a partnership?





Capacity Development

Capacity Development is a process for water systems to acquire and maintain adequate technical, managerial and financial (TMF) capacity.

TMF capacity enables water systems to have the capability to consistently provide safe drinking water to the public.





Water System Capacities



Technical

- Technical knowledge
- Adequacy of water supply
- Adequacy of treatment, storage, and distribution



Water System Capacities

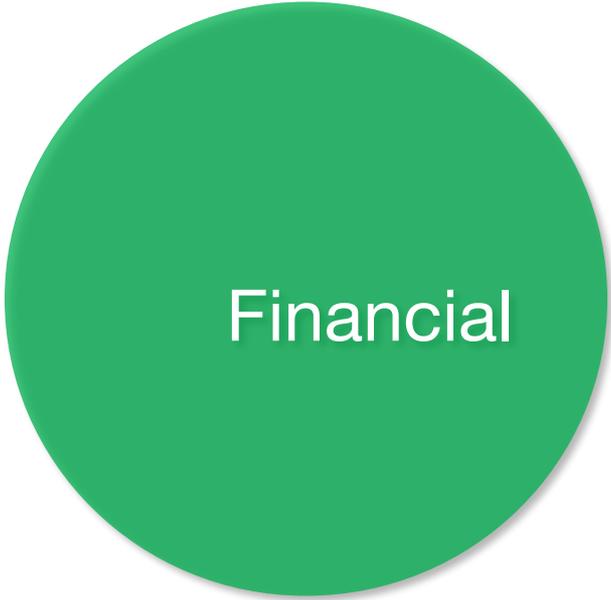
- Appropriate staffing and organization
- Accountability of ownership



Managerial



Water System Capacities

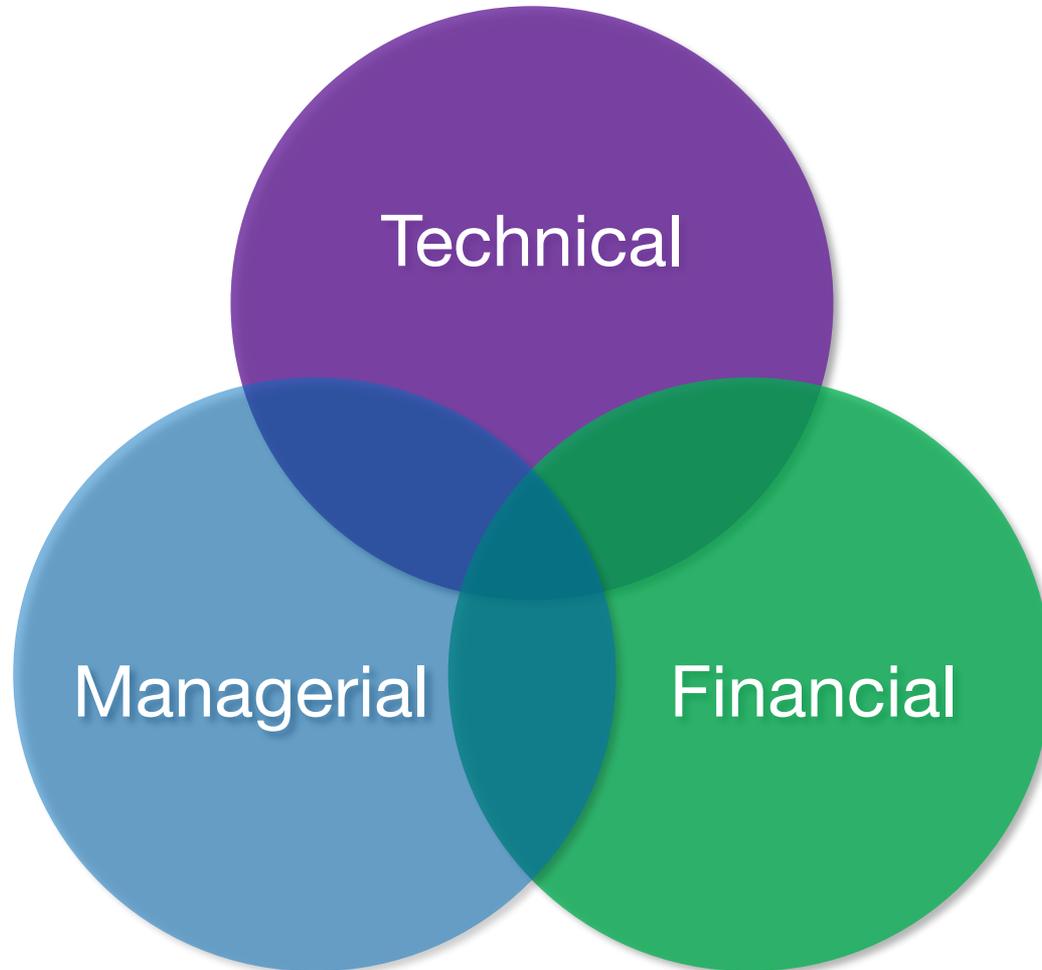


Financial

- Revenue is sufficient to cover expenses now and into the future
- Credit worthiness
- Fiscal management and controls in place



Water System Capacities





Basics of Partnerships





Loose, Less
Formal
Arrangements

Defined, More
Formal
Arrangements



Any kind of collaboration can be helpful



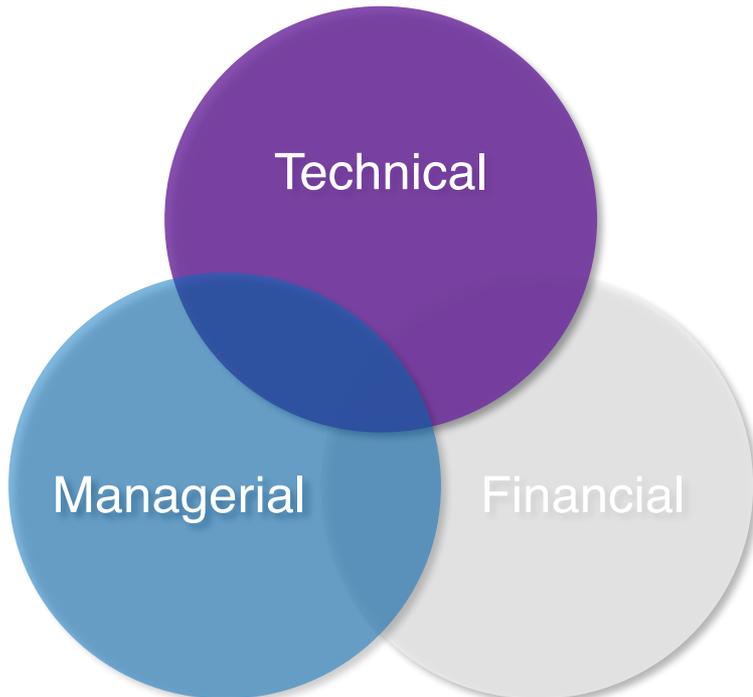
Less Formal



More Formal



Information
Sharing



Systems share information regarding regulations, planning, infrastructure



Polling Question #1

- Information Sharing
 - A. We are doing them.
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



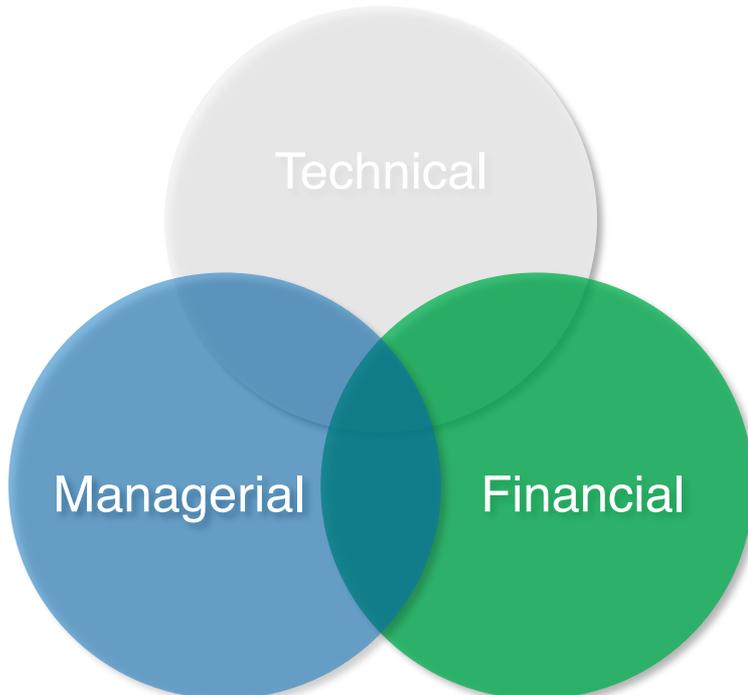
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Buying
Consortium



Systems work together to buy equipment, chemicals, or supplies



Polling Question #2

- Buying Consortium
 - A. We are doing them.
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



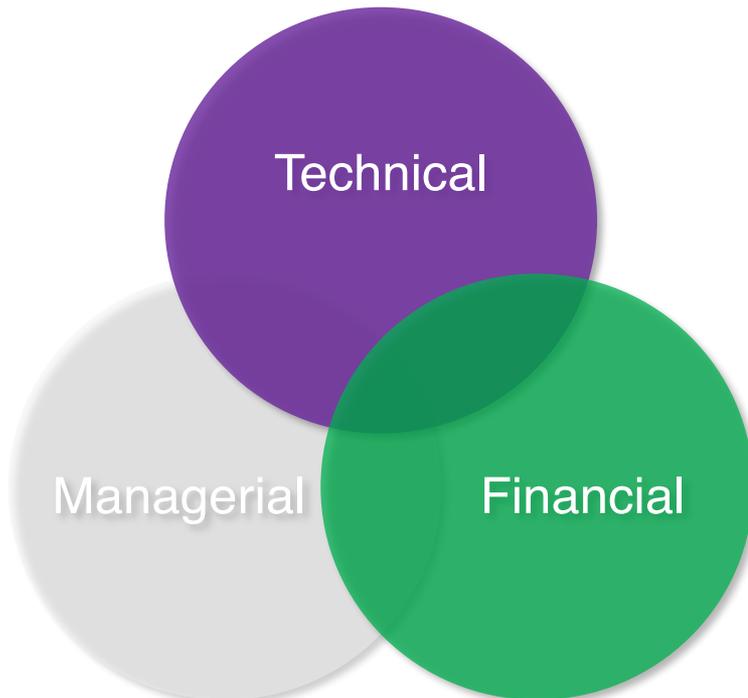
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Equipment
Sharing



Systems share equipment so each one does not have to buy/own/rent all the equipment they need



Polling Question #3

- Equipment Sharing
 - A. We are doing them.
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



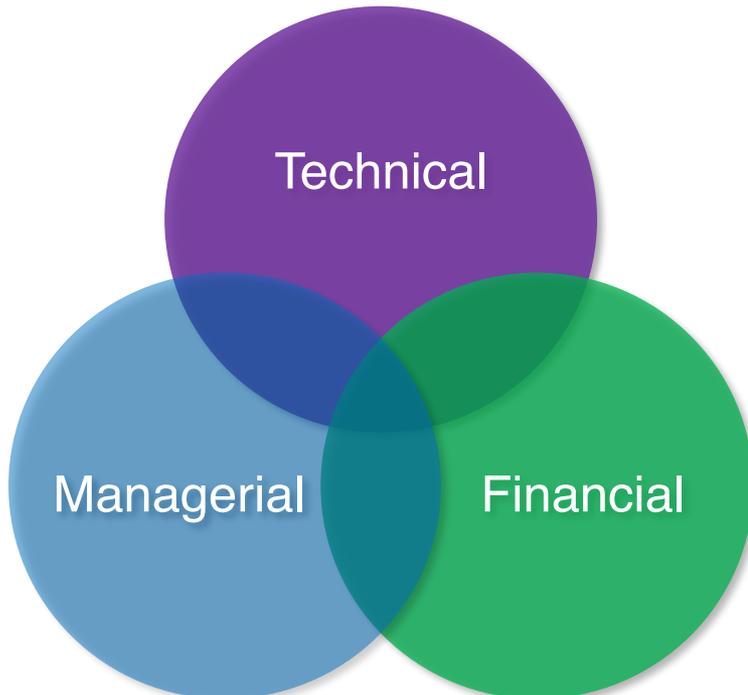
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More Formal



Mutual Aid & Emergency Assistance



Systems assist each other during an emergency or time of need (WARN)



Polling Question #4

- Mutual Aid & Emergency Assistance
 - A. We are doing them.
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



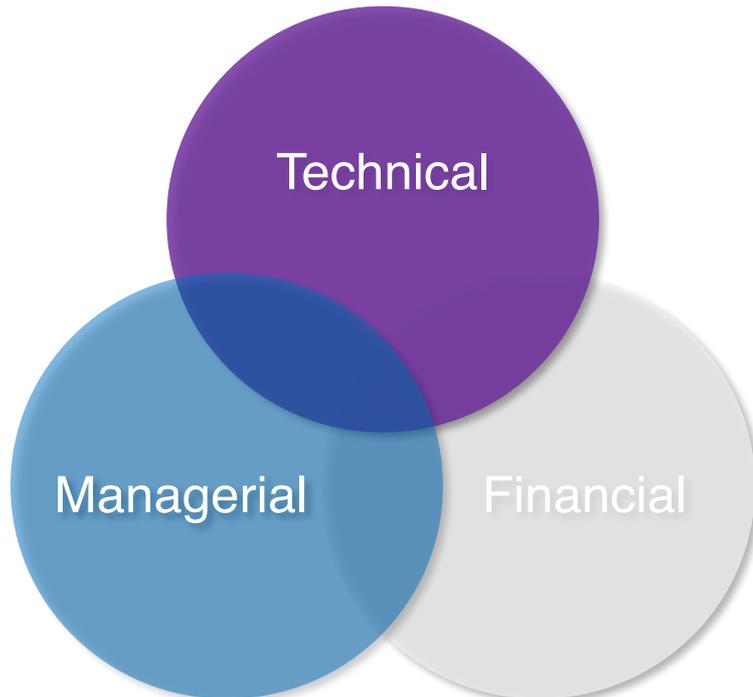
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More Formal



Emergency
Interconnect



Systems have a physical connection that is only used during emergencies



Polling Question #4

- Emergency Interconnection
 - A. We are doing them
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



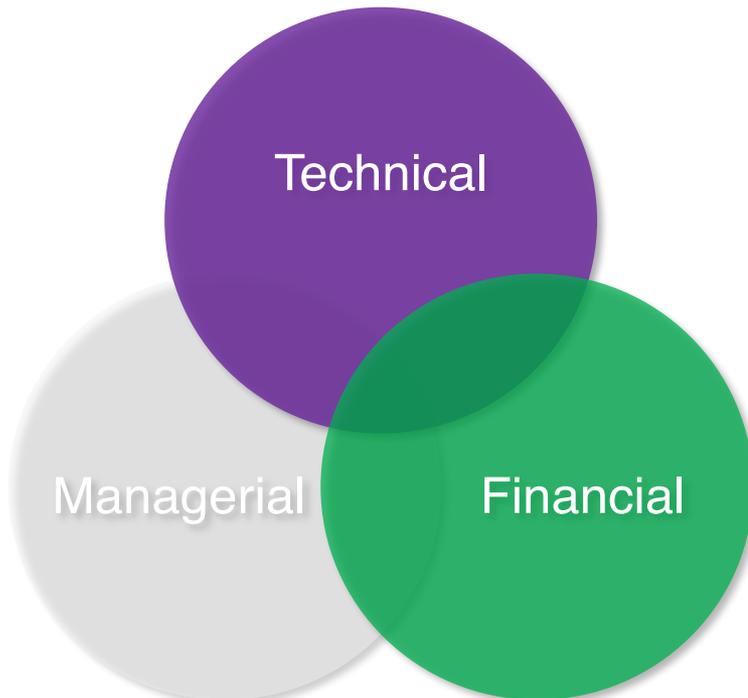
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Operational
Collaboration

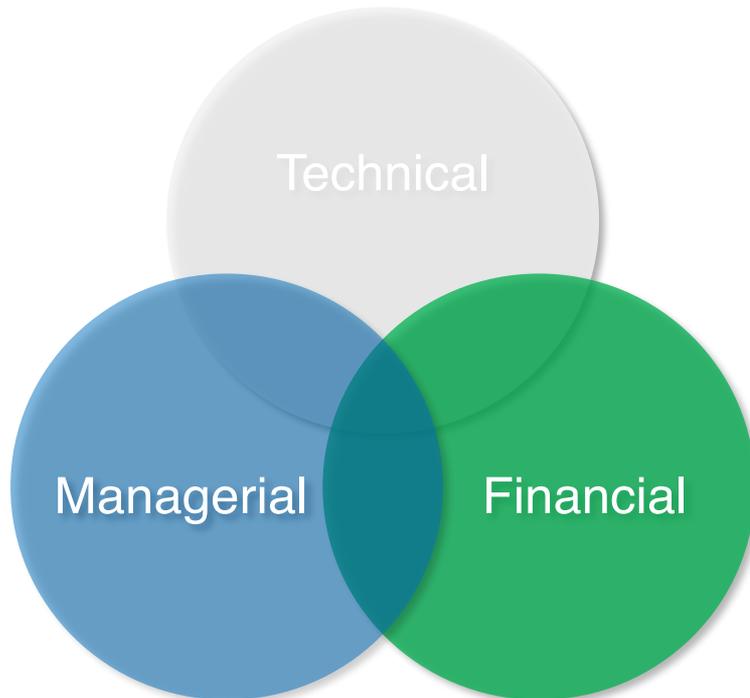


Systems share an operator or contract with the same operator or operation company



Polling Question #5

- Operational Collaboration
 - A. We are doing them
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



Systems share a financial connection. Many options available.



Polling Question #6

- Financial Collaboration
 - A. We are doing them
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



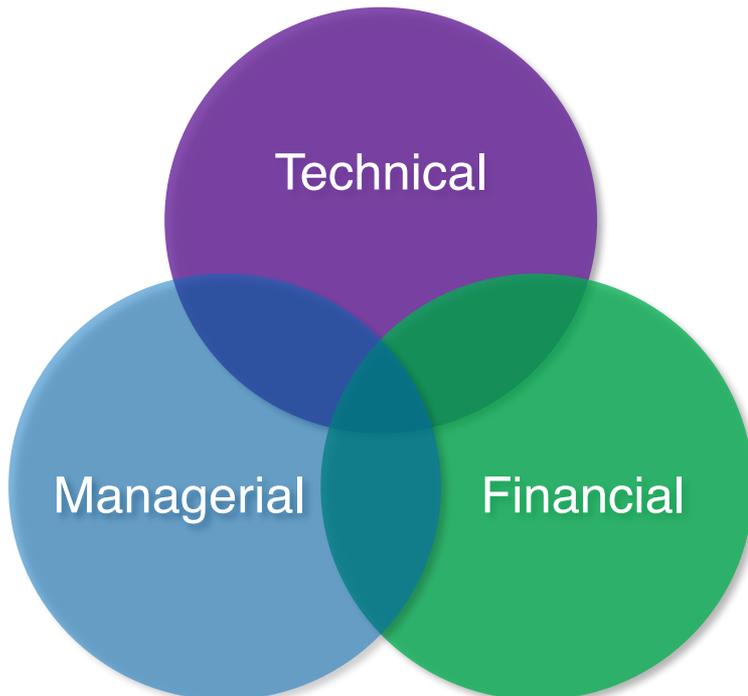
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Managerial
Collaboration



Systems share
management
structure but
systems are not
interconnected



Polling Question #7

- Managerial Collaboration
 - A. We are doing them
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



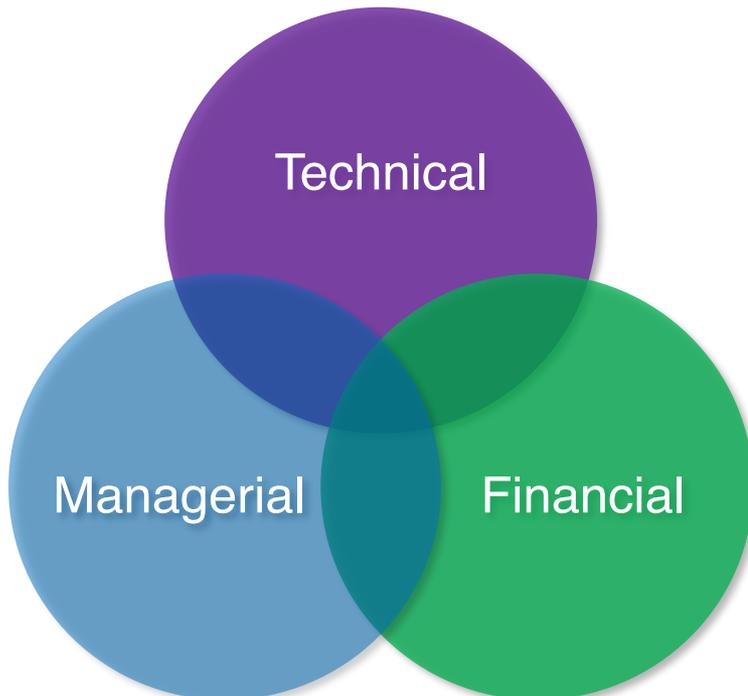
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Regional Entity



Systems form a regional entity. Governance is decided between the participating systems.



Polling Question #8

- Regional Entity
 - A. We are doing them
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model



Less Formal

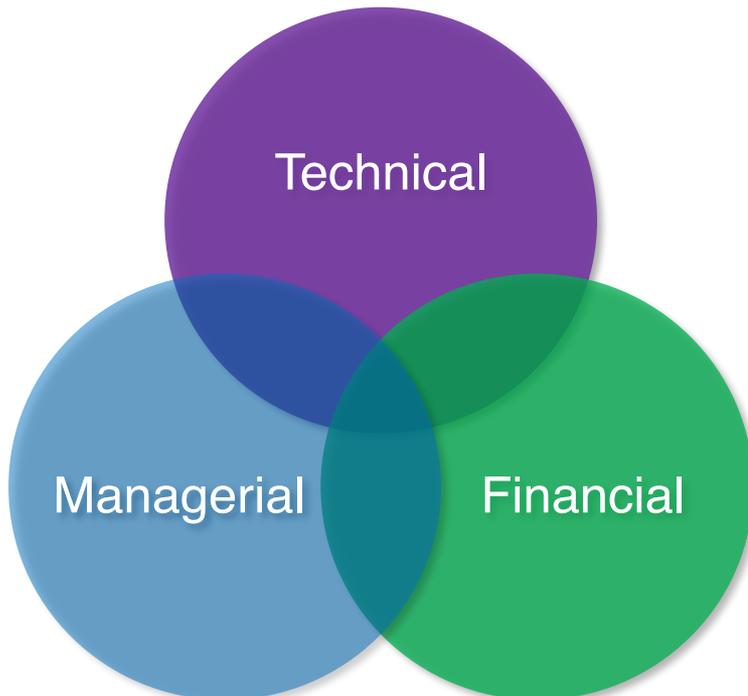


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Systems regionalize
into one entity

Only one utility
remains.





Polling Question #9

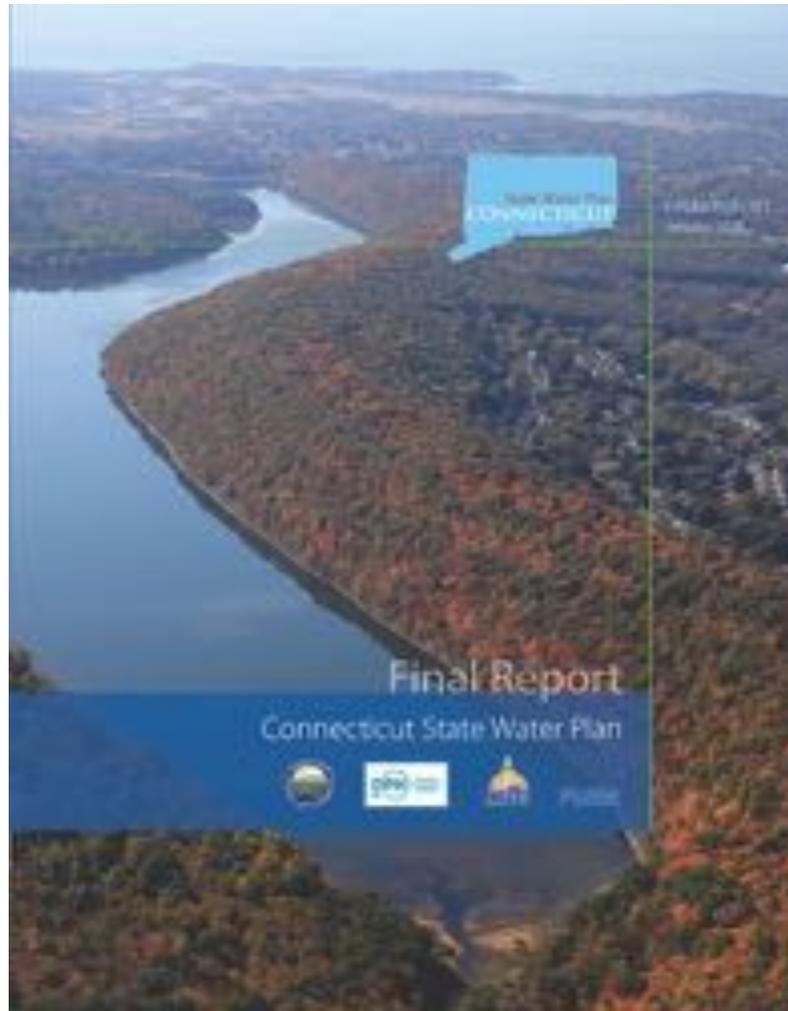
- Regionalization/Consolidation
 - A. We are doing them
 - B. We are not doing them but would be exploring them more
 - C. We are not interested in this model

Regionalization

- It can be more than just connecting the pipes



Regionalization in Connecticut





Sections to consider

- 5.2.3.10 Regionalization
 - “However, the solution to some of the state’s water challenges in the state could be furthered where municipalities work together and where the state encourages and creates opportunities for cooperation among municipalities on a regional level.”
- 5.3.2.2 Regionalization/Interconnections
 - “There was agreement that interconnections between public water supply systems have multiple benefits, and the Plan should encourage interconnections, with controls and considerations appropriate to the purpose of the interconnections.”



Sections to consider (2)

- WP4-2.3.2 Regionalization of Small Public Water Systems
 - “Barriers to consolidation or regionalization of small water systems include cost, engineering considerations, the influence of home rule, regulatory and public opposition to large system expansions and interconnections, and consumer preference”



Full regionalization

- Managerial
 - Combined governance and oversight
- Technical
 - Physical interconnection of systems
 - “Virtual” interconnection of systems
- Financial
 - Pooled assets and liabilities
 - Uniform rates or path to uniform rates



Regionalization “Lite”

- Managerial
 - Shared operators
- Technical
 - Bulk or emergency connections
- Financial
 - Systems retain the ability to set their own rates



Why regionalization can be a tool for small system sustainability

- Economies of scale is almost always better
- It may be the only good alternative
- Increased access to public funds
- Pooling of costs
- Pooling of operational and financial risk
- Better access to skilled employees
- Provide a better platform for economic development
- Can be used as a growth tool



Considerations for the regionalization process

- Managerial
 - Future rate setting
 - Establish a capital investment process
 - Establish a dispute resolution process
- Technical
 - Work plan and schedule for interconnections
- Financial
 - Transparent financial and rates analysis
 - Financing of transition costs



What about a private utility partnership or regionalization?

- Asset transfer
 - Rate base model
 - Operating margin model
- Contract operations and maintenance

<https://efc.sog.unc.edu/resource/private-water-and-sewer-companies>

Additional challenges





Intangibles

- The value of process champions
- Transparency and communication with stakeholders
- Recognition of opposition
- Don't oversell benefits



Considerations for moving forward

- Valuing the use of an impartial third party to facilitate the conversation
- Look how others have done it
- Start now communicating with your stakeholders
- Understand it will take time
- The devil is in the details
- Trust between the parties is key to meet short and long term goals



Partnership and Regionalization Resources



What is the role of the regulator in the regionalization process?

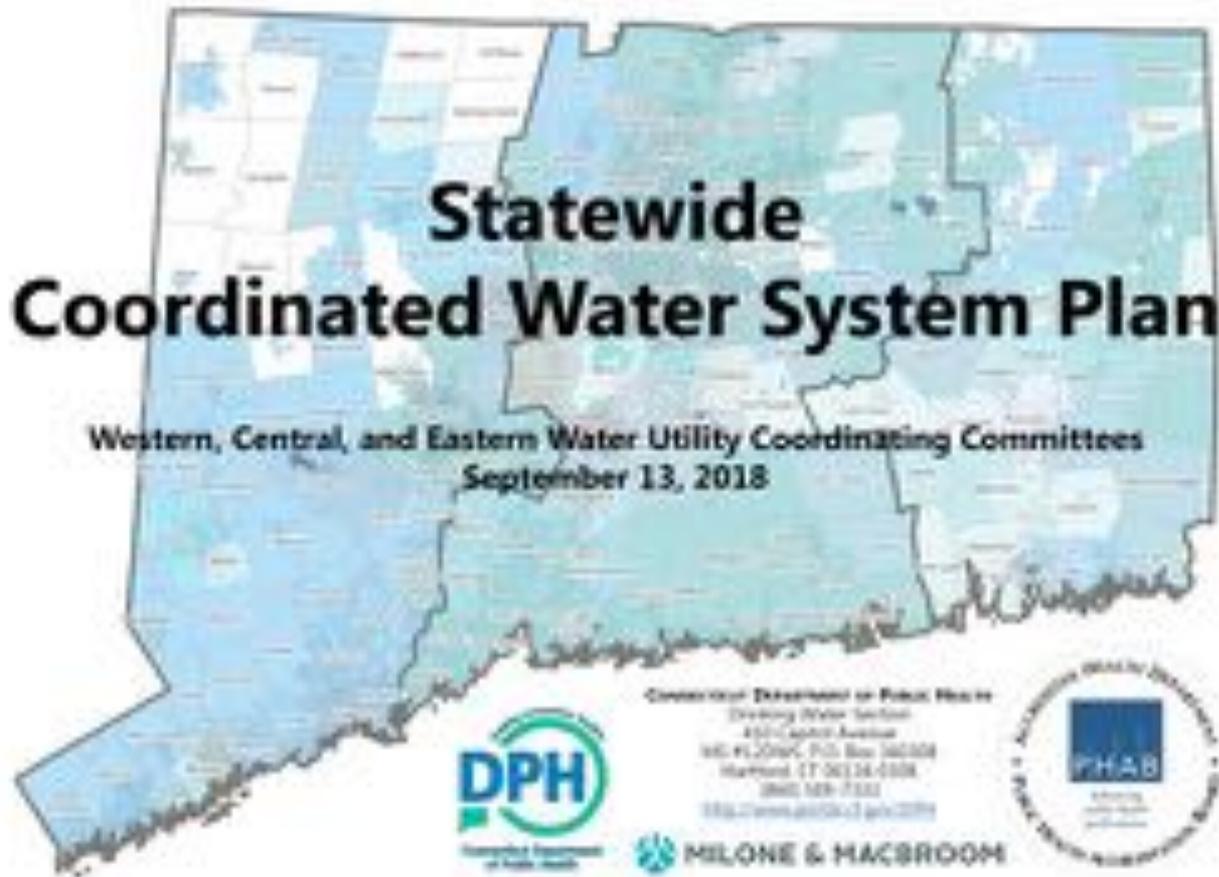




The role of regulators

- They can help steer you to potential partners
- They can help you identify funding resources
- They can provide examples of successes and pitfalls
- They can help identify potential legal issues
- They can be your advocate with stakeholders

WUCC –Water Utility Coordinating Committee



<https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=cfccb8b4975d4d72869bd0770510c1b0>



Water System Partnerships

Collaborative Approaches to Address Drinking Water Challenges





<http://efcnetwork.org/resource-library/>

> How can we work with other water systems to lower costs?

Tools

No posts found.

Publications

June 1, 2017

Workshop in a Box: Sustainable Management of Rural and Small Systems
Workshops

April 8, 2017

Saving Operational and Managerial Expenses Through Water System
Partnerships

April 8, 2017

System Partnerships Solutions to Improve Public Health Protection
(Slide 1)

April 6, 2017

Enhancing Performance of Small Water Systems Through Shared
Management

April 8, 2017

Collaborating with Local Water Agencies: Tips, Pitfalls to Avoid, and
Not-Here-Though-it's-in-That-You-Water-System-to-Read!

April 8, 2017

System Partnerships Solutions to Improve Public Health Protection
 (Slide 2)

June 1, 2017

Alternative Financing of Water and Wastewater Infrastructure in Rural
Communities

July 6, 2016

Drinking Water and Wastewater Infrastructure in Appalachia: An Analysis
of Capital Funding and Funding Gaps



Small Water System Partnerships and Regionalization Considerations

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