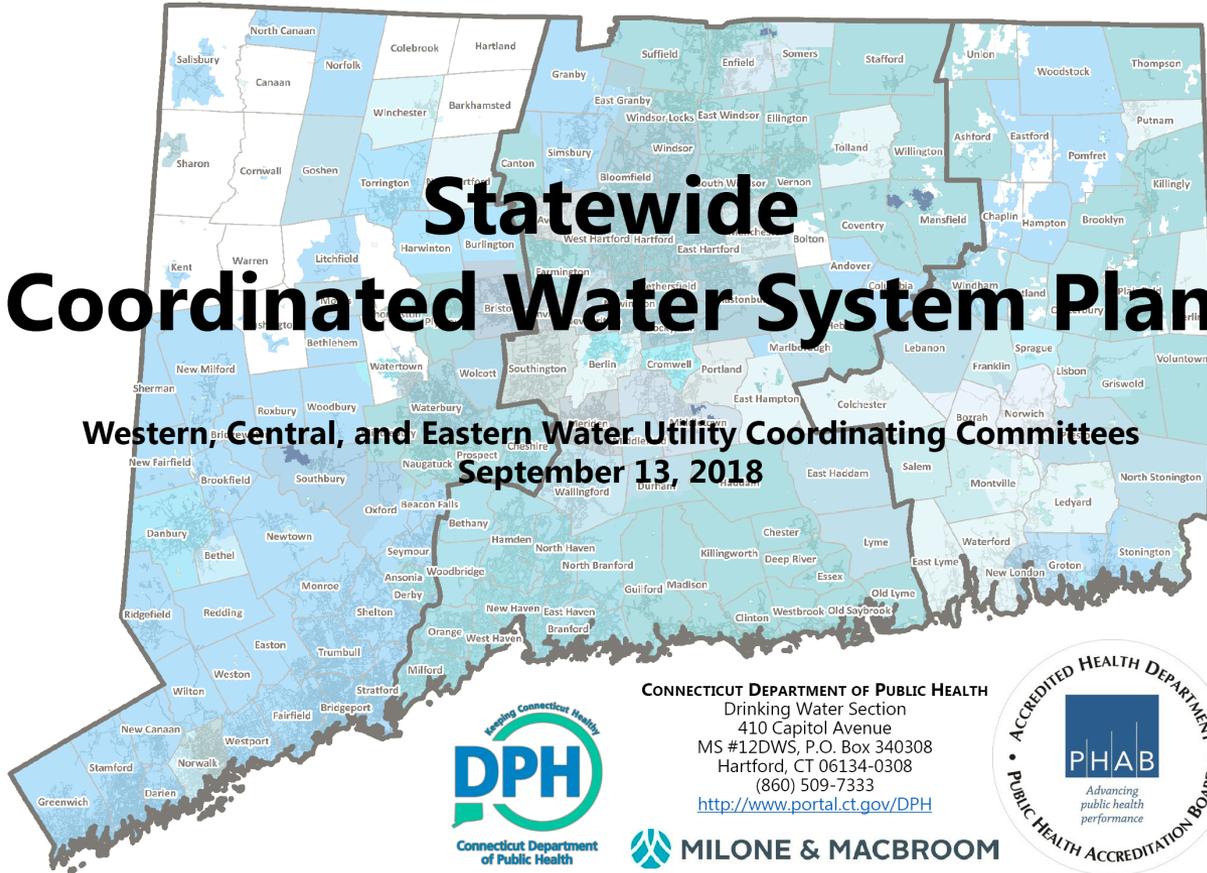


WUCCs as a Regionalization Tool

Statewide Coordinated Water System Plan

Western, Central, and Eastern Water Utility Coordinating Committees
September 13, 2018



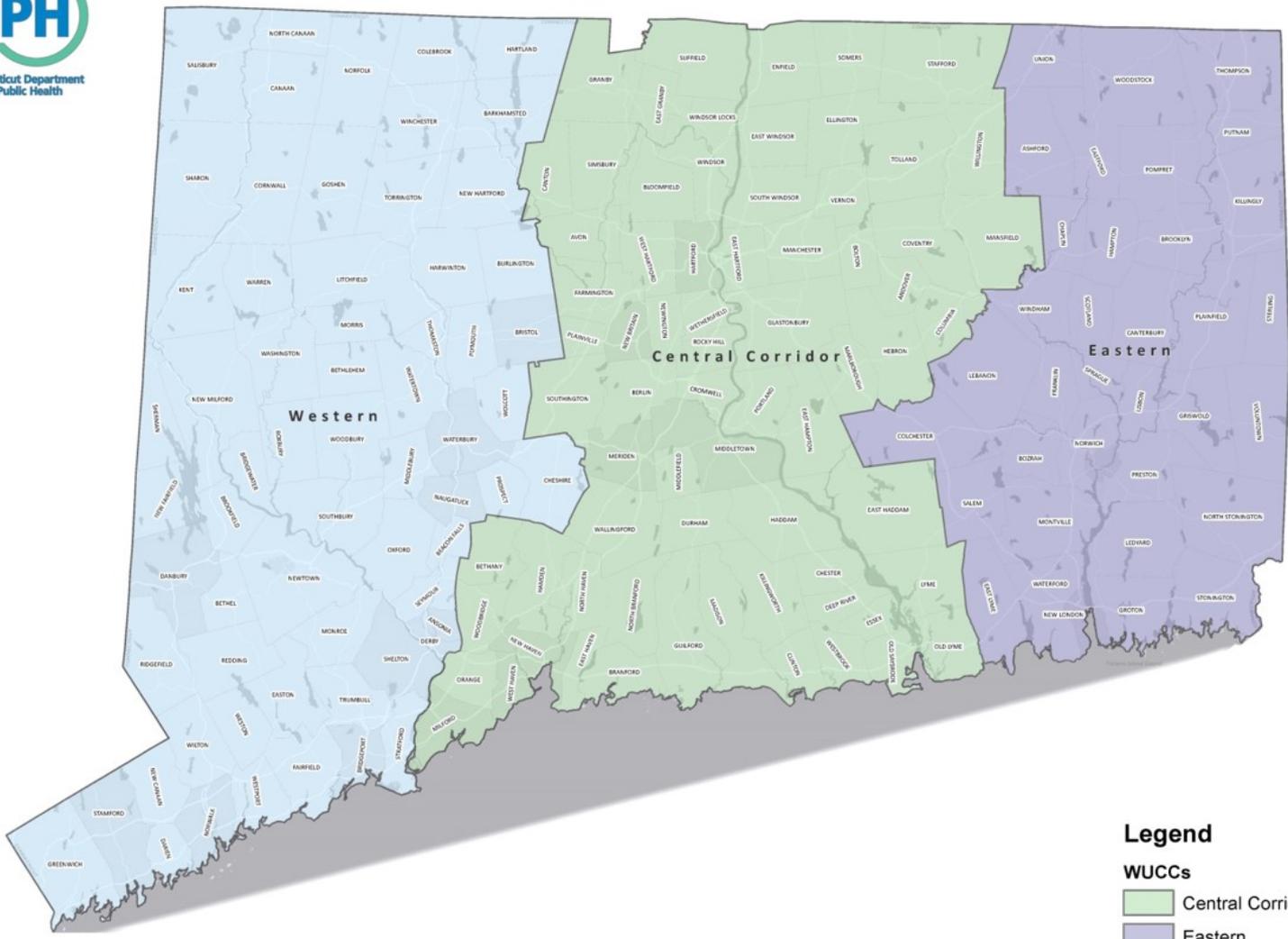
What are WUCCs?

- 💧 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.**

WUCC Boundaries



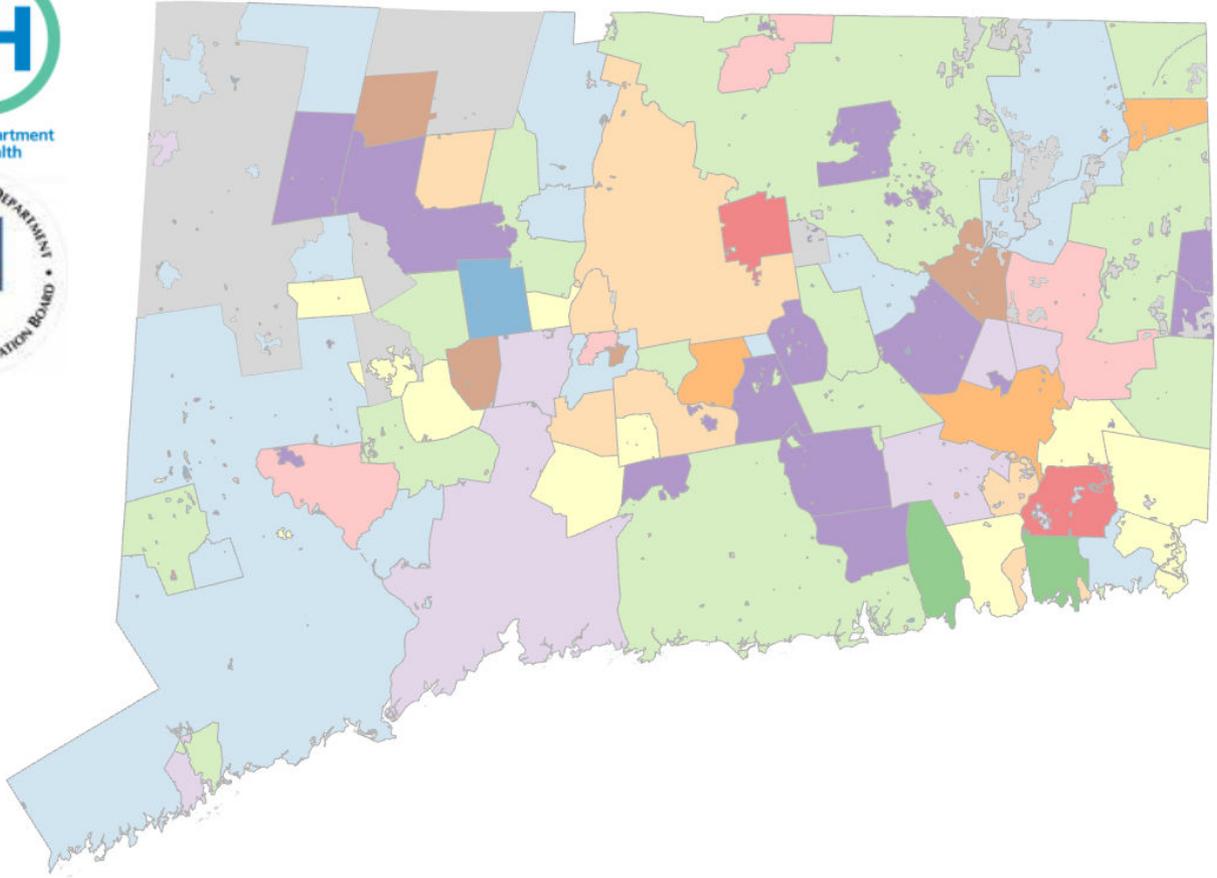
Legend

WUCCs

- Central Corridor
- Eastern
- Western

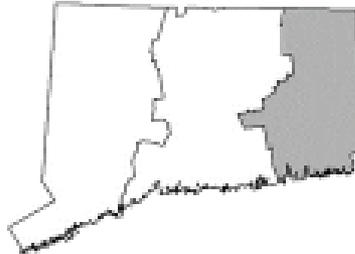
Exclusive Service Areas

WATER UTILITY COORDINATING COMMITTEE FINAL EXCLUSIVE SERVICE AREAS



Coordinated Water System Plan Part IV: Final Executive Summary

Eastern Public Water Supply Management Area
May 31, 2018



Prepared for:
EASTERN REGION WATER UTILITY
COORDINATING COMMITTEE
c/o the Elected Recording Secretary
5 Connecticut Avenue, Norwich, CT 06360
<http://www.portal.ct.gov/DPH/Drinking-Water/ERWUC/Eastern-Water-Utility-Coordinating-Committee>

Sponsoring Agency:
CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
430 Capitol Avenue
MS #120WS, P.O. Box 340308
Hartford, CT 06134-0308
(860) 509-7333
<https://www.portal.ct.gov/DPH>

Prepared by:
MILONE & MACBROOM, INC.
99 Realty Drive
Cheshire, Connecticut 06410
(203) 271-1773
www.miloneandmacbroom.com

MMI #1017-05-05



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.

Table D-1. Small Community Water System Capacity Scores and Potential Options for Improving Capacity

Town	PWS ID	Small Community PWS Name	TOTAL SCORE	Technical Score	Managerial Score	Financial Score	Option A	Option B	Option C	Option D
BARKHAMSTED	CT0055071	FOXRIDGE APARTMENTS-WELL 2	59	55	82	40	X		X	X
BETHEL	CT0090114	ELMWOOD COURT LLC	67	80	81	40	X	X		
BRIDGEWATER	CT0161011	BRIDGEWATER COMMONS CONDOMINIUMS	66	75	82	40	X	X		
BRISTOL	CT0176021	CHIPPANYDALE ASSOCIATION	55	65	61	40	X		X	X
BROOKFIELD	CT0189971	39 HOP BROOK RD - APT COMPLEX	49	45	62	40	X	X		
BROOKFIELD	CT0184011	BROOKFIELD ELDERLY HOUSING	64	80	71	40	X		X	X
BROOKFIELD	CT0180171	BROOKFIELD HILLS CONDOMINIUM UNIT OWNERS	67	80	82	40	X		X	X
BROOKFIELD	CT0180101	HICKORY HILLS	69	85	82	40	X	X	X	
BROOKFIELD	CT0180231	LAKE LILLINONAH SHORES CONDOS	49	35	72	40	X	X		
BROOKFIELD	CT0180161	WHISCONIER VILLAGE ASSOCIATION, INC.	42	25	62	40	X		X	X
BURLINGTON	CT0201011	FARMINGTON LINE WEST CONDOMINIUMS	58	65	70	40	X		X	X
BURLINGTON	CT0201021	WOODCREST ASSOCIATION, INC	57	60	72	40	X		X	X
CHESHIRE	CT0251021	CRESTVIEW CONDOMINIUM ASSOCIATION	50	60	50	40	X		X	X
CORNWALL	CT0311011	CORNWALL WATER COMPANY	49	45	61	40	X	X		
DANBURY	CT0347021	CANDLEWOOD PARK INC	49	25	82	40	X		X	X
DANBURY	CT0340141	CEDAR TERRACE PROP OWNERS ASSN	50	40	71	40	X		X	X
DANBURY	CT0340151	HAWTHORNE TERRACE ASSOC	69	25	81	100	X	X		
DANBURY	CT0347031	SHADY ACRES MOBILE HOME PARK	67	80	82	40	X		X	X
DANBURY	CT0340231	SNUG HARBOR DEVELOPMENT CORP	66	75	82	40	X		X	X
GOSHEN	CT0550321	VILLAGE MARKET PLACE	47	30	72	40	X	X		
HARWINTON	CT0660341	GARDEN LANE APARTMENTS	59	55	82	40	X	X		

Water Utility Coordinating Comm x

https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Commit...

Apps Wellhead Protection Drinking Water Sectic SDWIS-STATE Login F Maps.ct.gov eRegulations - Home

Connecticut's Official State Website Search Connecticut Government...

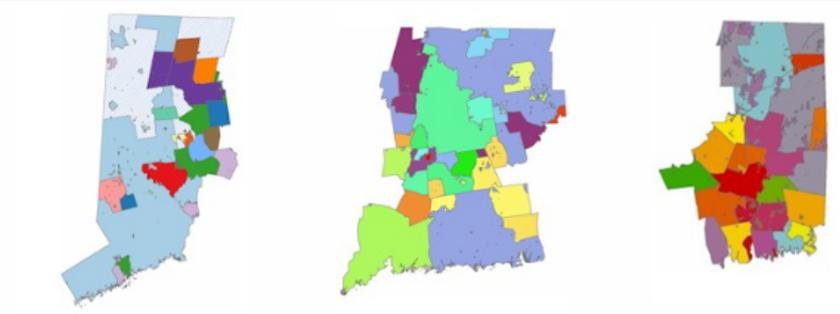
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Western WUCC Central Corridor WUCC Eastern WUCC

Water Utility Coordinating Committees

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.

The Commissioner of Public Health, following the final priorities established pursuant to section 25-22a, shall organize a water utility coordinating committee (WUCC) for each public water supply...

Density of Small PWSs

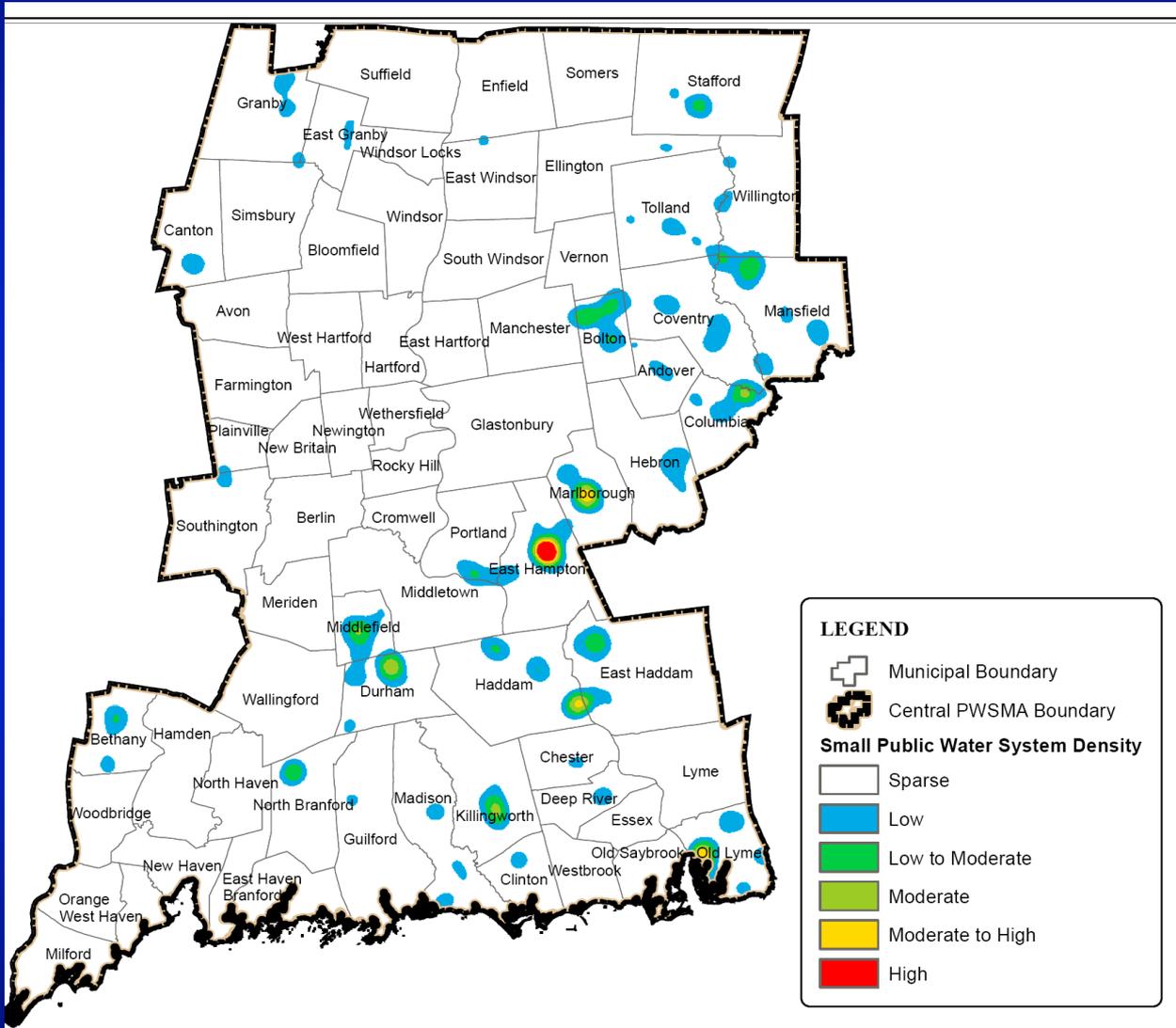


FIGURE 4-1: SMALL PUBLIC WATER SYSTEM DENSITY

**WATER SUPPLY ASSESSMENT
 CENTRAL PWSMA**
 LOCATION: STATE OF CONNECTICUT

Map By: SJB
 MMI#: 1017-05-02
 Original: 8/16/2016
 Revision: 8/24/2016
 Scale: 1 in = 43,000 ft

MILONE & MACBROOM
 99 Realty Drive Cheshire, CT 06410
 (203) 271-1773 Fax: (203) 272-9733
 www.miloneandmacbroom.com

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>


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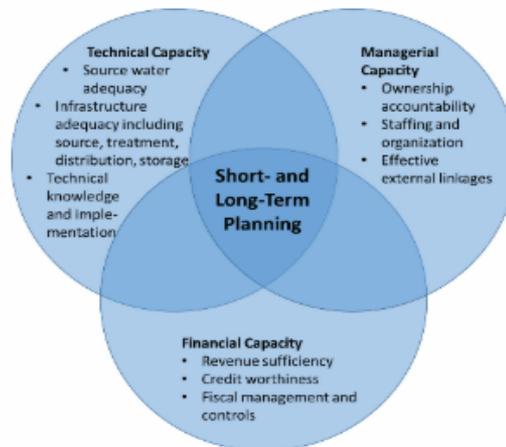
by Keyword

Capacity Development for Small Public Water Systems

Capacity Development is a very important concept for the long term viability of public water systems. A key component of maintaining a viable public water system is ensuring that water system assets and finances are sustainable. This was the rationale behind the Department's new statutory requirement for small community water systems to develop individual fiscal and asset management plans.

PWS Capacity Development

A Capacity Development Strategy considers the technical, managerial and financial (TMF) needs of public water systems (PWSs) as shown here:



Technical capacity refers to a PWSs ability to operate and maintain water system infrastructure and includes elements such as source water adequacy, infrastructure condition and the technical knowledge of its operators.



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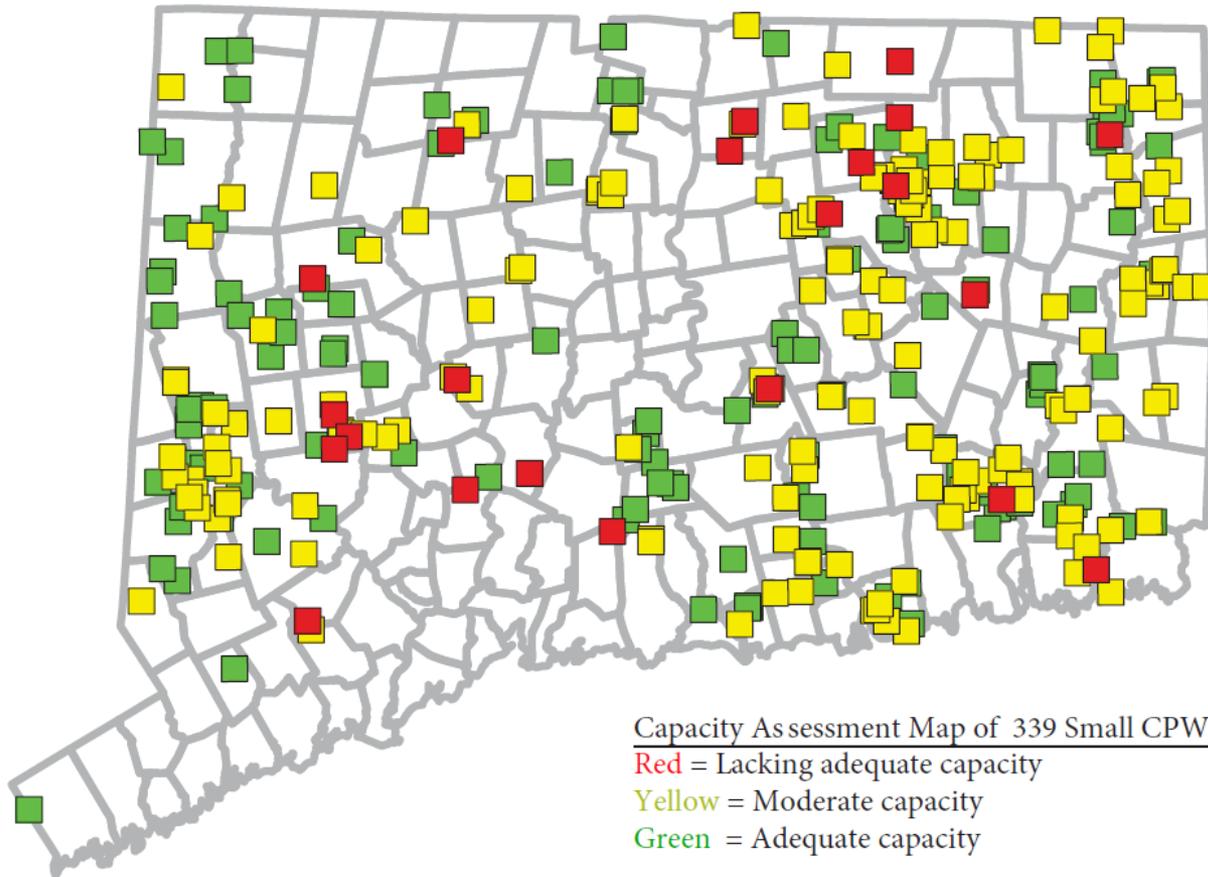
by Keyword

Capacity Assessment Tool

While some small public water systems are owned and operated by utilities and municipalities with experience in public water supply, others are owned and operated by entities for whom providing public water supply is not their primary business. The DPH did an initial assessment that identified significant concerns about the technical, managerial, and financial capacity of some small systems in 2016 using the Capacity Assessment Tool (CAT). DPH developed this tool to help track capacity deficiencies and understand small system needs. The CAT has also been incorporated into the sanitary survey process. As part of the routine sanitary survey, all CWS are required to complete a capacity questionnaire that will be used to update the CAT. The CAT data has been an integral part of developing capacity through the Water Utility Coordinating Committee (WUCC) process and keeping the data updated and relevant is key.

- [CAT 2016 Baseline Assessment Map](#)
- [Western WUCC CAT 2016 Baseline Assessment Summary](#)
- [Central WUCC CAT 2016 Baseline Assessment Summary](#)
- [Eastern WUCC CAT 2016 Baseline Assessment Summary](#)
- [CWS Sanitary Survey Capacity Questionnaire](#)

Small Community Public Water System Capacity Assessment Map





Capacity Assessment Query

Thursday, September 22, 2016

10:54:08 AM

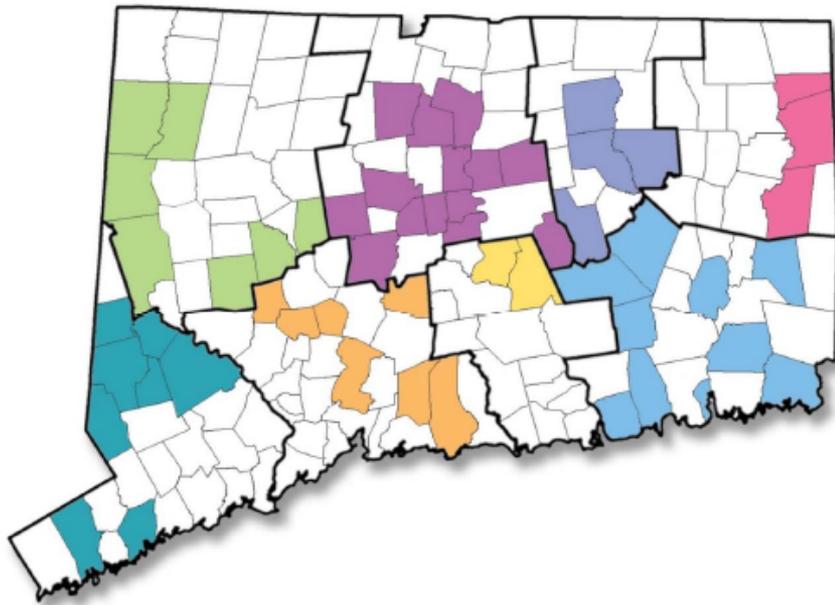
Town	PWSID #	Public Water System	Total Capacity Score	Technical Score	Managerial Score	Financial Score	WUCC
BARKHAMSTED	CT0055071	FOXRIDGE APARTMENTS-WELL 2	59	55	82	40	WESTERN
BARKHAMSTED	CT0051011	FOXRIDGE APARTMENTS-WELL 1	74	100	82	40	WESTERN
BARKHAMSTED	CT0051031	WALLENS HILL APARTMENTS	72	95	67	55	WESTERN
BARKHAMSTED	CT0050011	ROCKTREE APARTMENTS	65	90	67	40	WESTERN
BETHANY	CT0081011	BETHANY MOBILE HOME PARK	34	10	53	40	WESTERN
BETHEL	CT0090114	ELMWOOD COURT LLC	62	80	66	40	WESTERN
BETHLEHEM	CT0105033	WOODHALL SCHOOL, INC	92	100	82	95	WESTERN
BETHLEHEM	CT0100011	NORTH PURCHASE ELDERLY	92	100	97	80	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.

COMMUNITIES ACROSS THE ENTIRE STATE OBTAINED PROJECT FUNDING OF MORE THAN \$259 MILLION THROUGH THE CONNECTICUT DRINKING WATER STATE REVOLVING FUND SINCE PROGRAM'S INCEPTION



Fairfield County: Bethel, *Brookfield*, Danbury, New Fairfield, *Newtown*, *Norwalk*, Ridgefield, Stamford

Hartford County: *Bristol*, Bloomfield, Enfield (Hazardville Water Company), Farmington, *Manchester*, *Marlborough*, *Metropolitan District Commission (MDC)* (includes Hartford, Bloomfield, Windsor, Rocky Hill, East Hartford, Newington, Wethersfield, West Hartford), *New Britain*, Simsbury, *Southington*

Litchfield County: Cornwall, Kent, *New Milford*, Plymouth, Salisbury, *Sharon*, *Watertown*, *Woodlake Tax District (Woodbury)*, *Woodbury*

Middlesex County: Cromwell Fire District, East Hampton, *Portland*

New Haven County: Guilford, *Meriden*, Middlebury, Naugatuck, North Branford, Prospect, *South Central CT Regional Water Authority (RWA)* (includes Hamden, North Branford), Waterbury

New London County: Colchester, *East Lyme*, *Griswold*, Lebanon, *Ledyard*, New London, *Norwich*, Old Lyme, Salem, Stonington

Tolland County: *Coventry*, *Hebron*, *Mansfield*, *Tolland*, *Willington*

Windham County: *Killingly*, Plainfield, Putnam

Bold and italic Towns received multiple loans

Can the DWSRF Program assist?

- 💧 Small systems are encouraged to apply
- 💧 Can fund interconnections (redundancy/resilience)



Thanks!

eric.mcphee@ct.gov

860-509-7333

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

Drinking Water Section