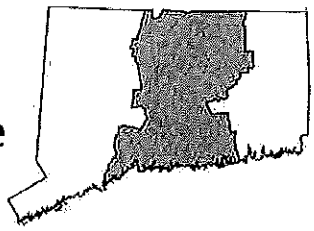
Central Region
Water Utility Coordinating Committee



September 23, 2016

Via Electronic Mail

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To: Central WUCC Members
Consulting State Agencies
Interested Parties

RE: Preliminary Water Supply Assessment

In accordance with CGS 25-33g, the Central Connecticut Water Utility Coordinating Committee (WUCC) has prepared a Preliminary Water Supply Assessment ("Preliminary Assessment") for the Central Connecticut Public Water Supply Management Area (PWSMA). An electronic copy of the document may be found online at the WUCC website http://www.ct.gov/dph/wucc under the Central WUCC section. In addition, a hard copy of the document may be reviewed at the offices of the South Central Connecticut Council of Governments, the Lower Connecticut River Valley Council of Governments, and the Capitol Region Council of Governments during normal business hours. The Central WUCC would like to thank each Council of Governments for agreeing to provide this service.

At this time, the Central WUCC is requesting review and comment on the Preliminary Assessment from all interested persons. Discussion of comments received to date will be discussed at the next Central WUCC meeting scheduled for October 25, 2016. The public comment period closes on Monday, October 24, 2016 and any final comments on the document from the public must be received by the end of that day.

Please provide comments via electronic mail to the Officers at the email addresses listed above or via regular mail at the mailing address of the Recording Secretary listed below. If you have any questions, please do not hesitate to contact the WUCC officers.

We look forward to hearing your thoughts and comments on this document. For current information regarding the WUCC process, please visit the DPH website at http://www.ct.gov/dph/wucc.

Very Truly Yours,

David Radka
Central Region WUCC Co-Chair

Bart Halloran
Central Region WUCC Co-Chair

Coordinated Water System Plan
Part I: Preliminary Water Supply Assessment

Central Connecticut Public Water Supply Management Area
September 21, 2016

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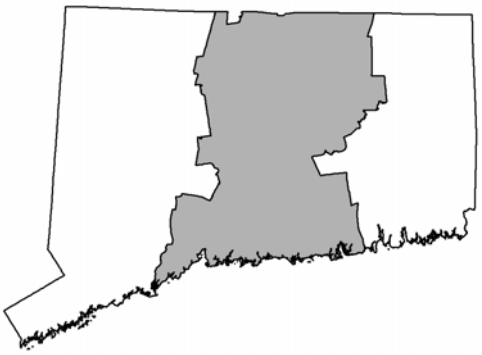
Coordinated Water System Plan
Part I: Preliminary Water Supply Assessment

Central Connecticut Public Water Supply Management Area
September 21, 2016



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MMI #1017-05

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NOTICE TO READERS

This document was prepared under a grant from the United States Environmental Protection Agency administered by the Connecticut Department of Public Health. Points of view or opinions expressed in this document are those of the Central Water Utility Coordinating Committee and do not necessarily represent the official position or policies of the Environmental Protection Agency or the Connecticut Department of Public Health.

ACKNOWLEDGEMENTS

This document could not be completed without the time and dedication of the Water Utility Coordinating Committee (WUCC) Officers and active WUCC membership, defined as those members who attended at least one Central Connecticut WUCC meeting or provided written comments on the process.

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Central WUCC Active Members*

Member	Member
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Avon Water Company	Town of Marlborough
Berlin Water Control Commission	Meriden Water Division
Bristol Water Department	Metropolitan District Commission
Capitol Region Council of Governments	Middletown Water & Sewer Department
Connecticut Water Company	New Britain Water Department
Cromwell Fire District	Portland Water Department
Town of Durham	South Central Connecticut Regional Water Authority
Town of East Haddam	South Central Region Council of Governments
East Hampton Water Pollution Control Authority	Tolland Water Commission
Town of Haddam	Twin Maples Healthcare, Inc.
Hazardville Water Company	University of Connecticut
Juniper Club, Inc.	Wallingford Water Division
Lower CT River Valley Council of Governments	

*As of September 21, 2016

Other Contributors

The Central Connecticut WUCC also appreciates the time and effort of the numerous nonmember stakeholders who participated and have contributed valuable insight to this process:

Stakeholders	Stakeholders
Citizens Campaign for the Environment	North Haven Department of Public Works
Connecticut Department of Energy & Environmental Protection	Norwich Public Utilities
Connecticut Department of Public Health	Quinnipiac River Watershed Association
Connecticut Office of Policy & Management	River Advocates of South Central Connecticut
Connecticut Public Utilities Regulatory Authority	Rivers Alliance
Connecticut River Watershed Council	Rome Smith & Lutz
Durham Conservation Commission	Save our Water - CT
Essex Health Department	Tighe & Bond, Inc.
Farmington River Watershed Association	Town of Westbrook
Members of the Public	West River Watershed Coalition
Milone & MacBroom, Inc.	

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DEFINITIONS

Areawide Supplement – A part of a coordinated water system plan which addresses areawide water system concerns pertaining to the public water supply management area which are not otherwise included in each water company's individual water system plan. The supplement identifies the present and future water system concerns, analyzes alternatives, and sets forth means for meeting those concerns. An areawide supplement consists of a water supply assessment, exclusive service area boundaries, integrated report, and executive summary.

Coordinated Water System Plan – The individual water system plans of each public water system within a public water supply management area, filed pursuant to Section 25-32d of the Connecticut General Statutes, and an areawide supplement to such plans developed pursuant to Connecticut General Statute 25-33h which addresses water system concerns pertaining to the public water supply management area as a whole.

Exclusive Service Area – An area where public water is supplied by one system. Exclusive Service Area boundaries comprise Part 2 of the areawide supplement.

Executive Summary – An abbreviated overview of the coordinated water system plan for the public water supply management area that summarizes the major elements of the coordinated water system plan. The Executive Summary comprises Part 4 of the areawide supplement.

Integrated Report – An overview of individual public water systems within the management area that addresses areawide water supply issues, concerns, and needs; and promotes cooperation among public water systems. The report comprises Part 3 of the areawide supplement.

Public Water Supply Management Area – An area for coordinated water supply planning determined by the Commissioner of the Department of Public Health to have similar water supply problems and characteristics.

Public Water System – Any private, municipal or regional utility supplying water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people daily for at least 60 days per year. Types of regulated public water systems are discussed below:

> **Community Water System –** A public water system that regularly supplies water to at least 15 service connections or at least 25 of the same population year-round. Examples include residential subdivisions, cluster-housing projects, homeowners associations, municipalities, tax districts, apartment buildings or complexes, residential and office condominium developments, elderly housing projects, convalescent homes, and trailer or mobile home parks.
>
> **Non-Community Water System –** A public water system that serves at least 25 persons at least 60 days per year and is not a Community or seasonal water system.

DEFINITIONS (CONTINUED)

Non-Transient Non-Community Water System – A public water system that regularly supplies water to at least 25 of the same people over 6 months per year and is not a Community water system. Some examples are schools, factories, office buildings, and hospitals that have their own water systems.

Seasonal Water System – A public water system that operates on a seasonal basis for 6 months of the year or fewer. These are typically regulated as non-transient Non-Community Water Systems unless sufficient service is available to meet the definition of a Community Water System, and often include larger campgrounds and shorefront communities.

Transient Non-Community Water System – Any Non-Community water system that does not meet the definition of a Non-Transient Non-Community Water System. It is a public water system that provides water in a place such as a gas station or campground where people do not remain for long periods of time.

Satellite Management – Management of a public water supply system by another public water system that is disconnected from its primary system.

Water Supply Assessment – An evaluation of water supply conditions and problems within the public water supply management area. The evaluation is Part 1 of the areawide supplement.

Water Utility Coordinating Committee – A committee consisting of one representative from each public water system with a source of supply or service area within the public water supply management area and one representative from each regional planning agency within the public water supply management area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional planning agency.

ABBREVIATIONS

CGS	Connecticut General Statute(s)
CRCOG	Capitol Region Council of Governments
CWC	Connecticut Water Company
CWS	Community Water System(s)
DEEP	Department of Energy and Environmental Protection
DOT	Department of Transportation
DPH	Department of Public Health
EPA	Environmental Protection Agency
GPCD	Gallons Per Capita per Day
GPD	Gallons Per Day
GPM	Gallons Per Minute
MDC	Metropolitan District Commission
MG	Million Gallons
MGD	Million Gallons per Day
MMI	Milone & MacBroom, Inc.
MTBE	Methyl-Tert Butyl Ether
NTNC	Non-Transient Non-Community
OPM	Office of Policy and Management
POCD	Plan of Conservation and Development
PURA	Public Utilities Regulatory Authority
PWSID	Public Water System Identification Number
PWSMA	Public Water Supply Management Area
RCSA	Regulations of Connecticut State Agencies
RiverCOG	Lower Connecticut River Valley Council of Governments
SCCRWA	South Central Connecticut Regional Water Authority
SCRCOG	South Central Region Council of Governments
SWAP	Source Water Assessment Report
TNC	Transient Non-Community
VOC	Volatile Organic Compound
WPCA	Water Pollution Control Authority
WSP	Water Supply Plan
WUCC	Water Utility Coordinating Committee

1.0 INTRODUCTION

1.1 The Coordinated Water System Planning Process

Connecticut's 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 Regulating Authority (PURA), the Department of Energy & Environmental Protection (DEEP), and the Office of Policy & 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 Section 25-33c of the Connecticut General Statutes (CGS), 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."*

Pursuant to Public Act 85-535 and Section 25-33e of the CGS, the boundaries of seven Public Water Supply Management Areas (PWSMAs) were delineated based upon the similarity of water supply issues, population density and distribution, existing sources of public water supply, service areas or franchise areas, existing interconnections between public water systems, municipal and regional planning agency boundaries, natural drainage basins, and similar topographic and geologic characteristics. The boundaries of the seven PWSMAs originally established in 1986 are delineated on Figure 1-1.

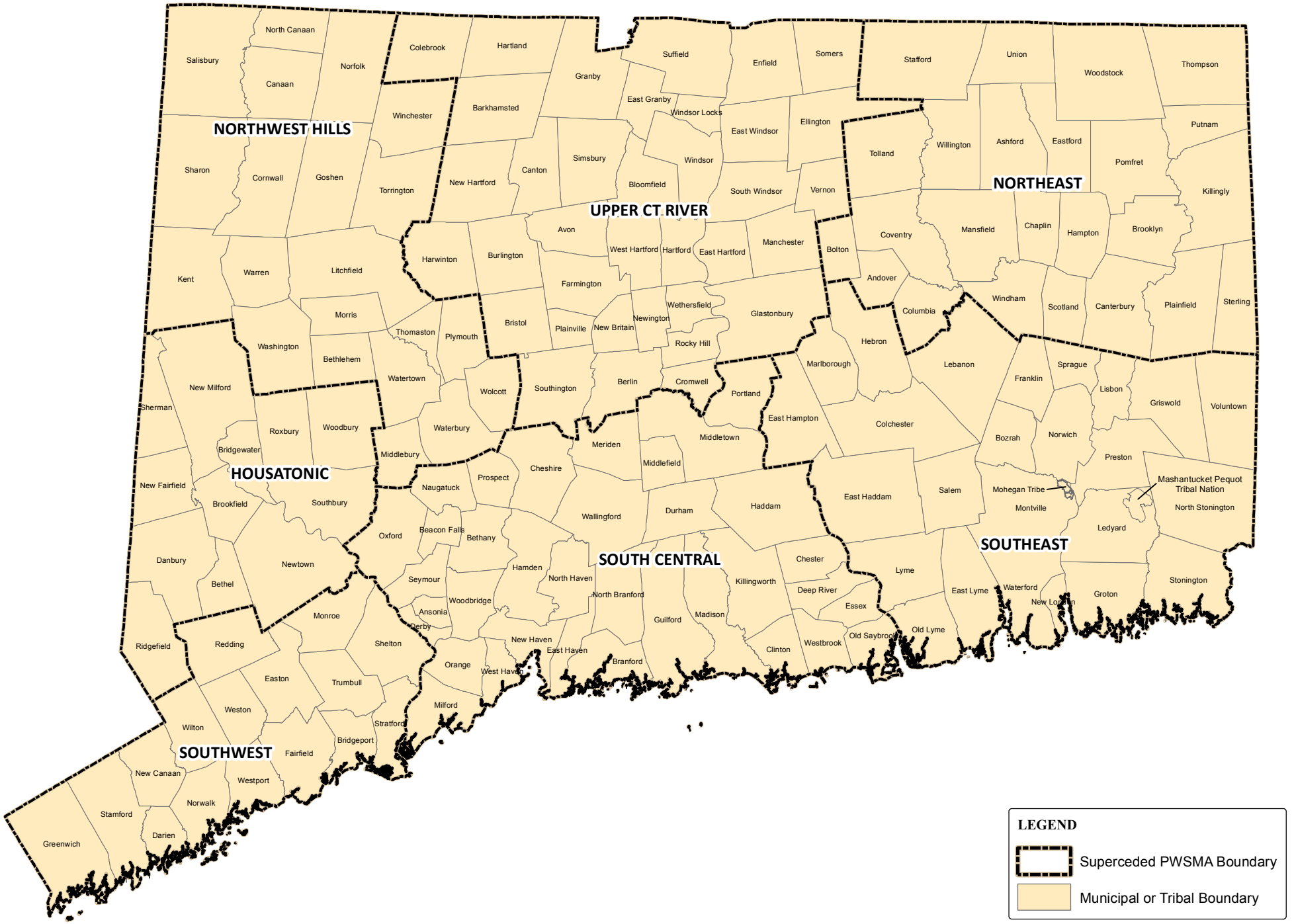
The CGS require that the Commissioner of DPH convene a Water Utility Coordinating Committee (WUCC) for each PWSMA to implement the areawide water supply planning process. A WUCC consists of one representative from each public water system with a source of water supply or service area within the PWSMA, and one representative from each regional planning agency within such area who is elected by majority vote of the chief elected officials of the municipalities that are members of such regional planning agency.

Four of the seven WUCCs were convened under the previous planning process, as outlined below:

- The Housatonic Area WUCC convened in June 1986.
- The Upper Connecticut River Area WUCC convened in March 1987.
- The South Central Area WUCC convened in November 1987.
- The Southeastern Area WUCC convened in August 1998.

The Northeast Area, Northwest Hills Area, and Southwest Area WUCCs never convened.

DPH began considering consolidation of the PWSMAs and reconvening the WUCCs since at least 2009. As stated in its 2014 annual report regarding the WUCC process:



SOURCE(S):
CT DPH 2016

N

FIGURE 1-1: ORIGINAL PWSMAs

WATER SUPPLY ASSESSMENT

LOCATION: STATE OF CONNECTICUT

Map By:	SJB
MMI#:	1017-05-02
Original:	7/18/2016
Revision:	7/18/2016
Scale:	1 in = 54,000 ft

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"The lack of approved WUCC management area coordinated plans remains a basic need that must be addressed for state drinking water planning success. The legislation envisioned coordinated plans would be revised every ten years and convened management area's coordinated plans were not updated primarily due to lack of available state funds. Iterative planning processes require constant vigilance and regular updates to reflect change. Current, accurate coordinated plans are needed to reflect changes over the past two decades to the economy, individual public water system plans, local and regional planning, and environmental impacts to supply adequacy that will result from new reservoir releases required by state Stream Flow Standards and Regulations.

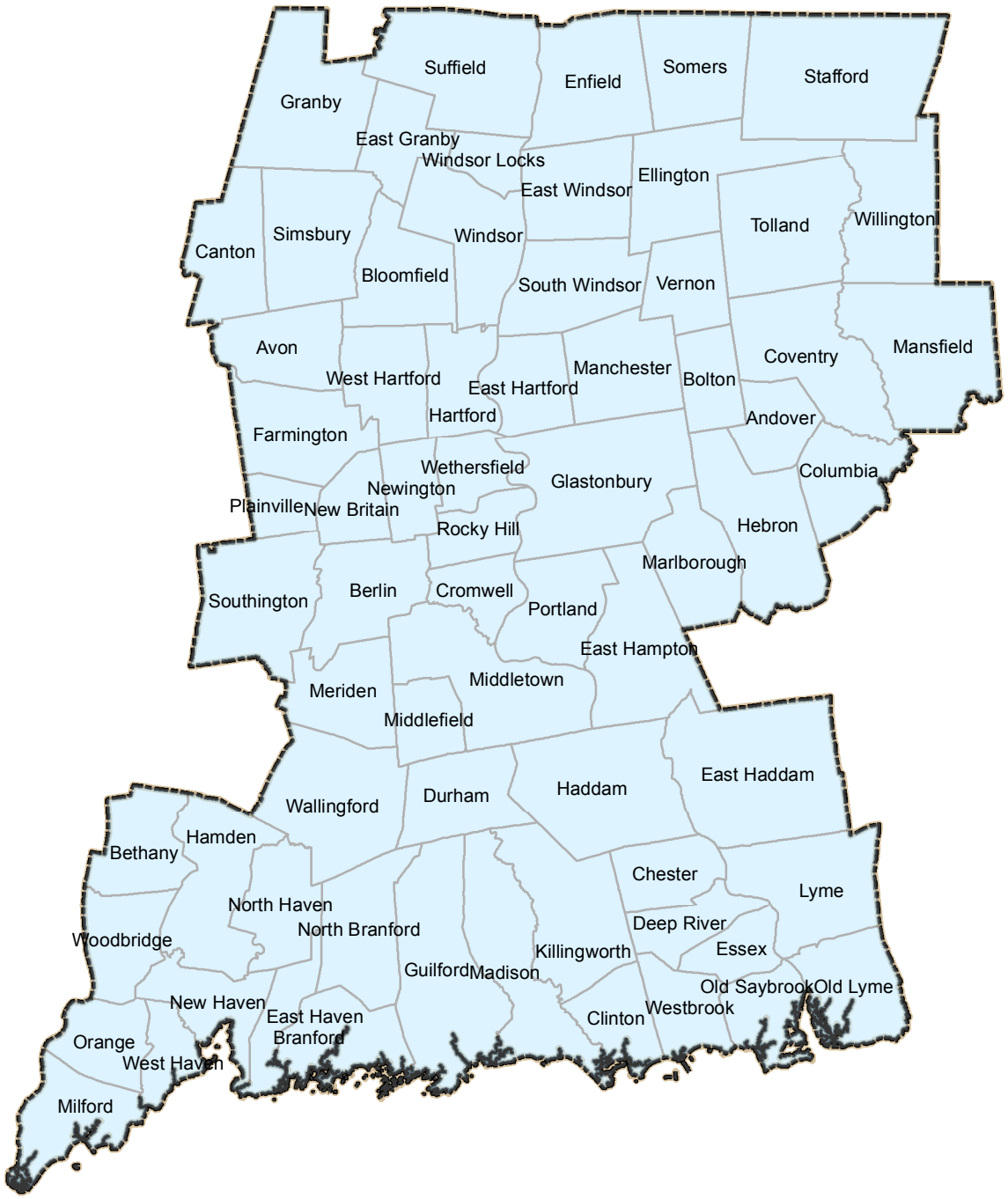
In 2011, a WUCC advisory group was convened to discuss historic problems, current shortcomings, and make recommendations for improvements. Recommendations provided were to sizably increase stakeholder and municipal involvement and to improve coordination between public water systems and the municipalities served. Management area consolidation was recommended given the current costs associated with preparing seven WUCC management area coordinated plans for the state's small footprint. The group recommended that WUCC consolidation efforts consider the state's regional planning boundaries to encourage increased municipal involvement and that current, accurate technical data be used to demonstrate system adequacy prior to granting state approved Exclusive Service Area designations."

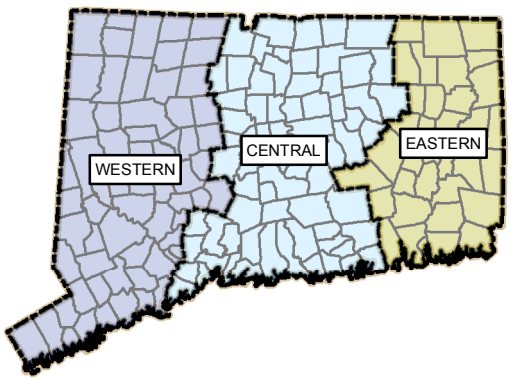
Based on the needs identified by DPH and the WUCC advisory group, in October 2014 following a public comment period from April to July 2014, the number of PWSMAs was consolidated from seven to three. The boundaries of the Western, Central, and Eastern Connecticut PWSMAs are shown on Figure 1-2. Each PWSMA boundary is consistent with the recently realigned regional planning agency boundaries completed by OPM. The WUCC representing each PWSMA convened on the following schedule with the goal of developing new coordinated water system plans as presented in Table 1-1:

- The Western Connecticut WUCC convened on June 14, 2016.
- The Central Connecticut WUCC convened on June 15, 2016.
- The Eastern Connecticut WUCC convened on June 17, 2016.

TABLE 1-1
Coordinated Water System Plan Components and Schedule

Component	Schedule from Convening of Central WUCC	Due Date
A. Individual Water Supply Plan	Not Applicable	Not Applicable
B. Areawide Supplement (Four Parts)	Within 24 Months	June 15, 2018
Part 1: Water Supply Assessment	Within 6 Months	December 15, 2016
Part 2: Exclusive Service Area Declaration	Within 12 months	June 15, 2017
Part 3: Integrated Report	Within 24 Months	June 15, 2018
Part 4: Executive Summary	Within 24 Months	June 15, 2018





KEY MAP: WUCC BOUNDARY
SCALE: N.T.S

LEGEND

WUCC REGION

- Central
- Eastern
- Western
- WUCC Boundary

SOURCE(S):
CT DPH 2016

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FIGURE 1-2: CENTRAL REGION PWSMA

WATER SUPPLY ASSESSMENT
CENTRAL PWSMA

LOCATION: STATE OF CONNECTICUT

Map By:	EB
MMI#:	1017-05-02
Original:	6/16/2016
Revision:	7/21/2016
Scale:	1 in = 45,000 ft

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1.2 Components of the Coordinated Water System Plan

A Coordinated Water System Plan is comprised of the individual water supply plans of the public water systems within the PWSMA that serve over 1,000 people or have 250 or more service connections, and an areawide supplement that includes a water supply assessment, delineation of exclusive service area boundaries, an integrated report, and an executive summary. Each of the four WUCCs that previously convened produced such documents; only the Southeastern Area WUCC Coordinated Plan was approved by DPH. The purpose of the coordinated water system plan is to:

1. Identify the present and future water system concerns.
2. Analyze alternatives.
3. Set forth a means for meeting the identified needs.

The major components of the Coordinated Water System Plan are described below:

Individual Water Supply Plans – Each Community water system (CWS) that serves greater than 1,000 people or 250 service connections is required to prepare an individual water supply plan under Section 25-32d of the RCSA. The individual water supply plans are in various stages of development and DPH approval. The status of each plan within the Central Connecticut PWSMA is described in greater detail in Section 6.0 of this document. The principal goals of individual water system planning as defined by the DPH are to:

1. Ensure an adequate quantity of pure drinking water, now and in the future;
2. Ensure orderly growth of individual water systems; and
3. Make efficient use of available resources.

Water Supply Assessment – The subject document represents the Water Supply Assessment (WSA), the first of the four components of the areawide supplement. The purpose of the WSA is to evaluate existing conditions and deficiencies within the PWSMA. Per Statute, the Final WSA and associated mapping must be completed within 6 months of the convening of the WUCC. Per Statute and Regulation, the following six topics must be discussed within the Water Supply Assessment:

1. Description of existing water systems, including:
    a. History of water quality, reliability, service, and supply adequacy;
    b. General fire-fighting capability of the utilities; and
    c. Identification of major facilities which need to be expanded, altered, or replaced.

2. Availability and adequacy of any future water source(s).

3. Existing service area boundaries and public water system limits established by statute, special act or administrative decision, including a map of established boundaries, and identification of systems without boundaries.

4. Present and projected growth rates, including population data, land use patterns and trends, and identification of lands available for development.

5. Status of water system planning, land use planning and coordination between public water systems.

6. A discussion of regional issues, needs, and deficiencies.

Documentation of proper notification regarding the convening of the WUCC and initiation of the Water Supply Assessment are included herein as Appendix A.

Exclusive Service Area Declaration – Pursuant to Paragraph (d)(2)(B) of Section 25-33h-1 (Regulations Concerning Coordinated Water System Plans), *"the WUCC shall prepare preliminary and then final exclusive service area boundaries."* An exclusive service area is an area where public water is supplied by one system. Numerous factors are considered in determining exclusive service area boundaries, including existing service areas; land use plans, zoning regulations, and growth trends; physical limitations to water service; political boundaries; water company rights as established by statute, special act, or administrative decision; system hydraulics, including potential elevations or pressure zones; and ability of a water system to provide a pure and adequate supply of water now and into the future. Such boundaries may not be delineated until the Water Supply Assessment is final.

Integrated Report – The Integrated Report is a long-term planning tool for the PWSMA. Various issues are evaluated in the Integrated Report, including existing and future projected populations, existing and alternative water supplies, source protection, water conservation, existing and potential interconnections, system ownership and management, satellite management / ownership issues, minimum design standards, financial considerations, potential impacts on other uses of water resources (including water quality, flood management, recreation, hydropower, and aquatic habitat issues), and land acquisition for proposed wells in stratified glaciofluvial deposits.

Executive Summary – The executive summary provides an abbreviated overview of the Coordinated Water System Plan for the PWSMA. It is a factual and concise summary of the major elements of the coordinated water system plan.

It is recognized that some water supply issues may cross PWSMA or state boundaries. Such issues will be addressed in a Statewide Coordinated Water System Plan, which will be developed upon completion of the Coordinated Water System Plans for each of the three WUCCs.

1.3 Central Connecticut Public Water Supply Management Area

Figure 1-2 graphically depicts the Central Connecticut PWSMA. It contains all of the municipalities that are included within the boundaries of the Capitol Region Council of Governments (CRCOG), South Central Region Council of governments (SCRCOG), and the Lower CT River Valley Council of Governments (RiverCOG) regional planning agencies.

The boundaries of the PWSMA are generally defined by the Massachusetts state boundary to the north; the boundaries of the Western PWSMA and the Eastern PWSMA to the west and east, respectively; and Long Island Sound to the south. The municipalities within the Central PWSMA are listed in Table 1-2, with municipalities along the western and eastern boundaries called out separately as these communities may coordinate on water supply issues with municipalities or utilities in the Western or Eastern PWSMAs. In total, the Central PWSMA comprises 70 municipalities.

TABLE 1-2
Central PWSMA Municipalities

Central PWSMA Municipalities				
Andover	Durham	Haddam	New Britain	Southington*
Avon*	East Granby	Hamden*	New Haven	Stafford^
Berlin	East Haddam^	Hartford	Newington	Suffield
Bethany*	East Hampton^	Hebron^	North Branford	Tolland
Bloomfield	East Hartford	Killingworth	North Haven	Vernon
Bolton	East Haven	Lyme^	Old Lyme^	Wallingford*
Branford	East Windsor	Madison	Old Saybrook	West Hartford
Canton*	Ellington	Manchester	Orange*	West Haven
Chester	Enfield	Mansfield^	Plainville*	Westbrook
Clinton	Essex	Marlborough^	Portland	Wethersfield
Columbia^	Farmington*	Meriden*	Rocky Hill	Willington^
Coventry^	Glastonbury	Middlefield	Simsbury	Windsor
Cromwell	Granby*	Middletown	Somers	Windsor Locks
Deep River	Guilford	Milford*	South Windsor	Woodbridge*

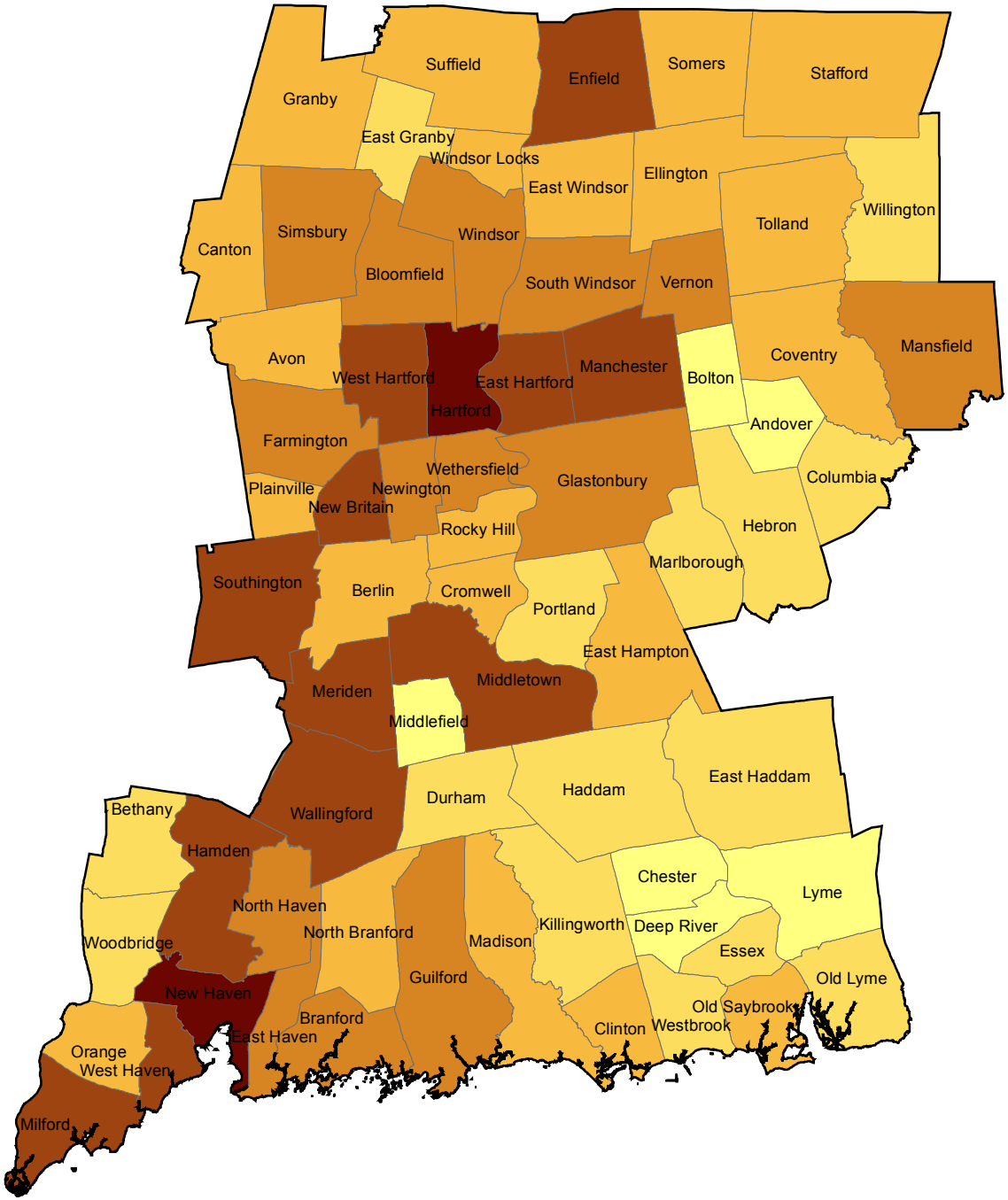
*Denotes municipality that is on the border with the Western PWSMA
^Denotes municipality that is on the border with the Eastern PWSMA

Population varies widely in the region. Based on the most recent census data, the smallest municipality is Lyme, with a 2010 population of 2,406. The largest municipality is New Haven, with a 2010 Census population of 129,779. Figure 1-3 depicts the distribution of population in the Central PWSMA by municipality.

The Central Connecticut PWSMA consists of 931 public water systems. Of these:

- 199 are regulated as Community water systems;
- 214 are regulated as NTNC water systems; and
- 521 are regulated as TNC water systems.

Each municipality contains at least one public water system. The EPA classifies water system size based on the population served. The distribution of water system service population by system type is shown on Table 1-3. CWS sizes range from very small systems that serve, for example, apartments and convalescent homes to large municipal systems. NTNC water system sizes range from very small systems that serve small businesses to small systems that serve private schools with several hundred students. TNC water systems are typically very small systems serving gas stations or restaurants, whereas larger systems may serve state parks.



LEGEND

2010 Municipal Population Data

- Population Less Than 5,000
- Population Between 5,000 and 10,000
- Population Between 10,000 and 20,000
- Population Between 40,000 and 80,000
- Population More than 80,000
- Municipal Boundary

SOURCE(S):
CT DPH 2016

N

FIGURE 1-3: POPULATION DISTRIBUTION BY MUNICIPALITY

WATER SUPPLY ASSESSMENT
CENTRAL PWSMA
LOCATION: STATE OF CONNECTICUT

Map By:	SJB
MMI#:	1017-05-02
Original:	7/18/2016
Revision:	7/21/2016
Scale:	1 in = 45,000 ft

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TABLE 1-3
Summary of Population Served in Central PWSMA by Public Water Systems

EPA System Classification	Range of Population Served	Number of Community Water Systems	Number of NTNC Water Systems	Number of TNC Water Systems
Very Small	< 51	50	69	493
Very Small	51-100	34	67	10
Very Small	101-250	50	32	10
Very Small	251-500	22	22	4
Small	501-1000	9	20	4
Small	1001-3,300	10	4	0
Medium	3,301-10,000	6	0	0
Large	10,001-50,000	12	0	0
Large	50,001-100,000	4	0	0
Very Large	> 100,000	2	0	0
	Total	**199**	**214**	**521**

Based on the information in Table 1-3, the majority of public water systems in the region serve less than 500 people. Only 71 systems (7.5% of the total systems in the Central PWSMA) serve more than 500 people. A total of 34 CWS serve greater than 1,000 people and are therefore required to file and maintain an individual water supply plan. Many smaller systems are also covered in water supply plans because utilities that are required to create an individual water supply plan typically include their smaller satellite systems.

The Central PWSMA falls into four geological areas, the western uplands, central lowlands, eastern uplands, and coastal slope. The western uplands are characterized by narrow river valleys with steep hills with land typically sloping downward form the northwest. The central lowlands are associated with the Connecticut River Valley and the Quinnipiac River Valley, with lower hills and significant expanses of flatter land. The eastern uplands are similar to the western uplands and are characterized by narrow river valleys and low hills with land sloping downward from the northwest or northeast. Many areas are heavily forested, and others have rich soil that is generally good for farming. The coastal slope extends approximately 6 to 16 miles inland from Long Island Sound and are characterized by lower ridges and beaches and harbors along the coast.

1.4 Central Connecticut Water Utility Coordinating Committee

Per Statute, the Central WUCC is comprised of one representative from each public water system with a source of water supply or a service area within the Central PWSMA and one representative from each regional council of governments within the Central PWSMA. Per regulation, sources of supply within a PWSMA include reservoirs, wells, other water bodies, and associated watershed land; service area includes areas where a public water system currently provides service or has the authority to provide service as determined by legal rights, legislative franchises, municipal charters, or inter-local agreements for the sale of water.

The list of all eligible WUCC members for the Central PWSMA is presented in Appendix B. There are more than 900 eligible WUCC members in the Central PWSMA, with membership comprised of representatives from public water systems and three councils of governments. Many Central WUCC members own and/or operate more than one system. Based on the bylaws and work plan developed by the Central WUCC, each utility that is an eligible WUCC member (not each public water system) will have one vote for those issues requiring votes. This prevents any one utility from dominating the WUCC by virtue of owning multiple systems within the PWSMA.

1.5 Information Sources

Data has been gathered from regulatory agencies, public water supply representatives, municipalities, and regional planning organizations. Much of the data collection effort was completed prior to convening the WUCC. Individual water supply plans, municipal plans of development, regional planning documents, and population data published by the Connecticut DOT were utilized as a starting point in the data gathering, compilation, and assessment process as well as DPH files and databases. This information was supplemented by telephone interviews and personal communications with individuals having an association with the region. Interaction with, and input from WUCC members and meeting attendees, was also a critical component of data collection.

Following extensive file reviews, each CWS that produces an individual water supply plan in the Central PWSMA was contacted with a request to verify existing information and for additional information. Due to the size and regulatory requirements, there was generally more base information and better response from the systems serving greater than 1,000 people. Smaller CWS were also contacted by DPH. The data for systems serving less than 1,000 people remains sparse in many instances due to the lack of available documentation and low rate of response to requests for specific facility information, particularly for the Non-Community public water systems. This is reflected in the text and tables throughout this document.

2.0 EXISTING PUBLIC WATER SYSTEMS

2.1 Composition of the Region

Table 2-1 indicates the number and type of public water systems serving each municipality within the Central PWSMA. The following discussion provides a breakdown of existing public water systems in each municipality. Areas not served by these systems are served by private well and/or spring systems.

TABLE 2-1
Summary of Central PWSMA Public Water System Service Areas by Municipality

Municipality	Total Number of Community Water Systems	Number of NTNC Systems	Number of TNC Systems	Number of Municipally-Owned Systems
Andover	3	3	5	0
Avon	3	3	0	0
Berlin	5	1	3	2
Bethany	3	7	9	0
Bloomfield	5	0	2	0
Bolton	6	9	18	3
Branford	1	0	0	0
Canton	2	4	7	1
Chester	3	3	4	0
Clinton	6	0	2	1
Columbia	3	9	16	5
Coventry	10	6	16	7
Cromwell	1	0	1	0
Deep River	6	3	2	0
Durham	5	7	18	3
East Granby	9	4	4	0
East Haddam	7	7	28	9
East Hampton	13	16	27	9
East Hartford	1	0	1	0
East Haven	1	0	1	0
East Windsor	4	2	7	0
Ellington	2	1	7	1
Enfield	4	0	6	0
Essex	4	4	1	0
Farmington	4	1	5	0
Glastonbury	2	3	6	3
Granby	2	7	13	2

TABLE 2-1
Summary of Central PWSMA Public Water System Service Areas by Municipality

Municipality	Total Number of Community Water Systems	Number of NTNC Systems	Number of TNC Systems	Number of Municipally-Owned Systems
Guilford	3	4	6	3
Haddam	2	8	27	3
Hamden	1	1	4	0
Hartford	1	0	0	0
Hebron	10	4	13	3
Killingworth	1	4	19	3
Lyme	0	1	2	1
Madison	3	14	4	0
Manchester	4	3	5	1
Mansfield	19	9	22	3
Marlborough	8	9	14	1
Meriden	1	0	3	1
Middlefield	6	9	17	4
Middletown	2	2	5	1
Milford	1	0	2	0
New Britain	1	0	0	1
New Haven	1	0	0	0
Newington	2	0	2	0
North Branford	3	2	15	0
North Haven	1	0	2	0
Old Lyme	11	11	21	2
Old Saybrook	1	0	1	0
Orange	1	0	1	0
Plainville	2	0	2	0
Portland	2	1	9	1
Rocky Hill	1	0	0	0
Simsbury	4	1	4	0
Somers	4	2	3	1
South Windsor	3	2	3	1
Southington	2	0	12	1
Stafford	3	11	15	2
Suffield	2	1	5	0
Tolland	10	6	12	2
Vernon	4	0	6	1
Wallingford	1	1	1	1
West Hartford	1	0	0	0

TABLE 2-1
Summary of Central PWSMA Public Water System Service Areas by Municipality

Municipality	Total Number of Community Water Systems	Number of NTNC Systems	Number of TNC Systems	Number of Municipally-Owned Systems
West Haven	1	0	0	0
Westbrook	2	3	1	0
Wethersfield	1	0	1	0
Willington	12	4	10	2
Windsor	1	0	0	0
Windsor Locks	1	1	1	0
Woodbridge	1	1	4	0

Andover – Three CWS supply Andover. These include the Whispering Hills, LLC Well A and Well D systems and the Hop River Homes system. All three of these systems are small systems supplying less than 100 people. NTNC systems include small businesses and an educational facility, and the TNC systems include small businesses, municipal services, and a church.

Avon – Three CWS supply Avon. Avon Water Company is the largest system and serves most of the community, with the Connecticut Water Company (CWC) – Collinsville System and the CWC – Unionville System serving the northwest and southwestern corners, respectively. NTNC systems include a number of small businesses.

Berlin – Four CWS supply Berlin. The Kensington Fire District, Berlin Water Control Commission, and the Worthington Fire District serve most of the northern and southeastern areas of the town. The New Britain Water Department also serves a small area in the north western part of the community, and the Meriden Water Division provides water to a small section of southern Berlin. The sole NTNC system is a small business, as are the TNC systems.

Bethany – Three CWS supply Bethany. The CWC Central System serves a small portion of northwestern Bethany, and the SCCRWA serves a small portion of southeastern Bethany. The Bethany Mobile Home Park has a small system in the northern part of the community. NTNC systems include small businesses, a state facility, and an educational facility, and the TNC systems include mall businesses, municipal facilities, and churches.

Bloomfield – Five CWS operate in Bloomfield. The MDC serves most of the community, and four small systems (Grant Hill Association; Juniper Club, Inc.; Orchard Hill Association; and Sharon Heights Water Association) also serve less than 200 people each. The TNC systems include a small business and a state park.

Bolton – Six small CWS (160 & 180 Boston Turnpike, 890 Boston Turnpike, Cook Drive Association, CWC Lynwood System, Southridge Park Apartments, and Sunset Apartments) operate systems in the town of Bolton and each serves less than 200 people. NTNC systems include small businesses and schools, and the TNC systems include small businesses, churches, and a municipal facility.

Canton – There are two CWS serving Canton. The CWC – Collinsville System provides supply to most of the southern part of the community. The other system (298-302 Albany Turnpike) is fairly small and serves the southern part of the community. NTNC systems include educational facilities and a small business, and the TNC systems include small businesses and churches.

Chester – Three CWS currently operate in Chester. The largest system is the CWC – Chester System, which serves much of the eastern part of town. The CWC Chester Village System and the Aaron Manor Nursing & Rehab center are the other two Community systems. NTNC systems include small businesses, and the TNC systems include small businesses and campgrounds.

Clinton – Six CWS currently operate in Clinton. The largest is the CWC Guilford System, which serves most of the community. All five of the other Community systems are small, serving less than 200 people. These include the Nod Hill Apartments system and four systems associated with the Evergreen Trailer Park. The TNC systems include a municipal facility and a small business.

Columbia – Only three CWS currently operate in Columbia, with all three serving less than 100 people. These include the CWC – Columbia Heights Division, Dartmouth Village Elderly Housing, and Woodland Terrace systems. NTNC systems include small businesses and educational facilities, and the TNC systems include campgrounds, churches, small businesses, and municipal facilities.

Coventry – Ten CWS operate in Coventry. The largest are the CWC Coventry Hills Division and the South Coventry Water Supply Company systems, which serve more than 500 people each. The remaining eight systems include two Coventry Housing Authority systems, several CWC systems (General Water, Lakeview, Lakewood, Nathan Hale, and Pilgrim Hills), and the Twin Hills Water District. NTNC systems include churches, educational facilities, and a small business, and the TNC systems include municipal facilities, churches, small businesses, and golf courses.

Cromwell – The only CWS in Cromwell is the Cromwell Fire District, which serves the majority of the community. The sole TNC system is a small business.

Deep River – Six CWS operate in Deep River. The largest is the CWC – Chester System, which serves a large portion of the eastern part of the community. The other systems include Mount Saint John School four systems associated with the Ridgewood Hills Association. The NTNC systems include schools and a small business, and the TNC systems include small businesses.

Durham – Five CWS operate in Durham and all serve less than 500 people. The largest is the Durham Center Division in downtown Durham, with other systems including the Blue Trails Association, Durham Elderly Housing Division, Durham Lexington Place Division, and Twin Maples Nursing Home. The NTNC systems include small businesses and schools, and the TNC systems include small businesses, a campground, and churches.

East Granby – Nine CWS operate in East Granby. The Aquarion Water Company – Simsbury System provides water to the southwestern part of town, while the MDC and CWC Western System serve portions of the eastern part of town. The remaining systems include Chelsea Common Condominium Association, two Metacomet Homes systems, the Old Newgate Ridge Water Company, the GQC Well Commission, and Turkey Hill of East Granby. The NTNC and TNC systems include small businesses.

East Haddam – Seven CWS operate in East Haddam. The largest is the CWC Lake Hayward System, with the other systems including 31 Grist Mill Road, Chestelm Health & Rehabilitation Center, Franklin Academy, Goodspeed Actor Housing, and the Oak Grove Senior Housing Corporation. The NTNC systems include small businesses and educational facilities, and the TNC systems include small businesses, churches, campgrounds, a golf course, and municipal facilities.

East Hampton – A total of 13 CWS operate in East Hampton. The largest is the Edgemere Condominium Association, which serves more than 500 people. The remaining systems include Chatham Acres Elderly Housing, Bellwood Court, Westside Manor, Chatham Apartments, Mallard Cove Condominium Association, three CWC systems (Baker Hill, Spice Hill, and Westchester East), two East Hampton WPCA systems (Village Center and Royal Oaks), the Aquarion Water Company East Hampton System, and Z, Inc. Most of the systems are near the center of the community. NTNC systems include small businesses, educational facilities, and municipal facilities, and the TNC systems include churches, small businesses, campgrounds, and municipal facilities.

East Hartford – The MDC provides water to nearly all of East Hartford. The sole TNC system is a small business.

East Haven – The SCCRWA provides water to nearly all of East Haven. The sole TNC system is a small business.

East Windsor – Four CWS are currently serving East Windsor. The CWC Western System serves the majority of the community. The other three CWS include the East Windsor Housing Authority, School Hill Association, and Markowski Farms. The NTNC systems are small businesses, and the TNC systems are small businesses, churches, and a state facility.

Ellington – Only two CWS serve within the town of Ellington. The CWC Western System serves most of the community. The second system is Meadowbrook Apartments, LLC. The sole NTNC system is a school, and the TNC systems include a church, golf courses, and small businesses.

Enfield – Four CWS operate in Enfield. The CWC Western System serves most of the western and northern parts of Enfield, while the Hazardville Water Company serves most of the central, southern, and eastern areas. The other two systems include the Connecticut Correctional Institute in the northeastern part of Enfield, and the Shaker Heights Water Company. The TNC systems include small businesses and churches.

Essex – Four CWS operate in Essex. The CWC – Chester System serves most of the town, with the remaining Community systems being Hemlock Apartments, Meadowbrook Manor, and Heritage Cove Condominiums. The NTNC systems include small businesses and an educational facility, and the TNC system is a small business.

Farmington – Four CWS serve in Farmington. The CWC Unionville System supplies most of the central and western portions of Farmington, while MDC and the New Britain Water Department provide supply in parts of the eastern portion of town. The remaining smaller Community system is the CWC Chimney Hill System. The sole NTNC system and the TNC systems are small businesses.

Glastonbury – MDC provides water throughout most of western Glastonbury, while the Manchester Water Department provides service to a portion of northern Glastonbury. NTNC systems include an

educational facility, a municipal facility, and a small business, and the TNC systems include small businesses, a golf course, and municipal facilities.

Granby – The Salmon Brook District Water Department provides water service to the eastern part of Granby, while the Aquarion Water Company – Simsbury System provides service to southeastern Granby. The NTNC systems include schools, small businesses, and a church, and the TNC systems include small businesses, a campground, and churches.

Guilford – Three CWS operate in Guilford. The CWC – Guilford System supplies water to most of the southern portion of town. The other two Community systems are much smaller and supply the Quonnipaug Hills development. NTNC systems include small businesses, a church, and a school. TNC systems include small businesses, municipal facilities, and a church.

Haddam – Two CWS operate in Haddam. These are the High Meadow and Saybrook at Haddam systems. Both of these systems are small and serve less than 200 people. NTNC systems include a church, educational facilities, and small businesses, and the TNC systems include small businesses, campgrounds, municipal facilities, a state park, and churches.

Hamden – SCCRWA provides water service to the majority of Hamden. The sole NTNC system is an educational facility and the TNC systems include a campground, municipal facilities, and a church.

Hartford – MDC provides water service to nearly all of Hartford and is the only public water system in the community.

Hebron – There are a total of 10 CWS in Hebron. The largest is the CWC – Hebron Center Division in central-eastern Hebron. The remaining nine systems include Wellswood Estates Foundation, Inc.; Abby Water, LLC; five additional CWC systems (Amston Lake, London Park, Country Manor Apartments, Wellswood Village, and Mill at Stonecroft); Hebron Arms Apartments; and Hillside Condominiums. NTNC systems include a small business, a church, and schools. TNC systems include golf courses, municipal facilities, churches, small businesses, and a state park.

Killingworth – Only one CWS is in operation in Killingworth, the Jensen's, Inc. Beechwood Residential system. NTNC systems include a church and educational facilities. TNC systems include small businesses, churches, campgrounds, municipal facilities, and a state park.

Lyme – There are no CWS in Lyme. The sole NTNC system is a school. TNC systems include a small business and a campground.

Madison – Three CWS serve in Madison. The largest is the CWC Guilford System, which supplies the southern part of Madison. The other two systems include the CWC Legend Hill Condominium Association and the Green Springs Subdivision. NTNC systems include small businesses, educational facilities, and religious facilities. TNC systems include a small business, a campground, and churches.

Manchester – Four CWS currently operate in Manchester. The Manchester Water Department operates the largest system, which serves the majority of Manchester's population. The MDC and the CWC Western System serve small areas on the western and northern boundary of Manchester, and the CWC Redwood Farms Division supplies a development in southwestern Manchester. NTNC systems include

small businesses and an educational facility. TNC systems include small businesses, churches, and a campground.

Mansfield – A total of 19 CWS provide water service in Mansfield. The largest systems include the University of Connecticut system in northwestern Mansfield, and the Windham Water Works system in southern Mansfield. The remaining systems are smaller and include Knollwood Acres Apartments; Maplewood Apartments; Orchard Acres Association; Mansfield Village; Jensen's, Inc. Rolling Hills Residential; Hunting Lodge Apartments; Carriage House Apartments; Rockridge Condominiums; Renwood Apartments; Woods Edge Apartments; three CWC systems (Crystal Springs, Birchwood Heights, and Pinewoods Lane); Club House Apartments; S&P Properties, LLC; Aquarion Water Company Valley View; and White Oak Condominiums. NTNC systems include schools and small businesses. TNC systems include small businesses, municipal facilities, and a campground.

Marlborough – Marlborough hosts eight CWS. These include four CWC systems (Sachem Village Condo, Marlborough Gardens, Florence Lord [MASH], and Forest Homes), Laurel Hill Water Association, Hillside Corporation, Aquarion Water Company - Birchwood Estates, and Marlborough Health Care Center, Inc. The town-owned NTNC Town Center system was recently constructed. Other NTNC systems include small businesses, educational facilities, and a church. TNC systems include small businesses, a municipal facility, churches, and a state facility.

Meriden – The Meriden Water Division is the only CWS in Meriden. TNC systems include a campground and a church.

Middlefield – Six CWS operate in Middlefield. These include the Bittersweet Ridge Water Association, Sylvan Ridge Condominiums, Middlefield Housing Authority, Old Indian Trail, Reja-Rainbow Spring Water Company, and the Middletown Water Department. NTNC systems include educational facilities, small businesses, and a church. TNC systems include small businesses, churches, municipal facilities, golf courses, and a state park.

Middletown – Two significant CWS operate in Middletown. Middletown Water Department is the larger of the two systems and serves the majority of the population in Middletown. The other system supplies the Connecticut Valley Hospital. NTNC systems include a large employer and a small business. TNC systems include a golf course, small businesses, a state facility, a municipal facility, and churches.

Milford – SCCRWA provides water service to the majority of Milford. TNC systems include a small business and a church.

New Britain – The New Britain Water Department is the only public water system in New Britain.

New Haven – SCCRWA is the only public water system in New Haven.

Newington – The MDC provides water service to the majority of Newington, while the New Britain Water Department provides service to a small area along the western boundary. A small area on the southern border is served by MDC using water purchased from the Berlin Water Control Commission. TNC systems serve small businesses.

North Branford – Three CWS provide service to North Branford. SCCRWA provides service throughout the southern and northwestern portions of town. The two remaining Community systems are the Blue

Trails Water Association and the Northford Glen Condominium Association. NTNC systems include small businesses. TNC systems include small businesses and churches.

North Haven – SCCRWA provides water service to North Haven. TNC systems include a church and a small business.

Old Lyme – Old Lyme has a total of 11 CWS. These include the Chadwick Homeowners Association; Lyme Academy Apartments; Miami Beach Water Company; Lyme Regis, Inc.; Rye Field Manor Elderly Housing; Lymewood Elderly Housing; Mile Creek Apartments; Boxwood Condominium Association; Laurel Heights Association; and two CWC systems (Sound View and Point O' Woods). The larger systems serve the more densely populated areas along the shoreline. NTNC systems include small businesses, educational facilities, and a state facility, and the TNC systems include small businesses, municipal facilities, churches, and a golf course.

Old Saybrook – The CWC – Guilford System provides service to the majority of southern and eastern Old Saybrook. The sole TNC system is a small business.

Orange – SCCRWA provides water service to North Haven. The sole TNC system is a small business.

Plainville – Valley Water Systems, Inc. provides water service to the majority of Plainville, while the CWC – Unionville System provides service to a small area near the northern boundary. TNC systems are all small businesses.

Portland – Two CWS provide service in the town of Portland. The Portland Water Department provides service to the majority of central and western Portland. The other system (CWC – Rivercrest Division) is fairly small and it serves less than 100 people. The sole NTNC system is an educational facility. TNC systems serve small businesses.

Simsbury – Four CWS provide service to Simsbury. The largest is the Aquarion Water Company's Simsbury System, which supplies water to the majority of the town's population. The Tariffville Fire District Water Department operates another large system that provides service to Tariffville. The remaining systems include Ethel Walker School and areas supplied by the Avon Water Company along the southern boundary of town. The sole NTNC system is a school, and TNC systems include a golf course, a state park, a small business, and a church.

Somers – Four CWS provide service in Somers. The CWC Western System provides service to most of the western and central portions of town, while the Hazardville Water Company provides service to a significant portion of the western part of town. The Town of Somers operates its Rye Hill System and the Connecticut Correctional Institute operates its system in the northwestern part of Somers. NTNC systems include small businesses. TNC systems include golf courses and a small business.

South Windsor – Public water service in South Windsor is divided primarily between the MDC to the southwest and the CWC – Western System to the northeast. The Manchester Water Department also serves a small area. NTNC systems include an educational facility and a small business, and the TNC systems include small businesses and a church.

Southington – Only two CWS provide service in Southington. The Southington Water Department operates a significant system serving the majority of the town's population. The other Community

water system is Apple Valley Village, which serves less than 100 people. TNC systems include small businesses and a municipal facility.

Stafford – Three CWS currently operate in Stafford. The CWC Stafford System is the largest, serving most of south-central Stafford. The Johnson Memorial Hospital and Stafford Hollow Water Association are the other two Community systems. NTNC systems include schools and small businesses. TNC systems include campgrounds and small businesses.

Suffield – Two CWS provide service to Suffield. The CWC – Western System services the majority of the central and eastern parts of the community, while the Aquarion Water Company – West Suffield System serves the northwestern portion of Suffield. The sole NTNC system is a small business. TNC systems include small businesses, a golf course, and a church.

Tolland – Ten CWS are currently in operation in Tolland. The CWC – Western System serves a small area stretching from the western boundary to central Tolland, while the Tolland Water Commission operates two systems (Tolland Water Department and Tolland Water Department – Torry Road), serving central and southeastern Tolland. The remaining systems are smaller and include Woodland Summit Community Water Association, Village at Crystal Springs, Norwegian Woods Apartments, Stone Pond Condominiums, Baxter Farms Community Water Association, Eastview Kozley Water Association, and Ivy Woods. NTNC systems include a church, a state facility, a federal facility, small businesses, and an educational facility. TNC systems include small businesses, municipal facilities, campgrounds, and a church.

Vernon – Four CWS operate in Vernon. The CWC Western System is the largest and serves most of the community. The remaining systems include the Manchester Water Department, which serves a small area near the southwestern boundary; Vernon Village Inc.; and the CWC Reservoir Heights system. TNC systems include small businesses and campgrounds.

Wallingford – The Wallingford Water Department is the only CWS in Wallingford and it supplies the majority of the town's population. One NTNC system and one TNC system serve small businesses.

West Hartford – MDC provides public water service to West Hartford and is the only public water system in the town.

Westbrook – Two CWS operate in Westbrook. The largest is the CWC – Guilford System, which supplies the majority of the southern part of the community as well as part of the northeastern area. The second, smaller water system is Safe Harbor, Inc. NTNC systems include an educational facility and a small business. A single TNC system serves a church.

Wethersfield – MDC provides water service to Wethersfield. The sole TNC system is a small business.

Willington – Twelve CWS are currently in operation in Willington. These include Willington Oaks Apartments, North Willington Village Condo Association, Natural Park Apartments, Cedar Ridge Apartments, Deer Park Apartments, CWC – Riversedge Division, Woodhaven Apartments, Walden Apartments, Willington Senior Center and Housing, Ridgeview Heights, and two Willington Ridge Condos systems. NTNC systems include an educational facility and small businesses. TNC systems include small businesses, campgrounds, and a municipal facility.

Windsor – MDC provides water service to Windsor and is the only public water system in the town.

Windsor Locks – CWC provides water service to Windsor Locks. The sole TNC system is a small business.

Woodbridge – SCCRWA provides water service to eastern and central Woodbridge. The sole NTNC system is a small business. TNC systems include a golf course, small businesses, and a church.

2.2 Assessment of Water Quality and Source Protection Concerns

DPH files and databases of recent water quality enforcement actions in the region have been compiled and evaluated. These are summarized in Table 2-2 for CWS from recent Annual Compliance Reports published by DPH. Note that MCL refers to Maximum Contaminant Level.

TABLE 2-2
Summary of Recent Water Quality Violations for Community Systems (2014-2015)

Public Water System	Primary Location Served	MCL Violations	Monitoring Violations	Reporting Violations	Comment
31 Grist Mill Rd	East Haddam	2	0	0	Total Coliform
890 Boston Turnpike	Bolton	1	216	3	SOCs, VOCs, Physical Parameters, Lead and Copper, Radionuclides, Total Coliform, pH
Abby Water, LLC	Hebron	0	0	1	
Apple Valley Village	Southington	0	0	1	
Baxter Farms Community Water Association	Tolland	1	0	0	90th Percentile Lead
Berlin Water Control Commission	Berlin	0	7	0	Physical Parameters, pH, Chlorine, Total Coliform
Bethany Mobile Home Park	Bethany	0	7	0	Chlorine, pH
Boxwood Condominium Association	Old Lyme	0	1	0	pH
Carriage House Apartments	Mansfield	1	5	3	Total Coliform (MCL), Physical Parameters, pH
Chatham Apartments	East Hampton	2	2	2	Nitrite, Nitrate, Total Coliform
Club House Apartments	Mansfield	0	1	0	pH
Cobalt Lodge Healthcare & Rehab Center (Z, Inc.)	East Hampton	0	5	2	Physical Parameters, Total Coliform, pH
Connecticut Correctional Institute	Enfield / Somers	0	0	1	
Cromwell Fire District Water Department	Cromwell	0	2	0	Disinfection Byproducts
CWC – Forest Homes Division	Marlborough	1	0	0	Total Coliform
CWC – General Water Division	Coventry	2	0	0	Total Coliform

TABLE 2-2
Summary of Recent Water Quality Violations for Community Systems (2014-2015)

Public Water System	Primary Location Served	MCL Violations	Monitoring Violations	Reporting Violations	Comment
CWC – Guilford System	Guilford / Old Saybrook / Westbrook / Clinton / Madison	0	2	0	Nitrate, Nitrite
CWC – Legend Hill Condominium Association	Madison	0	0	2	
CWC – London Park Division	Hebron	1	0	0	90th Percentile Lead
CWC – Redwood Farms Division	Manchester	1	0	0	Total Coliform
CWC – Wellswood Village Division	Hebron	1	0	1	Total Coliform
CWC – Westchester Village East	East Hampton	0	0	1	
CWC – Western System	East Windsor / Suffield / Enfield / Somers / East Granby / Windsor Locks / South Windsor / Ellington / Vernon / Tolland	0	1	0	Physical Parameters
Dartmouth Village Elderly Housing	Columbia	0	0	1	
East Windsor Housing Authority	East Windsor	0	0	1	
Eastview Kozley Water Association	Tolland	0	0	1	
Ethel Walker School	Simsbury	0	141	1	VOCs, SOCs, Disinfection Byproducts,
GQC Well Commission	East Granby	0	1	1	Total Coliform
Grant Hill Associates	Bloomfield	0	0	2	
Green Springs Subdivision	Madison	0	0	1	
Hemlock Apartments	Essex	0	5	1	Physical Parameters, pH
High Meadow	Haddam	0	0	1	
Hillside Corporation	Marlborough	0	0	1	
Hop River Homes	Andover	0	0	1	
Juniper Club, Inc.	Bloomfield	0	0	1	
Kensington Fire District	Berlin	0	0	4	

TABLE 2-2
Summary of Recent Water Quality Violations for Community Systems (2014-2015)

Public Water System	Primary Location Served	MCL Violations	Monitoring Violations	Reporting Violations	Comment
Knollwood Acres Apartments	Mansfield	1	0	1	Total Coliform
Lyme Academy Apartments, LLC	Old Lyme	0	0	2	
Lyme Academy Apartments, CCL – 77-1 Lyme Street	Old Lyme	0	0	1	
Mallard Cove Condominium Assn.	East Hampton	0	1	0	*E. Coli*
Manchester Water Department	Manchester	0	0	1	
Meadowbrook Apartments, LLC	Ellington	1	0	3	90th Percentile Lead
Meriden Water Division	Meriden	0	0	2	
Miami Beach Water Company	Old Lyme	0	4	1	Chlorine, pH
Mount Saint John School	Deep River	0	1	1	pH
New Britain Water Department	New Britain / Farmington / Newington	0	0	1	
Nod Hill Apartments	Clinton	1	0	2	90th Percentile Copper
Northford Glen Condominium Association	North Branford	0	13	2	Total Coliform, pH, Physical Parameters, Chlorine, Nitrate
Norwegian Woods Apartments	Tolland	3	1	1	Total Coliform
Portland Water Department	Portland	0	1	0	Chlorine Residual, Free
Quonnipaug Hills – Main System	Guilford	0	0	1	
Quonnipaug Hills – Section I	Guilford	0	0	1	
Reja-Rainbow Spring Water Company	Middlefield	0	0	1	
Renwood Apartments	Mansfield	0	1	2	Chlorine
Ridgewood Hills Association, System #1	Deep River	0	1	0	pH
Rye Field Manor Elderly Housing	Old Lyme	0	4	2	Physical Parameters, pH
S & P Properties LLC	Mansfield	0	0	2	
Safe Harbor, Inc.	Westbrook	2	0	2	Total Coliform
Salmon Brook Water District Water Dept.	Granby	0	0	1	
Sharon Heights Water Association	Bloomfield	0	0	2	

TABLE 2-2
Summary of Recent Water Quality Violations for Community Systems (2014-2015)

Public Water System	Primary Location Served	MCL Violations	Monitoring Violations	Reporting Violations	Comment
South Coventry Water Supply Company	Coventry	1	0	0	Total Coliform
South Ridge Park Apartments	Bolton	0	0	2	
Southington Water Department	Southington	0	0	3	
Stonegate Springs	Durham	0	0	2	
Tolland Water Department	Tolland	1	0		Total Coliform
Valley Water Systems, Inc.	Plainville	0	0	1	
Whispering Hills, LLC – Well D System	Andover	0	0	1	
White Oak Condominiums	Mansfield	1	0	1	Total Coliform
Willington Oaks Apartments	Willington	0	1	0	Chlorine
Willington Senior Center & Housing	Willington	0	1	0	pH
Woodhaven Apartments	Willington	0	1	0	Nitrate
Woodland Terrace	Columbia	1	0	0	Total Coliform
Worthington Fire District	Berlin	0	0	1	
Total		**25**	**426**	**77**	

*HAA5 = Total Haleoacetic Acids; MCL = Maximum Contaminant Level; SOC = Synthetic Organic Chemical; TTHM = Total Trihalomethanes; VOC = Volatile Organic Compound

Most violations are due to lack of testing and/or reporting of water quality data, and the majority of violations actions have occurred in small systems. A total of 25 MCL violations and 77 reporting violations (failure to perform public notification or issue consumer confidence reports) occurred in the region for CWS in 2014 and 2015. Although 426 monitoring violations were noted, 357 were associated with only two systems. In addition, four systems (CWC Pilgrim Hills Division, East Hampton WPCA Royal Oaks, Stonegate Springs, and Meadowbrook Apartments) had an action level exceedance for lead and copper.

Table 2-3 summarizes overall water quality and source protection concerns of the larger water systems in the region based on a review of individual water supply plans. These water quality concerns include either constituents that require treatment or activities within the source water area that could affect water quality. As illustrated by Table 2-3, elevated iron and manganese levels are common throughout the Central PWSMA. The elevated levels of these two metals may be due, in part, to the acidity in the soils and/or the bedrock types in the Central PWSMA combined with large mineral and metal deposits. Additionally, the bedrock geology for the Central PWSMA is a source of iron and manganese. Bedrock in

the area is typically composed of metamorphic and igneous crystalline rocks, such as gneiss, schists, and granites. Water is contained within and transmitted via open fractures in the bedrock mass.

TABLE 2-3
Summary of Water Utility Concerns Regarding Water Quality and Source Protection for Utilities Serving >1,000 People

Community Water System	Primary Location Served	Summary of Water Quality Concerns	Summary of Source Protection Concerns
Aquarion Water Company – Simsbury System	Simsbury, Granby, East Granby	Pesticides, Nitrate, hardness, Dichloropropane5 (DCP), copper rule compliance, Tetrachloroethylene (PCE)	No reported concerns
Avon Water Company	Avon, Simsbury	MTBE, pH, iron and manganese, color and turbidity	Septic systems, residential contaminants, industry / Superfund sites, sanitary sewer leakage, fertilizer, road salt and salt piles, golf course pesticides
Berlin Water Control Commission	Berlin	Solvents (TCE), VOCs	No reported concerns
Connecticut Correctional Institute	Enfield / Somers	Tetrachloroethylene (PCE), hardness	Fuel oil spills
Connecticut Valley Hospital	Middletown	Iron, manganese, taste, odor	Historic agricultural uses, illegal dumping
Cromwell Fire District Water Department	Cromwell	VOCs, manganese	No reported concerns
CWC – Chester System	Chester, Deep River, Essex	Iron, manganese	No reported concerns
CWC – Collinsville Sys	Canton	No reported concerns	No reported concerns
CWC – Guilford System	Guilford, Madison, Old Saybrook, Westbrook, Clinton	pH, manganese, MTBE, iron, sodium, color	No reported concerns
CWC – Hebron Center	Hebron	Iron	No reported concerns
CWC – Legend Hill Condominium Association	Madison	Uranium	No reported concerns
CWC – Point O' Woods	Old Lyme	Radon, pH	No reported concerns
CWC – Sound View	Old Lyme	Iron, manganese, radon	No reported concerns
CWC – Stafford System	Stafford	pH, color, turbidity, iron, manganese	Agricultural runoff
CWC – Unionville System	Farmington, Avon	VOCs, pesticides, iron, manganese	No reported concerns
CWC – Western System	East Windsor, Suffield, Enfield, Somers, East Granby, Windsor Locks, South Windsor, Ellington, Vernon, Tolland	Color, hardness, iron, manganese, VOCs, nitrate, metals, sodium, SOCs, MTBE	Industry / Superfund sites

TABLE 2-3
Summary of Water Utility Concerns Regarding Water Quality and Source Protection for Utilities Serving >1,000 People

Community Water System	Primary Location Served	Summary of Water Quality Concerns	Summary of Source Protection Concerns
Hazardville Water Company	Enfield, Somers	Manganese, VOCs, nitrates, coliform	Gasoline spills, agricultural activity, industry, sanitary sewers, closed sanitary landfill
Kensington Fire District	Berlin	No reported concerns	No reported concerns
Manchester Water Department	Manchester, Glastonbury	VOCs, radon, nitrate, MTBE, dieldrin	Industry
Meriden Water Division	Meriden	VOCs, iron, manganese, sodium, pH	No reported concerns
Metropolitan District Commission	East Granby, Windsor, Rocky Hill, Bloomfield, West Hartford, East Hartford, Hartford, South Windsor, Farmington, Newington, Wethersfield, Glastonbury	No reported concerns	No reported concerns
Middletown Water Department	Middletown	Iron, manganese, pH, color	Former landfill
New Britain Water Department	New Britain, Farmington	VOCs	Fuel spills, industrial / commercial pollutants, septic system failure
Portland Water Department	Portland	Sodium, disinfection byproducts	Industry, salt storage, septic systems
Salmon Brook District Water Department	Granby	pH	Road runoff, agricultural uses
South Central Connecticut Regional Water Authority	Milford, Orange, West Haven, Woodbridge, New Haven, Hamden, Bethany, East Haven, North Haven, North Branford, Branford	Color, sodium	Road runoff, bulk fuel storage, vehicle repair, chemical storage/use facilities, septic systems, agricultural uses/runoff, erosion, industry, historic contamination
Southington Water Department	Southington	VOCs	Industry, wastewater discharges
Tariffville Fire District Water Department	SImsbury	No reported concerns	No reported concerns
Tolland Water Department	Tolland	No reported concerns	No reported concerns
University Of Connecticut - Main Campus	Mansfield	pH	Runoff
Valley Water Systems, Inc.	Plainville	Hardness, VOCs	No reported concerns

TABLE 2-3
Summary of Water Utility Concerns Regarding Water Quality and Source Protection for Utilities Serving >1,000 People

Community Water System	Primary Location Served	Summary of Water Quality Concerns	Summary of Source Protection Concerns
Wallingford Water Department	Wallingford	VOCs, sodium, nitrate, manganese	Fuel oil tanks, lawn chemical application, improper disposal of residential chemicals, septic systems, industry, landfills, road runoff
Worthington Fire District	Berlin	No reported concerns	No reported concerns

Iron and manganese sequestering has been implemented by many CWS to reduce metals and turbidity levels. Adjustment for pH has also been added to many treatment operations for the larger CWS to correct for the low pH levels often reported, and the majority of systems also add a corrosion inhibitor. Given the developed nature of the region, many supply sources are proximal to developed land uses, and therefore, many utilities are concerned about, or actively treating for, VOCs. Many smaller systems are finding it necessary to provide the same measures of treatment. Bacteria contamination has been detected in several CWS in the region, with exceedances ranging from chronic problems to sporadic outbreaks. However, it should be noted that many CWS, both large and small, have remained without water quality degradation and/or problems for many years.

Source protection concerns listed in Water Supply Plans vary by utility. Utilities with sources near developed areas are typically concerned with nearby septic system failures; underground storage tanks; and roadway runoff, which can contribute pollution from transportation accidents and road deicing chemicals and salts. Misuse and inappropriate storage of chemicals by residents and businesses is also a concern as well as historic areas of contamination. Systems utilizing reservoirs typically view source protection concerns on a much larger scale across the contributing watershed, with additional concerns being the level and density of development, agricultural runoff, illegal dumping, and sedimentation and erosion. Specific planning related to source protection for each larger utility is discussed in Section 6.3.1.

2.3 Assessment of System Reliability

Table 2-4 presents information on the availability of back-up or emergency supply sources, interconnections, and the existence of emergency power for the CWS in the Central PWSMA serving greater than 1,000 people. This information is based on a review of individual water supply plans, information provided by system representatives, and information provided by DPH. Most of the larger systems either have emergency supplies or multiple sources of supply and many have both. Approximately 63% of these larger systems are interconnected with another system, and all have at least some emergency power capabilities.

TABLE 2-4
Summary of System Reliability Characteristics for Community Water Systems Serving >1,000 People

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Emergency Power Availability
Aquarion Water Company – Simsbury System	Simsbury, Granby, East Granby	M	N	Y
Avon Water Company	Avon, Simsbury	M, E	Y	Y
Berlin Water Control Commission	Berlin	M	Y	Y
Connecticut Correctional Institute	Enfield / Somers	M, E	N	Y
Connecticut Valley Hospital	Middletown	M	N	Y
Cromwell Fire District Water Department	Cromwell	M, E	Y	Y
CWC – Chester System	Chester, Deep River, Essex	M	N	Y
CWC – Collinsville Sys	Canton	N	Y	Y
CWC – Guilford System	Guilford, Madison, Old Saybrook, Westbrook, Clinton	M, E	Y	Y
CWC – Hebron Center	Hebron	M	N	Y
CWC – Legend Hill Condominium Association	Madison	M	N	Y
CWC – Point O' Woods	Old Lyme	M, E	N	Y
CWC – Sound View	Old Lyme	M, E	Y	Y
CWC – Stafford System	Stafford	M, E	N	Y
CWC – Unionville System	Farmington, Avon	M, E	Y	Y
CWC – Western System	East Windsor, Suffield, Enfield, Somers, East Granby, Windsor Locks, South Windsor, Ellington, Vernon, Tolland	M, E	Y	Y
Hazardville Water Company	Enfield, Somers	M, E	Y	Y
Kensington Fire District	Berlin	N	Y	Y
Manchester Water Department	Manchester, Glastonbury	M, E	Y	Y
Meriden Water Division	Meriden	M, E	Y	Y
Metropolitan District Commission	East Granby, Windsor, Rocky Hill, Bloomfield, West Hartford, Hartford, East Hartford, South Windsor, Farmington, Newington, Wethersfield, Glastonbury	M, E	Y	Y
Middletown Water Department	Middletown	M, E	N	Y
New Britain Water Department	New Britain, Farmington	M, E	Y	Y
Portland Water Department	Portland	E	Y	Y

TABLE 2-4
Summary of System Reliability Characteristics for Community Water Systems Serving >1,000 People

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Emergency Power Availability
Salmon Brook District Water Department	Granby	M	N	Y
South Central Connecticut Regional Water Authority	Milford, Orange, West Haven, Woodbridge, New Haven, Hamden, Bethany, East Haven, North Haven, Branford, North Branford	M, E	Y	Y
Southington Water Department	Southington	M, E	N	Y
Tariffville Fire District Water Department	Simsbury	E	N	Y
Tolland Water Department	Tolland	M	Y	Y
University Of Connecticut - Main Campus	Mansfield	M, E	N	Y
Valley Water Systems, Inc.	Plainville	M, E	Y	Y
Wallingford Water Department	Wallingford	M	Y	Y
Windham Water Works	Windham, Mansfield	N	N	Y
Worthington Fire District	Berlin	N	Y	Y*

M: Multiple sources of supply; E: Emergency or Backup source of supply; N: None; Y: Yes.
* Emergency power capabilities provided by source CWS.

Some of the larger systems are consecutive water systems (Kensington Fire District, Worthington Fire District), wherein they have no sources of supply and rely on interconnections with New Britain Water Department for daily supply. However, many of the larger systems and some of the smaller ones are within close proximity of one another with no interconnection. Windham Water Works is the only major supplier without a backup/emergency supply source or an interconnection.

Note that Table 2-4 is not intended to imply that systems with multiple sources, emergency sources, and interconnections are inherently more reliable than those that do not. In many cases, the additional supply sources in a system are not sufficient to provide 100% of demands if the largest goes offline; in some cases, emergency supplies may not be able to be activated immediately pending results of water quality tests. However, systems with only one source of supply are considered by DPH to be more at risk of an emergency declaration should a problem occur. An advanced analysis of the reliability of each system is beyond the scope of this document.

Appendix C presents information on system reliability for the CWS serving less than 1,000 people. Based on the available information, 29% of the small CWS rely on a single source of supply and 71% of the small CWS have more than one source of supply. Reliance on a sole source of supply in a small system is problematic, as the only alternative is typically a water tanker if the source becomes unavailable. Two systems receive 100% of their supply through interconnections without a backup source of supply or backup interconnection. These are the CWC Chimney Hill system and the Town of Somers Rye Hill System.

Numerous smaller CWS lack generators and were unable to provide water (or were on a boil water notice) for up to a week at a time following Tropical Storm Irene in 2011 and Super Storm Sandy in 2012. Many systems have been seeking grant funding for the purchase of generators, but overall results of such efforts have varied. Several utilities reported purchasing additional generators since the two storms occurred.

2.4 Assessment of Service and Supply Adequacy

Under DPH Guidelines for individual water supply plan development, it is the responsibility of the water company to demonstrate that it has an adequate margin of safety of available water in excess of demand. The margin of safety for a system is defined as the unitless ratio of the water available in the system (available yield) to the average daily demand. It is system specific and is based only on available active supplies, considering hydraulic, permitting, or other supply limitations. Available yield is often lower than the safe yield of a particular source of supply or combination of supplies.

A margin of safety of at least 15% (1.15) relative to a 99% safe yield is recommended by PURA [RCSA 16-262m-8(d)(1)]. Margin of safety is required to be evaluated for average day conditions, but is also typically evaluated for maximum month average day and maximum day conditions based on historical DPH guidance. Certain systems may have an adequate average day margin of safety, but experience peak demand deficiencies. Other systems can meet peak requirements but have marginal or inadequate supplies to sustain long-term average day demands.

Table 2-5 presents actual (not projected) demand, yield, and margin of safety for the average day, maximum month, and peak day for CWS serving greater than 1,000 people, based on information contained in the individual water supply plans or other documents as well as input from system representatives. The available data indicates that the larger systems are meeting average day demands with a 15% or more margin of safety.

Maximum month average day demand margin of safety is below 1.15 for four systems. These are the Berlin Water Control Commission, Connecticut Correctional Institute, CWC Sound View, and University of Connecticut systems. All other systems serving greater than 1,000 people operate with a maximum month average day margin of safety greater than 15%.

Peak day demand margin of safety is below 1.15 for five systems. These include the Berlin Water Control Commission, CWC – Point O' Woods, CWC – Sound View, Tariffville Fire District, and University of Connecticut systems. All other systems serving greater than 1,000 people operate with a peak day margin of safety greater than 15%.

Demand, yield, and margin of safety data, as well as ability to meet peak hourly demands for CWS serving less than 1,000 people is presented in Appendix D. Approximately 97% of the smaller systems have margins of safety in excess of 15%. In some cases, the margin of safety may be below 1.15 because the water demand is estimated at 75 gallons per person per day (gpcd) and would be above 1.15 if actual usage data was available. Almost all systems are believed capable of supplying peak hourly demands without storage.

TABLE 2-5
System Demand, Available Yield, and Margin of Safety for Water Systems Serving > 1,000 People

Water System	Reference Year[1]	Average Day Demand (mgd)	Average Day Available Water[2] (mgd)	Average Day Margin of Safety	Maximum Month Average Day Demand (mgd)	Maximum Month Average Day Available Water[2] (mgd)	Maximum Month Average Day Margin of Safety	Peak Day Demand (mgd)	Peak Day Available Water[2] (mgd)	Peak Day Margin of Safety	Unaccounted-For Water Percentage	Per-Capita Residential Demand (gpcd)
Aquarion Water Company – Simsbury System	2015 (PC), 2005 (WSP)	1.990	4.910	2.47	2.815	4.910	1.74	3.562	6.240	1.75	23%	93
Avon Water Company[3]	2015 (PAR), 2011 (WSP)	1.648	4.777	2.90	2.583	4.777	1.85	3.370	6.388	1.90	3%	82
Berlin Water Control Commission[3]	2011 (WSP)	1.775	2.756	1.55	2.475	2.756	1.11	2.663	3.000	1.13	6%	58
Connecticut Correctional Institute	2000 (WSP)	0.740	0.996	1.35	0.884	0.996	1.13	0.950	1.328	1.40	35%	71
Connecticut Valley Hospital	2006 (WSP)	0.301	0.700	2.33	0.320	0.700	2.19	0.560	0.700	1.25	30%	62
Cromwell Fire District Water Department[3]	2015 (PC), 2012 (PAR), 2004 (WSP)	1.750	5.620	3.21	2.500	7.490	3.00	3.500	7.490	2.14	12%	74
CWC – Chester System	2015 (PC), 2009 (WSP)	0.581	1.340	2.31	0.769	1.340	1.74	0.926	1.690	1.83	20%	60
CWC – Collinsville Sys	2015 (PC), 2008 (WSP)	0.439	1.300	2.96	0.677	1.300	1.92	0.822	1.650	2.01	1%	70
CWC – Guilford System	2015 (PC), 2009 (WSP)	3.865	7.790	2.02	5.683	7.790	1.37	7.007	9.920	1.42	21%	55
CWC – Hebron Center	2015 (PC)	0.030	0.072	2.41	0.043	0.072	1.67	0.080	0.096	1.21	8%	NR
CWC – Legend Hill Condominium Association	2015 (PC)	0.014	0.086	6.14	0.016	0.086	5.26	0.028	0.086	3.07	9%	NR
CWC – Point O' Woods	2015 (PC), 2009 (WSP)	0.047	0.117	2.48	0.090	0.117	1.29	0.123	0.154	1.25	36%	39
CWC – Sound View	2015 (PC), 2009 (WSP)	0.059	0.150	2.55	0.144	0.150	1.05	0.201	0.201	1.00	NR	25
CWC – Stafford System	2015 (PC), 2005 (WSP)	0.535	0.700	1.31	0.601	0.700	1.16	0.723	1.000	1.38	4%	77
CWC – Unionville System	2015 (PC), 2008 (WSP)	2.091	4.665	2.23	3.197	4.966	1.55	4.334	6.024	1.39	14%	92
CWC – Western System[3]	2015 (PC), 2005 (WSP)	9.627	14.040	1.46	11.738	14.040	1.20	13.666	16.690	1.22	14%	79
Hazardville Water Company	2015 (PAR)	1.480	4.166	2.81	2.056	4.166	2.03	3.940	5.438	1.38	9%	72
Kensington Fire District[3]	2008 (WSP)	0.665	As Needed	NR	0.863	As Needed	NR	0.996	As Needed	NR	6%	71
Manchester Water Department	2013 (PAR)	4.940	9.129	1.85	6.285	9.129	1.45	8.220	15.529	1.89	13%	66
Meriden Water Division	2015 (PC), 2012 (PAR), 2006 (WSP)	5.109	9.700	1.90	6.273	11.700	1.87	6.646	15.200	2.29	19%	63
Metropolitan District Commission[3]	2015 (PC), 2007 (WSP)	49.610	71.450	1.44	60.410	106.000	1.75	70.090	127.000	1.81	19%	79
Middletown Water Department	2014 (DIV), 2010 (WSP)	3.630	6.952	1.92	3.990	7.892	1.98	4.590	10.625	2.31	11%	64
New Britain Water Department[3]	2015 (PC), 2006 (WSP)	9.400	17.640	1.88	12.130	17.640	1.45	11.520	17.640	1.53	4%	73
Portland Water Department	2005 (WSP)	0.619	1.400	2.26	0.861	1.400	1.63	1.123	2.300	2.05	14%	78
Salmon Brook District Water Department	2005 (WSP)	0.162	0.269	1.66	0.192	0.269	1.40	0.242	0.320	1.32	18%	NR
SCCRWA	2015 (PC), 2008 (WSP)	45.700	76.700	1.68	59.269	76.700	1.29	62.200	130.200	2.09	12%	52
Southington Water Department	2012 (PAR), 2000 (WSP)	3.830	7.000	1.83	5.928	7.000	1.18	8.010	10.830	1.35	12%	75
Tariffville Fire District Water Department	2014 (PAR), 2006 (WSP)	0.107	0.252	2.36	0.128	0.252	1.97	0.226	0.252	1.12	8%	88
Tolland Water Department[4]	2015 (PAR), 2014 (DAR), 2007 (WSP)	0.127	0.304	2.40	0.171	0.304	1.78	0.198	0.425	2.15	24%	69
University Of Connecticut[5]	2015 (PC), 2013 (DIV), 2011 (WSP)	1.186	2.320	1.96	1.450	2.320	1.60	2.085	3.093	1.48	<15%	54
	2015 (PC), 2013 (DIV), 2011 (WSP)	1.186	1.480	1.25	1.450	1.480	1.02	2.085	1.970	0.94	<15%	54
Valley Water Systems, Inc.	2015 (PAR), 2003 (WSP)	1.546	2.940	1.90	2.100	2.940	1.40	2.554	3.670	1.44	4%	80
Wallingford Water Department	2012 (PAR), 2006 (WSP)	4.380	9.000	2.05	5.790	9.000	1.55	7.615	15.260	2.00	14%	64
Windham Water Works	2015 (PC), 2012 (WSP)	2.300	4.100	1.78	2.630	4.100	1.56	2.980	4.100	1.38	15%	60
Worthington Fire District	2012 (PAR), 2008 (WSP)	0.317	0.685	2.16	0.486	0.685	1.41	0.633	1.000	1.58	2%	70

1. Data is a compilation from various sources including regulatory agencies, public water supply representatives, municipalities, and regional planning organizations. Individual water supply plans as well as DPH files and databases were accessed. Additionally, this information was supplemented by telephone interviews and personal communications with individuals having an association with the water system. Key to abbreviations: WSP = Water Supply Plan; DIV = Diversion Permit Application; DAR = Diversion Annual Report; SS = Sanitary Survey; EIE = Environmental Impact Evaluation; PAR = PURA Annual Report, and PC = Personal Communication
2. Represents available water, or the limiting factor between safe yield, permit or registration limits, contractual limits, pump capacity, etc.
3. Includes water sold to other utilities
4. Safe Yield calculated in 2012 UConn Potential Sources of Water Supply EIE
5. Available supply is restricted during low flows by the 2011 Wellfield Management Plan. The first line considers the Fenton Wellfield as available, the bottom does not.

NR = Not Reported

Note: Margin of Safety calculated by dividing the available water for each demand category by the demand for each demand category.

DPH has implemented an internal Capacity Assessment Tool (CAT) program to evaluate the technical, managerial, and financial capacity of CWS that serve less than 1,000 people. A preliminary analysis of 129 CWS in the Central PWSMA has been conducted and the results shared with the systems to collect feedback. Although the current results are preliminary and subject to change, the CAT program indicates that 8% of systems assessed in the Central PWSMA were rated to have an overall low capacity to provide water service, 50% were rated to have an overall moderate capacity to provide water service, and 42% were rated to have a high capacity to provide water service. The preliminary results are encouraging, and it is anticipated that an update on this program will be available in a later part of the Coordinated Water System planning process. The long-term goal of the CAT program is to target specific types of assistance to smaller CWS.

System reliability and service and supply adequacy are also influenced by drought and the quality and condition of infrastructure utilized to provide water service. CWS that serve greater than 1,000 people are required to address drought as part of their Emergency Contingency Plans within the Water Supply Plan process. In addition, many utilities have diversion permits from DEEP or are party to other agreements that restrict withdrawals during periods of low stream flow. Such restrictions are incorporated into the available yields presented on Table 2-5 where appropriate. Smaller systems typically do not have a formal drought plan, but many have experienced a decline in yields during sustained droughts.

Similarly, systems serving greater than 1,000 people are required to have an asset management program for tracking infrastructure age and condition. Many smaller systems have no such program and in some cases can be blindsided by the costs necessary to design and construct replacements. The occurrence of water main leaks and breaks can also prioritize asset replacement. For example, DEEP typically requires leak detection surveys to be conducted every 5 years as a general condition of diversion permits issued for public water supply and increases the required frequency of the surveys if the percentage of unaccounted-for water versus total production is greater than 15%.

Table 2-5 presents the percentage of unaccounted-for water for utilities in the PWSMA serving greater than 1,000 people. Unaccounted-for water is water that is produced but not accounted for by customer meters or estimated for unmetered nonrevenue uses such as firefighting and main flushing (i.e. legitimate consumption). Typically, unaccounted-for water is considered to be associated with slow leaks in piping joints or water theft. A total of 26% of the water systems listed in Table 2-5 had unaccounted-for water percentages greater than 15%.

Finally, a high per-capita residential use may be indicative of systems where water conservation measures could be enacted to increase supply adequacy. Table 2-5 presents the residential per-capita water demands for each CWS in the PWSMA serving greater than 1,000 people. Per-capita water demands are also presented in Appendix D for the remaining CWS where actual demands are known.

The majority of the larger systems in the Central PWSMA have per-capita residential demands less than the design standard of 75 gpcd. A total of 67 of the smaller CWS have per-capita demand estimates available; of these, only 11 (16%) are greater than 75 gpcd.

2.5 Assessment of Firefighting Capabilities

Firefighting capabilities were determined from a review of individual water supply plans, PURA annual reports, municipal hazard mitigation plans, plans of conservation development, and personal

communications with municipal and system representatives. Table 2-6 presents a summary of firefighting capabilities by municipality. All of the jurisdictions in the Central PWSMA maintain some form of fire protection for residents and businesses. At least 59 of these municipalities rely in part on CWS in the region for fire protection.

TABLE 2-6
Firefighting Capabilities by Municipality

Municipality	Name of Community Water System(s) Serving > 1,000 People	Provides Municipal / Private Fire Protection	Number of Hydrants[1]	Other Municipal Fire Protection[2]
Andover	None	No	0	SW, TT
Avon	Avon Water Company CWC – Collinsville & Unionville Systems MDC	Yes Yes Yes	648 158 5	SW, TT
Berlin	Kensington Fire District Berlin Water Control Commission Worthington Fire District	Yes Yes Yes	255 545 153	3 DH, 3 CS, SW, TT
Bethany	SCCRWA CWC – Central System	Yes Yes	2 1	SW, TT
Bloomfield	MDC	Yes	752	SW, TT
Bolton	None	No	0	SW, TT
Branford	SCCRWA	Yes	891	SW, TT
Canton	CWC – Collinsville System MDC	Yes Yes	201 3	SW, TT
Chester	CWC – Chester System	Yes	55	SW, TT
Clinton	CWC – Guilford System	Yes	291	SW, TT
Columbia	None	No	0	SW, TT
Coventry	None	No	0	SW, TT
Cromwell	Cromwell Fire District Water MDC	Yes Yes	737 1	SW, TT
Deep River	CWC – Chester System	Yes	47	SW, TT
Durham	None	No	0	SW, TT
East Granby	Aquarion Water Company – Simsbury MDC CWC – Western System	Yes Yes No	10 65 0	SW, TT
East Haddam	None	No	0	SW, TT
East Hampton	None	No	0	SW, TT
East Hartford	MDC	Yes	1,073	SW, TT
East Haven	SCCRWA	Yes	626	DH, CS, SW, TT
East Windsor	CWC – Western System Hazardville Water Company	Yes Yes	328 3	SW, TT
Ellington	CWC – Western System	Yes	284	SW, TT
Enfield	CTWC – Western System Hazardville Water Company Connecticut Correctional Institute	Yes Yes Yes	350 605 NR	SW, TT
Essex	CWC – Chester System	Yes	126	SW, TT

TABLE 2-6
Firefighting Capabilities by Municipality

Municipality	Name of Community Water System(s) Serving > 1,000 People	Provides Municipal / Private Fire Protection	Number of Hydrants[1]	Other Municipal Fire Protection[2]
Farmington	CWC – Unionville System MDC New Britain Water Department Valley Water Systems	Yes Yes Yes Yes	861 105 NR 4	SW, TT
Glastonbury	MDC Manchester Water Department	Yes Yes	711 65	SW, TT
Granby	Aquarion Water Company – Simsbury	Yes	18	DH, SW, TT
Guilford	CWC – Guilford System	Yes	373	DH, CS, SW, TT
Haddam	None	No	0	SW, TT
Hamden	SCCRWA	Yes	1,162	SW, TT
Hartford	MDC	Yes	2,610	SW, TT
Hebron	CWC – Hebron Center Division	Yes	24	DH, SW, TT
Killingworth	None	No	0	SW, TT
Lyme	None	No	0	SW, TT
Madison	CWC – Guilford System CWC – Legend Hill Condominium Association	Yes NR	239 NR	SW, TT
Manchester	Manchester Water Department MDC	Yes Yes	1,954 2	SW, TT
Mansfield	University of Connecticut Windham Water Works	Yes Yes	NR 32+	DH, SW, TT
Marlborough	None	No	0	SW, TT
Meriden	Meriden Water Division	Yes	1,778	CS, SW, TT
Middlefield	Middletown Water Department	Yes	NR	SW, TT
Middletown	Middletown Water Department Connecticut Valley Hospital	Yes Yes	NR 81	SW, TT
Milford	SCCRWA	Yes	1,695	SW, TT
New Britain	New Britain Water Department	Yes	NR	SW, TT
New Haven	SCCRWA	Yes	2,197	SW, TT
Newington	MDC New Britain Water Department	Yes Yes	728 NR	SW, TT
North Branford	SCCRWA	Yes	248	SW, TT
North Haven	SCCRWA	Yes	834	SW, TT
Old Lyme	CWC – Point O' Woods CWC – Sound View	No Yes	0 40	SW, TT
Old Saybrook	CWC – Guilford System	Yes	373	DH, SW, TT
Orange	SCCRWA	Yes	573	SW, TT
Plainville	Valley Water Systems	Yes	487	SW, TT
Portland	Portland Water Department	Yes	NR	SW, TT
Rocky Hill	MDC	Yes	602	SW, TT
Simsbury	Aquarion Water Company – Simsbury Tariffville Fire District Water Dept. Avon Water Company	Yes Yes Yes	551 43 NR [A]	SW, TT

TABLE 2-6
Firefighting Capabilities by Municipality

Municipality	Name of Community Water System(s) Serving > 1,000 People	Provides Municipal / Private Fire Protection	Number of Hydrants[1]	Other Municipal Fire Protection[2]
Somers	CWC – Western System Hazardville Water Company	Yes Yes	89 98	DH, CS, SW, TT
South Windsor	CWC – Western System MDC Manchester Water Department	Yes Yes Yes	736 277 4	SW, TT
Southington	Southington Water Department New Britain Water Department Valley Water Systems	Yes Yes Yes	1,766 NR 26	SW, TT, DH
Stafford	CWC – Stafford System	Yes	75	SW, TT
Suffield	CWC – Western System	Yes	334	SW, TT
Tolland	CWC – Western System Tolland Water Department	Yes Yes	41 97	SW, DH, TT
Vernon	CWC – Western System Manchester Water Department	Yes Yes	524 3	SW, TT
Wallingford	Wallingford Water Department	Yes	1699	SW, TT
West Hartford	MDC	Yes	1,403	SW, TT
West Haven	SCCRWA	Yes	940	SW, TT
Westbrook	CWC – Guilford System	Yes	213	SW, TT
Wethersfield	MDC	Yes	781	SW, TT
Willington	None	No	0	SW, TT
Windsor	MDC	Yes	1,095	SW, TT
Windsor Locks	CWC – Western System	Yes	357	SW, TT
Woodbridge	SCCRWA	Yes	92	SW, TT

1. NR – Not Reported
2. Other Fire Protection Codes: SW = Surface Water; TT = Tanker Trucks; DH = Dry Hydrants; CS = Cisterns; BT = Brush Trucks

A. The Avon Water Company hydrant count for Avon includes hydrants in Simsbury.

Information similar to that presented in Table 2-6 is included in Appendix C for the systems serving less than 1,000 people. It should be noted that there are no regulatory requirements for a CWS to maintain firefighting capabilities. Individual requirements for fire protection are addressed indirectly in the application process for a Certificate of Public Convenience and Necessity (Section 16-262m-5(e) of the Regulations of Connecticut State Agencies) for small water companies which are regulated by PURA in coordination with DPH. A letter from the local fire marshal where the project is located must be submitted with the application to PURA, indicating whether or not fire protection facilities are required to be included in the design of the water system. The PURA regulations also state that fire protection is not allowed to be provided via hydrants unless the system has more than 150,000 gallons in storage. However, there is no explicit requirement imposed by PURA to provide fire protection.

The majority of larger systems have adequate pressure and system components to provide some form of fire protection to customers within their supply area. Most of the smaller CWS provide little or no fire protection as indicated in Appendix C.

2.6 Assessment of Major Facilities

Table 2-7 presents data on major facilities for CWS serving greater than 1,000 people. This information is included as Appendix C for systems serving less than 1,000 people.

TABLE 2-7
Major Facilities of Community Water Systems Serving >1,000 People

Community Water System	Primary Location Served	Groundwater Supplies	Surface Water Supplies	Treatment	Distribution Pumping	Storage
Aquarion Water Company – Simsbury System	Simsbury, Granby, East Granby	A	I	X	X	X
Avon Water Company	Avon, Simsbury	A, E, I	U	X	X	X
Berlin Water Control Commission	Berlin	A, I	U	X	X	X
Connecticut Correctional Institute	Enfield / Somers	A, E, I	U	X	X	X
Connecticut Valley Hospital	Middletown	U	A, I	X	U	X
Cromwell Fire District Water Department	Cromwell	A, E, I	U	X	X	X
CWC – Chester System	Chester, Deep River, Essex	A	A, I	X	X	X
CWC – Collinsville Sys	Canton	U	U*	U	X	X
CWC – Guilford System	Guilford, Madison, Old Saybrook, Westbrook, Clinton	A, E, I	A	X	X	X
CWC – Hebron Center	Hebron	A	U	X	X	X
CWC – Legend Hill Condominium Association	Madison	A	U	X	U	X
CWC – Point O' Woods	Old Lyme	A, I	U	X	X	X
CWC – Sound View	Old Lyme	A, I	U	X	X	X
CWC – Stafford System	Stafford	I	A	X	X	X
CWC – Unionville System	Farmington, Avon	A, I	U	X	X	X
CWC – Western System	East Windsor, Suffield, Enfield, Somers, East Granby, Windsor Locks, South Windsor, Ellington, Vernon, Tolland	A, E, I	A	X	X	X
Hazardville Water Company	Enfield, Somers	A, E, I	U	X	X	X

TABLE 2-7
Major Facilities of Community Water Systems Serving >1,000 People

Community Water System	Primary Location Served	Groundwater Supplies	Surface Water Supplies	Treatment	Distribution Pumping	Storage
Kensington Fire District[1]	Berlin	I	U	U	X	X
Manchester Water Department	Manchester, Glastonbury	A, E, I	A	X	X	X
Meriden Water Division	Meriden	A, I	A	X	X	X
Metropolitan District Commission	East Granby, Windsor, Rocky Hill, Bloomfield, West Hartford, Hartford, East Hartford, South Windsor, Farmington, Newington, Wethersfield, Glastonbury	U	A, E, I	X	X	X
Middletown Water Department	Middletown	A	A, E	X	X	X
New Britain Water Department	New Britain, Farmington	E, I	A	X	X	X
Portland Water Department	Portland	A	I	X	X	X
Salmon Brook District Water Department	Granby	A, E	U	U	U	X
South Central Connecticut Regional Water Authority	Milford, Orange, West Haven, Woodbridge, New Haven, Hamden, Bethany, East Haven, North Haven, Branford, North Branford	A, E, I	A, I	X	X	X
Southington Water Department	Southington	A, I	A	X	X	X
Tariffville Fire District Water Department	Simsbury	A, E	U	X	U	X
Tolland Water Department	Tolland	A	U	X	U	X
University of Connecticut - Main Campus	Mansfield	A, E, I	U	X	X	X

TABLE 2-7
Major Facilities of Community Water Systems Serving >1,000 People

Community Water System	Primary Location Served	Groundwater Supplies	Surface Water Supplies	Treatment	Distribution Pumping	Storage
Valley Water Systems, Inc.	Plainville	A, I	I	X	X	X
Wallingford Water Department	Wallingford	A	A	X	X	X
Windham Water Works	Windham / Mansfield	U	A	X	X	X
Worthington Fire District[1]	Berlin	U	U	U	U	U

A = Active, E = Emergency, I = Inactive; U = Unavailable; X = Available
*CWC – Collinsville System obtains water from an interconnection with MDC's Collinsville Water Treatment Plant.
1. Water purchased from another utility via interconnection.

Most CWS in the region utilize groundwater sources as their primary means of supply. However, several of the larger CWS maintain reservoirs for primary or emergency supply. Connecticut Valley Hospital, CWC Stafford System, MDC, and Windham Water Works are the only significant CWS that rely solely on surface water for drinking water supply. All of the systems serving less than 1,000 people utilize well water or springs as their source of supply, with the exception of small consecutive systems such as CWC – Reservoir Heights in Vernon (served by Manchester Water Department).

Table 2-8 presents information on identified facility improvements for the larger CWS.

TABLE 2-8
Planned and/or Identified Expansions/Alterations for Community Water Systems Serving >1,000

Community Water System	Planned or Identified Expansions / Alterations to Water Supply Facilities
Aquarion Water Company – Simsbury System	Distribution system upgrades, identify/install additional supply sources, create new high-service zone
Avon Water Company	Identify and develop future supply sources, additional storage tanks, distribution system upgrades
Berlin Water Control Commission	Distribution system upgrades, tank improvements, well replacement, identify future sources, identifying interconnection locations with neighboring water systems, upgrade MDC interconnection
Connecticut Correctional Institute	Identify future sources
Connecticut Valley Hospital	Pursue interconnection
Cromwell Fire District Water Department	Distribution system upgrades, emergency interconnections
CWC – Chester System	Distribution system upgrades, storage tank upgrades
CWC – Collinsville Sys	Distribution system upgrades, interconnection, future source evaluation

TABLE 2-8
Planned and/or Identified Expansions/Alterations for Community Water Systems Serving >1,000

Community Water System	Planned or Identified Expansions / Alterations to Water Supply Facilities
CWC – Guilford System	Distribution system upgrades, interconnections, storage tank upgrades, eventual development of new wellfields
CWC – Hebron Center	No identified needs
CWC – Legend Hill Condominium Association	No identified needs
CWC – Point O' Woods	Interconnection
CWC – Sound View	Interconnections
CWC – Stafford System	Distribution system upgrades, dam modifications, future source evaluation
CWC – Unionville System	Distribution system upgrades, storage tank upgrades, interconnection, future source evaluation
CWC – Western System	Distribution system upgrades, storage tank upgrades, Rockville WTP upgrade, other treatment plant/wellfield upgrades, evaluation of future sources, complete Mansfield extension
Hazardville Water Company	Future source evaluation, interconnection, distribution system upgrades
Kensington Fire District[1]	Distribution system upgrades, future source evaluation
Manchester Water Department	Pumping improvements, reservoir improvements, future source evaluation, dam improvements, well redevelopment, distribution system upgrades, storage tank improvements
Meriden Water Division	Facility upgrades, distribution system upgrades, future source evaluation
Metropolitan District Commission	Distribution system upgrades, pump station upgrades, future source evaluation, storage tank upgrades
Middletown Water Department	Well replacements/redevelopments, distribution system upgrades, interconnection with Durham
New Britain Water Department	Future source evaluation, pumping station upgrades, distribution system upgrades, storage tank upgrades, dam/reservoir improvements
Portland Water Department	Distribution system upgrades
Salmon Brook District Water Department	Interconnection, future source evaluation
South Central Connecticut Regional Water Authority	Dam/reservoir improvements, pump station upgrades, distribution system upgrades, climate change-related resiliency improvements, future source evaluation, interconnections
Southington Water Department	Future source evaluation, interconnections, storage tank upgrades, distribution system upgrades
Tariffville Fire District Water Department	Future source evaluation, storage tank upgrades, interconnection
Tolland Water Department	Future source evaluation, distribution system upgrades
University of Connecticut – Main Campus	Interconnection, distribution system upgrades/extensions, subsystem connectivity upgrades, well redevelopment
Valley Water Systems, Inc.	Distribution system upgrades, pumping station upgrades, future source evaluation
Wallingford Water Department	Future source evaluation, distribution system upgrades, pursue interconnections

TABLE 2-8
Planned and/or Identified Expansions/Alterations for Community Water Systems Serving >1,000

Community Water System	Planned or Identified Expansions / Alterations to Water Supply Facilities
Windham Water Works	Identify additional sources / increase available supply, distribution system improvements
Worthington Fire District[1]	Distribution system upgrades

Many CWS are currently interconnected. In particular, utilities in the central part of the PWSMA play a regional role in providing active daily supply to Berlin. Table 2-9 presents the list of interconnections between CWS in the Central PWSMA.

TABLE 2-9
List of Active Interconnections in Central PWSMA

Name	Supplier	Receiver	Town
Avon Water Company & CWC – Collinsville System	Avon Water Company	CWC Collinsville System	Avon
Berlin Water Control Commission & Kensington Fire District*	Berlin Water Control Commission	Kensington Fire District	Berlin
Berlin Water Control Commission & Worthington Fire District*	Berlin Water Control Commission	Worthington Fire District	Berlin
Cromwell Fire District Water Department & Berlin Water Control Commission*	Cromwell Fire District Water Department	Berlin Water Control Commission	Cromwell
CWC – Riversedge Division & Tolland Water Department	Tolland Water Department	CWC – Riversedge Division	Tolland / Willington
CWC – Western System & Hazardville Water Company	CWC – Western System	Hazardville Water Company	Somers
CWC – Western System & Tolland Water Department – Torry Road	CWC – Western System	Tolland Water Department – Torry Road	Tolland
CWC – Western System & Town of Somers – Rye Hill System	CWC – Western System	Town of Somers – Rye Hill System	Enfield
CWC – Crescent Lake System & Town of East Longmeadow, Mass	Town of East Longmeadow, Mass	CWC – Crescent Lake System	Enfield
Evergreen Trailer Park – System #1 & Evergreen Trailer Park – System #2	Evergreen Trailer Park – System #2	Evergreen Trailer Park – System #1	Clinton
Manchester Water Department & CWC – Western System	Manchester Water Department	CWC – Western System	South Windsor
Manchester Water Department & CWC – Reservoir Heights	Manchester Water Department	CWC – Reservoir Heights	Manchester
Metropolitan District Commission & Portland Water Department	Metropolitan District Commission	Portland Water Department	Portland
Metropolitan District Commission & Berlin Water Control Commission	Metropolitan District Commission	Berlin Water Control Commission	Newington
Metropolitan District Commission & CWC – Collinsville System	Metropolitan District Commission	CWC – Collinsville System	Canton

TABLE 2-9
List of Active Interconnections in Central PWSMA

Name	Supplier	Receiver	Town
Metropolitan District Commission & CWC – Western System	Metropolitan District Commission	CWC – Western System	South Windsor
Metropolitan District Commission & CWC – Western System	Metropolitan District Commission	CWC – Western System	Windsor Locks
Metropolitan District Commission & CWC – Western System	Metropolitan District Commission	CWC – Western System	Windsor
Metropolitan District Commission & CWC – Unionville System	Metropolitan District Commission	CWC – Unionville System	Farmington
Metropolitan District Commission & CWC – Chimney Hill System	Metropolitan District Commission	CWC – Chimney Hill System	Farmington
Metropolitan District Commission & New Britain Water Department	Metropolitan District Commission	New Britain Water Department	Burlington
Metropolitan District Commission & New Britain Water Department	Metropolitan District Commission	New Britain Water Department	Farmington
Mount Saint John School & CWC – Chester System	CWC – Chester System	Mount Saint John School	Deep River
New Britain Water Department & Bristol Water Department	New Britain Water Department	Bristol Water Department	Bristol
New Britain Water Department & Berlin Water Control Commission	New Britain Water Department	Berlin Water Control Commission	Berlin
New Britain Water Department & Kensington Fire District*	New Britain Water Department	Kensington Fire District	New Britain
New Britain Water Department & Valley Water Systems Inc.*	New Britain Water Department	Valley Water Systems, Inc.	New Britain
South Central Connecticut Regional Water Authority & CWC – Guilford System	SCCRWA	CWC - Guilford System	Guilford
South Central Connecticut Regional Water Authority & Meriden Water Division	SCCRWA	Meriden Water Division	Cheshire
Ridgewood Hills Association, System #1 & System#2	Ridgewood Hills Association, System #1	Ridgewood Hills Association, System #2	Deep River
Ridgewood Hills Association, System #2 & System#3	Ridgewood Hills Association, System #2	Ridgewood Hills Association, System #3	Deep River
Ridgewood Hills Association, System #3 & System#4	Ridgewood Hills Association, System #3	Ridgewood Hills Association, System #4	Deep River
Tolland Water Department - Tolland Water Department – Torry Road	Tolland Water Department	Tolland Water Department – Torry Road	Tolland
Valley Water Systems, Inc. & CWC – Unionville System*	Valley Water Systems, Inc.	CWC - Unionville System	Plainville
Willington Ridge Condos - System #1 & System #2	Willington Ridge Condo – System #2	Willington Ridge Condos – System #1	Willington

*Multiple interconnections exist between the two utilities.

Several CWS have identified future potential interconnections, either to promote source redundancy or to meet future supply needs. Table 2-10 lists the systems that are currently pursuing options for future

interconnections as determined through review of water supply plans, DPH records, and personal communications with persons having an association with the system. Table 2-10 also lists those systems that have identified the nearest potential source for interconnection as well as any known constraints on a future connection.

TABLE 2-10
Planned and/or Identified Future Interconnections

Community Water System	Planned and/or Identified Interconnections Involving Systems
Serving >1,000 People	
Avon Water Company	Interconnection with MDC
Avon Water Company	Interconnection with Aquarion Water Company – Simsbury System
Berlin Water Control Commission	Interconnection with Meriden Water Division
Berlin Water Control Commission	Interconnection with Southington Water Department
Connecticut Valley Hospital	Interconnection with Middletown Water Department
Cromwell Fire District	Interconnection with MDC
CWC – Chester System	Interconnection with CWC – Guilford System
CWC – Collinsville System	Interconnection with CWC – Unionville System
CWC – Sound View System	Interconnection with CWC – Guilford System
CWC – Sound View System	Interconnection with CWC – Point O' Woods System
CWC – Stafford System	Interconnection with CWC – Western System
CWC – Unionville System	Interconnection with Bristol Water Department
CWC – Western System	Interconnection with Agawam Water Company
CWC – Western System	Interconnection with University of Connecticut
Meriden Water Department	Interconnection with Kensington Fire District
Meriden Water Department	Interconnection with New Britain Water Department
Middletown Water Department	Interconnection with Durham Center System
Middletown Water Department	Interconnection with Berlin Water Control Commission
Southington Water Department	Interconnection with Bristol Water Department
Southington Water Department	Interconnection with New Britain Water Department
Southington Water Department	Interconnection with South Central Connecticut Regional Water Authority
Tarriffville Fire District	Interconnection with Aquarion Water Company – Simsbury System
Tolland Water Department`	Interconnection with CWC – Western System
Wallingford Water Department	Interconnection with Meriden Water Department
Wallingford Water Department	Interconnection with South Central Connecticut Regional Water Authority
Windham Water Works	Interconnection with Norwich Public Utilities
Serving <1,000 People	
Aquarion Water Company – Birches Estates System	Interconnection with Town of Marlborough Town Center water system
East Hampton WPCA – Future Town-wide System	Interconnection with Colchester Water & Sewer, Middletown Water Department / Pratt & Whitney, and/or Portland Water Department
CWC – Western System	Interconnection with Norwegian Woods Apartments, Jensen's Rolling Hills Residential, S & P Properties LLC, and other small systems in Mansfield

Finally, the opportunity exists for additional interconnections to be formed between utilities that are located within 1,000 feet of each other. This is a matter that will be discussed in the Integrated Report. The systems located within 1,000 feet of one another are presented in Table 2-11.

TABLE 2-11
Systems within 1,000 Feet without Existing or Planned Interconnections

Community Water System	Potential Interconnection System(s)
Aquarion Water Company – Birchwood Estate	Hillside Corporation
Chelsea Common Condominium Association	GQC Well Commission
Club House Apartments	Hunting Lodge Apartments
Coventry Housing Authority – Upper System	Coventry Housing Authority – Lower System
CWC – Birchwood Heights	Knollwood Acres Apartments
CWC – Hebron Center Division	Hebron Arms Apartments
CWC – Hebron Center Division	CWC – Country Manor Apartments
CWC – Hebron Center Division	CWC – Mill at Stonecroft Division
CWC – Jensen's, Inc. Rolling Hills Residential	Club House Apartments
CWC – Jensen's, Inc. Rolling Hills Residential	Hunting Lodge Apartments
CWC – Lakewood	CWC – Lakeview Terrace
CWC – Sound View	Miami Beach Water Company
CWC – Sound View	Chadwick Homeowners Assn, Inc.
CWC – Unionville System	Avon Water Company
CWC – Wellswood Village Division	Wellswood Estates Foundation, Inc.
CWC – Wellswood Village Division	Hillside Condominiums
CWC – Westchester East	Edgemere Condominium Assn, Inc.
CWC – Western System	Shaker Heights Water Company
CWC – Western System	Connecticut Correctional Institute
CWC – Western System	East Windsor Housing Authority
CWC – Western System	School Hill Association, Inc.
CWC – Western System	Vernon Village Inc.
East Windsor Housing Authority	School Hill Association, Inc.
Hillside Condominiums	Wellswood Estates Foundation, Inc.
Lyme Regis, Inc.	Boxwood Condominium Association
Lymewood Elderly Housing	Rye Field Manor Elderly Housing
Manchester Water Department	CWC – Redwood Farms Division
Metropolitan District Commission	Manchester Water Department
Metropolitan District Commission	Sharon Heights Water Association
Metropolitan District Commission	Grant Hill Associates Inc.
Metropolitan District Commission	Orchard Hill Association
Metropolitan District Commission	Juniper Club Inc.
Metropolitan District Commission	Old Newgate Ridge Water Company Inc.
Middletown Water Department	Sylvan Ridge Condominiums
Middletown Water Department	Connecticut Valley Hospital
Orchard Hill Association	Juniper Club Inc.
Quonnipaug Hills – Main System	Quonnipaug Hills – Section 1
Southington Water Department	Apple Valley Village
Tolland Water Department	Stone Pond Condominiums
University of Connecticut – Main Campus	Orchard Acres Association
University of Connecticut – Main Campus	Knollwood Acres Apartments
Valley Water Systems, Inc.	Southington Water Department

TABLE 2-11
Systems within 1,000 Feet without Existing or Planned Interconnections

Community Water System	Potential Interconnection System(s)
Whispering Hills, LLC – Well D System	Whispering Hills, LLC – Well A System
Willington Ridge Condos – System #2	Cedar Ridge Apartments

3.0 ASSESSMENT OF FUTURE WATER SUPPLY SOURCES

This section presents future water supply sources identified in the region. Information has been obtained from individual water supply plans and discussions with representatives of regulatory agencies, regional planning agencies, and CWS. Table 3-1 identifies systems serving greater than 1,000 people that have identified the potential need for future supply source exploration within the Central PWSMA. A discussion of each system follows.

TABLE 3-1
Potential Future Source of Supply Exploration Planned/Needed
for Community Water Systems Serving >1,000 People

Community Water System	None Identified	Within 5-Year Planning Period	Beyond 5-Year Planning Period
Aquarion Water Company – Simsbury System			X
Avon Water Company			X
Berlin Water Control Commission		X	X
Connecticut Correctional Institute		X	X
Connecticut Valley Hospital		X	X
Cromwell Fire District Water Department		X	
CWC – Chester System		X	
CWC – Collinsville Sys		X	
CWC – Guilford System		X	X
CWC – Hebron Center	X		
CWC – Legend Hill Condominium Association	X		
CWC – Point O' Woods			X
CWC – Sound View			X
CWC – Stafford System			X
CWC – Unionville System		X	
CWC – Western System		X	X
Hazardville Water Company			X
Kensington Fire District			X
Manchester Water Department			X
Meriden Water Division			X
Metropolitan District Commission			X
Middletown Water Department		X	X
New Britain Water Department			X
Portland Water Department			X
Salmon Brook District Water Department			X
SCCRWA			X
Southington Water Department			X
Tariffville Fire District Water Department	X		
Tolland Water Department	X		
University of Connecticut – Main Campus	X		
Valley Water Systems, Inc.			X
Wallingford Water Department			X
Windham Water Works			
Worthington Fire District	X		

3.1 Aquarion Water Company – Simsbury System

The Aquarion Water Company – Simsbury System is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Aquarion Water Company in their 2006 Water Supply Plan indicate that additional supply sources may be needed beyond the 5-year planning period to meet long-term projected peak day demands with a sufficient margin of safety. Potential future supply sources include the following:

- Replacing existing wells to reestablish diminished yield
- Development of new sources in the Farmington River basin (basin #4300)
- Purchasing existing sources from nearby public water systems

Well replacements and redevelopment projects will occur as needed. Purchasing sources from other water systems would likely only provide a limited increase in available supply as some or most of the available yield would need to serve existing customers of that system. Development of new sources in the Farmington River basin is believed to be the most likely scenario for increasing future supply.

While the potential exists for interconnections to be formed with other nearby water utilities, the Aquarion Water Company believes it to be unlikely at this time that such interconnections will be used to provide active, daily supply for the system.

3.2 Avon Water Company

The Avon Water Company is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Avon Water Company indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Completion of well rehabilitation / pumping improvement projects
- Reactivation of inactive supplies
- Development of new sources (basin #4300 and 4316)

As additional supply is not needed within the Avon Water Company system for many years, it is possible that the schedule for reactivation of inactive supplies or development of new supplies could be advanced by regional needs, with water delivered through new or existing interconnections. Well replacements and rehabilitation projects will occur as needed. Reactivation of currently inactive supplies may not be feasible due to water treatment concerns. The Avon Water Company believes that development of new sources of supply in the Farmington River basin is the most likely scenario for increasing future supply, although such actions will require diversion permits and evaluation of instream flow concerns.

While the potential exists for interconnections to be formed with other nearby water utilities, the Avon Water Company believes it to be unlikely at this time that such interconnections will be used to provide active, daily supply for the system.

3.3 Berlin Water Control Commission

The Berlin Water Control Commission is currently meeting average day demands with a sufficient margin of safety, although additional supply is needed to meet maximum month average day and peak day demands with a sufficient margin of safety. Well replacement is underway to restore lost capacity. Future projections by the Berlin Water Control Commission indicate that additional supply sources may be needed within and beyond the 5-year planning period, as the Commission is most likely to serve currently unserved areas of Berlin. Potential future supply sources include the following:

- Upgrading pumping components to increase efficiency of existing wells
- Reactivating inactive groundwater supplies
- Pursuing additional interconnections with nearby utilities
- Increasing flow through existing interconnections

Reactivating the inactive groundwater supplies may not be feasible due to water quality and treatment cost concerns. Increasing purchases through existing interconnections with Cromwell Fire District and the New Britain Water Department are believed by the Berlin Water Control Commission to be the most likely solutions for increasing supply. Pursuit of new interconnections with other water utilities is also an option.

3.4 Connecticut Correctional Institute

The Connecticut Correctional Institute was historically meeting average day demands and peak day demands with a sufficient margin of safety, although additional supply was necessary to meet maximum month average day demands with a sufficient margin of safety. Future projections by the Connecticut Correctional Institute in their 2000 Water Supply Plan indicate that additional supply may be needed within and beyond the 5-year planning period, although it is likely that some improvements have already occurred. Potential future supply sources include the following:

- Activating inactive groundwater supplies
- Well redevelopment
- Constructing interconnections with nearby utilities

Activation of currently inactive supply sources is believed by the Connecticut Correctional Institute to be the most feasible option for increasing supply. Well replacements and redevelopment projects will be pursued as needed. Purchasing sources from other water systems is believed to be more expensive than development of onsite supplies and will be pursued last.

3.5 Connecticut Valley Hospital

The Connecticut Valley Hospital system is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Connecticut Valley Hospital indicate that additional supply sources may be needed within and beyond the 5-year planning period. Potential future supply sources include the following:

- Reactivating inactive reservoirs
- Interconnection with nearby water utilities

Reactivating a currently inactive reservoir would be costly due to the need to install the infrastructure necessary move water from the impoundment to the treatment facility. Interconnecting with a nearby utility would likely be undertaken for redundancy purposes as an active daily supply is not immediately needed.

3.6 Cromwell Fire District

The Cromwell Fire District is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Cromwell Fire District indicate that additional supply sources were needed within the 5-year planning period, although it is likely that this has already occurred. Additional potential future supply sources include the following:

- Reactivating inactive groundwater supplies
- Interconnecting with nearby water utilities

Reactivating the inactive groundwater supplies would be costly due to the need to upgrade much of the facilities associated with these legacy supplies. Interconnection with other utilities is considered by Cromwell Fire District to be the most likely option for increasing active, daily supply, although such interconnections would be installed in the nearer term to increase system redundancy.

3.7 Connecticut Water Company

The majority of the CWC systems in the Central PWSMA are currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. The exceptions include the Sound View system which has margins of safety less than 1.15 for maximum month average day demands and peak day demands, and the Point O' Woods system which has a margin of safety less than 1.15 for peak day demands. Future projections by CWC indicate that additional supply sources may be needed within the 5-year planning period and beyond for most of the systems, while interconnections and consolidations are planned in some areas to increase system redundancy. Potential future supply sources for the CWC systems include the following:

- Installing additional supply sources for the Lakewood/Lakeview system (basins #3100, 3105)
- Reactivation of inactive groundwater supplies
- Interconnecting with nearby water utilities
- Performing reservoir modifications to increase yield
- Expansion of the Rockville Water Treatment Plant

Expansion of the Rockville Water Treatment Plant in the Western System is currently ongoing as part of the process to provide potable water to Mansfield and the University of Connecticut. Installation of additional supply sources and reactivating inactive supplies will be pursued as needed, as will reservoir modifications. The potential interconnections are longer-term projects to provide source redundancy, including interconnection of the Western and Stafford systems, the Guilford and Chester systems, the Sound View and Point O' Woods systems, and the consolidated Old Lyme systems with the Guilford System. Additional interconnections may be considered for active, daily supply in the Western System.

3.8 Hazardville Water Company

The Hazardville Water Company is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Hazardville Water Company indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Reactivating inactive groundwater supplies
- Interconnecting with nearby water utilities

Reactivating the inactive groundwater supplies may be costly due to the need to upgrade much of the facilities associated with these legacy supplies, and several of the wells have water quality concerns. However, it is possible that a significant increment of supply could be realized such that this is likely to be the first option pursued. Utilizing interconnections with other utilities is considered to be a secondary option.

3.9 Kensington Fire District

The Kensington Fire District is authorized by contract to purchase as much water as needed and therefore does not have an available water calculation. System margin of safety is considered to be 1.0 for existing and future demands.

3.10 Manchester Water Department

The Manchester Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Manchester Water Department indicate that additional supply may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Increasing yields from existing active wells and reservoirs
- Purchasing existing wells from other entities
- Reactivating inactive supplies

As Manchester Water Department does not need to consider future source evaluations in the near term, many of these actions have not been prioritized. Manchester Water Department plans to pursue additional yield as conditions warrant. While the Water Department is proximal to other large water utilities, utilizing interconnections with other utilities for active, daily supply is considered to be a secondary option at this time.

3.11 Meriden Water Division

The Meriden Water Division is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by the Meriden Water Department indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include pursuing interconnections with other utilities for the purchase of raw or treated water. Meriden Water Division does not have any plans to develop new surface or groundwater supply sources at this time.

3.12 Metropolitan District Commission

The MDC is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections in the MDC's 2008 Water Supply Plan indicated that additional supply sources may be needed beyond the 50-year planning period. Potential future supply sources include the following:

- Development of groundwater sources in the Connecticut River basin (basin #4000)
- Utilizing the West Branch and Colebrook River Lake Reservoirs which were built by MDC and the Federal Government in the 1960s for various purposes including future public water supply.

As one of Connecticut's larges water utilities, it is unlikely that interconnections with other agencies would provide a source of supply to MDC. It is more likely that MDC would be asked to provide water to other utilities in the region as a regional supplier.

3.13 Middletown Water Department

The Middletown Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Middletown Water Department indicate that additional supply sources may be needed within and beyond the 5-year planning period. Potential future supply sources include the following:

- Replacing existing wells
- Securing use of a collector well supply
- Activating an inactive reservoir

The Middletown Water Department is planning to replace the older wells at its active wellfield in the near future, which is expected to secure an additional small increment of available supply. Although the utility has contractual access to a collector well supply, this source would need to undergo significant study and possible regulatory changes to be allowed as a potential source. Middletown Water Department also has an inactive reservoir that could provide an increment of supply, but this would be very expensive as there is currently insufficient infrastructure in place to support the use of this source.

While interconnections may be a possibility for providing an increment of supply to Middletown Water Department in the future, it is more likely that Middletown will be asked to become party to contracts for delivery of water to other utilities in the region. For example, Middletown will be providing water to the Town of Durham within the next 5 years. Providing water to other nearby utilities may also be an option given the current excess supply available.

3.14 New Britain Water Department

The New Britain Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by New Britain Water Department indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Increasing supply through existing interconnections

- Creation of a new reservoir in Burlington (basin #4613)
- Utilization of a future Tilcon Quarry reservoir

The New Britain Water Department would likely pursue the purchase of raw water from nearby utilities first, as the creation of a new reservoir could present a significant permitting burden. The future Tilcon Quarry reservoir proposal, if allowed to move forward, would provide a potential additional supply source in 40 to 50 years.

While interconnections may be a possibility for providing an increment of supply to the New Britain Water Department in the future, it is more likely that New Britain will continue its role as a regional supplier through its existing interconnections and potential new interconnections.

3.15 Portland Water Department

The Portland Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by the Portland Water Department indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the development of a wellfield along the Connecticut River (basin #4000).

3.16 Salmon Brook District Water Department

The Salmon Brook District Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by the Salmon Brook District Water Department indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Development of new wells in basin #4319
- Interconnection with other water utilities

The Salmon Brook District Water Department is not currently in need of additional supplies and has not yet evaluated future water supply options in detail.

3.17 South Central Connecticut Regional Water Authority

The SCCRWA is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by SCCRWA indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Expansion of water treatment plant capacity
- Reservoir modifications
- Reactivation of inactive reservoirs
- Surface water diversions to reservoirs

Although potential new sources have not been prioritized, the expansion of water treatment plant capacity and reservoir modifications will likely have less of a permitting burden than surface water

diversions. The reactivation of inactive reservoirs could prove costly due to the need to upgrade infrastructure. Developing interconnections with other nearby large utilities may also be a way of providing an additional increment of supply.

3.18 Southington Water Department

The Southington Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Southington Water Department indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Development of a new wellfield (basin #5201)
- Reactivation of inactive wells
- Utilizing inactive reservoirs to augment surface water flow in order to increase withdrawals from groundwater supplies
- Development of interconnections with nearby utilities

Reactivation of inactive wells is problematic due to both water quality and instream flow concerns. Utilizing inactive reservoirs to augment surface water flow may provide a solution to the instream flow concern but not to the water quality issue. Development of a new wellfield could carry a significant permitting burden. Although interconnections are possible with other nearby utilities, significant capital improvements would be necessary with each potential project estimated around $10 million.

3.19 Tariffville Fire District

The Tariffville Fire District is currently meeting average day and maximum month average day demands with a sufficient margin of safety, but peak day demands have a margin of safety below 1.15. Future projections by Tariffville Fire District indicate that additional supply is not needed for the foreseeable future. One potential future supply source is an interconnection with a nearby utility, although this would only be undertaken for the purpose of increasing system redundancy at this time.

3.20 Tolland Water Department

The Tolland Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. The interconnection with the CWC – Western System is under construction and will provide an additional measure of supply redundancy once completed, along with assuaging system demands along Route 195. Future projections by Tolland Water Department indicate that additional supply will not be needed for the foreseeable future once the interconnection is completed.

3.21 University of Connecticut

The University of Connecticut (UConn) currently has sufficient margin of safety when the Fenton River Wellfield is online, but the system margins of safety for maximum month average day demands and peak day demands fall below 1.15 when the Fenton River Wellfield is not available per the provisions of the University's 2011 *Wellfield Management Plan.* An interconnection with the CWC – Western System is currently under construction, which will restore margin of safety to acceptable levels when the Fenton River

Wellfield is unavailable. Future projections by the University indicate that additional supply sources will not be needed for the foreseeable future once the interconnection is in place.

3.22 Valley Water Systems

Valley Water Systems, Inc. is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Valley Water Systems indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Increasing withdrawals from existing wellfields
- Interconnecting with nearby utilities
- Utilizing existing interconnections with nearby utilities

Increasing withdrawals from existing sources would be the first choice for Valley Water Systems but may not be possible due to instream flow concerns. Utilizing active interconnections would be the next choice, followed by the creation of new interconnections.

3.23 Wallingford Water Department

The Wallingford Water Department is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Wallingford Water Department indicate that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Creating a new reservoir (basin #5208)
- Creating new wellfields (basin #5208)
- Interconnecting with nearby utilities
- Expansion of existing wellfields

Creating new sources and expansion of existing wellfields could be problematic due to the significant permitting burden and potential instream flow issues. Creating interconnections with other utilities is feasible and the potential exists for Wallingford to both buy and sell water.

3.24 Windham Water Works

Windham Water Works is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Windham Water Works indicated that additional supply sources may be needed beyond the 5-year planning period. Potential future supply sources include the following:

- Additional withdrawals from the existing reservoir
- Interconnecting / shared source creation with nearby utilities

Due to potential instream flow issues, additional withdrawals from the existing reservoir may require an agreement with the United States Army Corps of Engineers to manage upstream releases. Creating interconnections with other utilities is feasible but is likely to be expensive given the distances involved.

3.25 Worthington Fire District

The Worthington Fire District is currently meeting average day, maximum month average day, and peak day demands with a sufficient margin of safety. Future projections by Worthington Fire District indicate that additional supply sources are not needed for the foreseeable future.

4.0 EXISTING SERVICE AREAS

Appended Figure 2 delineates existing service areas within the region. Non-Community water systems are typically very limited and are denoted by a point. CWS boundaries were determined based upon individual water supply plan mapping, legal documents, and information from CWS.

Table 4-1 identifies the enabling legislation for each CWS in the region serving greater than 1,000 people. Where available, the reference for the original act of the General Assembly or associated special act is provided. The information that follows has been gathered from a variety of sources through the assistance of system representatives as well as staff of the various town offices.

TABLE 4-1
Summary of Enabling Legislation for Community Water Systems Serving >1,000 People

Community Water System	Charter Service Area	Enabling Legislation Reference
Aquarion Water Company – Simsbury System	Simsbury	Special Act 265 (Village Water Company of Simsbury, May 15, 1903, as amended)
Avon Water Company	Avon	Substitute for Senate Joint Resolution 102, March 8, 1911; PURA docket 86-05-33 Order #10 (Farmington Woods Water Company)
Berlin Water Control Commission	East Berlin, Berlin	East Berlin Fire District established under CGS Chapter 31 in 1923; Berlin Town Charter (Section 8-7-6), 1968
Connecticut Correctional Institute	DOC facility	Not Reported (State Facility established in 1963)
Connecticut Valley Hospital	DMHAS Facility	Not Reported (State Facility established in 1868)
Cromwell Fire District Water Department	Cromwell	Special Act 220, May 5, 1927
CWC – Chester System	All of Connecticut	House Joint Resolution 357 – Incorporating the Chester Water Supply Company, July 6, 1895; House Joint Resolution 358 – Incorporating the Deep River Water Supply Company, July 4, 1895;
CWC – Collinsville System	All of Connecticut	Substitute for House Joint Resolution No. 66 – Incorporating the Collinsville Water Company, June 17, 1901, as amended
CWC – Guilford System	All of Connecticut	House Joint Resolution 134 – Incorporating the Clinton Water Company, April 14, 1893; Senate Bill 455 – Incorporating the Connecticut Water and Gas Company, July 23, 1945; House Joint Resolution 116 – Incorporating the Guilford Water Company, March 16 1893; House Joint Resolution 256 – Incorporating the Madison Water Company – April 19, 1893, as amended

TABLE 4-1
Summary of Enabling Legislation for Community Water Systems Serving >1,000 People

Community Water System	Charter Service Area	Enabling Legislation Reference
CWC – Hebron Center	All of Connecticut	Senate Bill 455 – An Act Incorporating the Connecticut Water and Gas Company, July 23, 1945
CWC – Legend Hill Condominium Association	All of Connecticut	Senate Bill 455 – An Act Incorporating the Connecticut Water and Gas Company, July 23, 1945
CWC – Point O' Woods	All of Connecticut	Senate Bill 455 – An Act Incorporating the Connecticut Water and Gas Company, July 23, 1945
CWC – Sound View	All of Connecticut	Senate Bill 455 – An Act Incorporating the Connecticut Water and Gas Company, July 23, 1945
CWC – Stafford System	All of Connecticut	Incorporating the Stafford Springs Aqueduct Company, April 17, 1883
CWC – Unionville System	All of Connecticut	House Joint Resolution No. 50 – An Act Incorporating the Unionville Water Company, January 1893, as amended
CWC – Western System	All of Connecticut	Incorporating the Broad Brook Water Company, 1849, as amended; Incorporating the Rockville Aqueduct Company, June 27, 1866; as amended; Incorporating the Windsor Locks Water Company, March 31, 1887, as amended; Incorporating the Thompsonville Water Company, March 24, 1880, as amended; House Joint Resolution 112 - Incorporating the Village Water Company of Suffield. May 3, 1895; Incorporating the Suffield Water Company, May 19, 1915, as amended; Substitute for House Joint Resolution 318 – Incorporating the Somers Water Company, June 30, 1905, as amended; Incorporating the Ellington Water Company, April 1, 1915; House Bill 1087 – Amending the Charter of the Connecticut Water Company, May 22, 1957; Substitute for House Bill 3039 – Concerning the Territory of the Vernon Water Company, May 29, 1968
Hazardville Water Company	East-Central Enfield	House Joint Resolution 515, June 21, 1889, as amended
Kensington Fire District	Kensington	Town Resolution in accordance with CGS Chapter 31, December 7, 1920
Manchester Water Department	Manchester, Glastonbury	Special Act of 1947; Town Charter, 1947
Meriden Water Division	Meriden	Meriden City Charter, Section C7-1

TABLE 4-1
Summary of Enabling Legislation for Community Water Systems Serving >1,000 People

Community Water System	Charter Service Area	Enabling Legislation Reference
Metropolitan District Commission	20-mile radius of Hartford	Charter & Ordinances of the Metropolitan District in Hartford County, CT, as amended
Middletown Water Department	Middletown and surrounding municipalities	CGS Vol. 5, July 20, 1865; Middletown Common Council Action, September 1865
New Britain Water Department	New Britain and surrounding municipalities	Municipal Special Charter, June 4, 1857; Special Acts, 1857-1860
Portland Water Department	Portland	Special Act 24, June 30,1943
Salmon Brook District Water Department	Eastern Granby	Legislation 1872; PURA Docket 86-06-10
South Central Connecticut Regional Water Authority	New Haven, West Haven, Branford, Hamden, North Branford, Orange, Milford, Woodbridge, Bethany	Special Act 77-98, 1977, as amended; Incorporating the New Haven Water Company, 1849, as amended; Incorporating the Fair Haven Water Company, July 2, 1861, as amended; Incorporating the West Haven Water Company, March 8, 1881, as amended; Incorporating the Branford Electric Company, March 28, 1895, as amended; Incorporating the Mount Carmel Water Company, March 26, 1878; Incorporating the North Branford Light, Water, and Power Company, June 29, 1909, as amended; Incorporating the Orange Water Company, August 29, 1911; Incorporating the Milford Water Company, May 5, 1893, as amended
Southington Water Department	Southington	Water Works of Southington Water Company acquired by Southington Water Works by 1901 Special Act, July 14, 1901
Tariffville Fire District Water Department	Tariffville area of Simsbury	Special Act 272, January 1, 1939
Tolland Water Department	Tolland	Town Charter Chapter 49, November 28, 1978
University of Connecticut - Main Campus	University and adjacent areas	Not reported (State facility established in 1881)
Valley Water Systems, Inc.	Plainville and northern portion of Southington	House Joint Resolution 109 – Incorporating the Plainville Water Company, February 27, 1884
Wallingford Water Department	Wallingford	CGS Special act of 1881 revised Borough of Wallingford Charter, Sections 58-70, March 29, 1881; CGS Special Act 495 Incorporating Yalesville Water Company, 1909
Windham Water Works	Windham Mansfield, Lebanon	Consolidation Ordinance of Town of Windham and City of Willimantic, Chapter VII, December 15, 1982

TABLE 4-1
Summary of Enabling Legislation for Community Water Systems Serving >1,000 People

Community Water System	Charter Service Area	Enabling Legislation Reference
Worthington Fire District	Worthington Ridge area	State Legislative Act 278, January 1, 1921

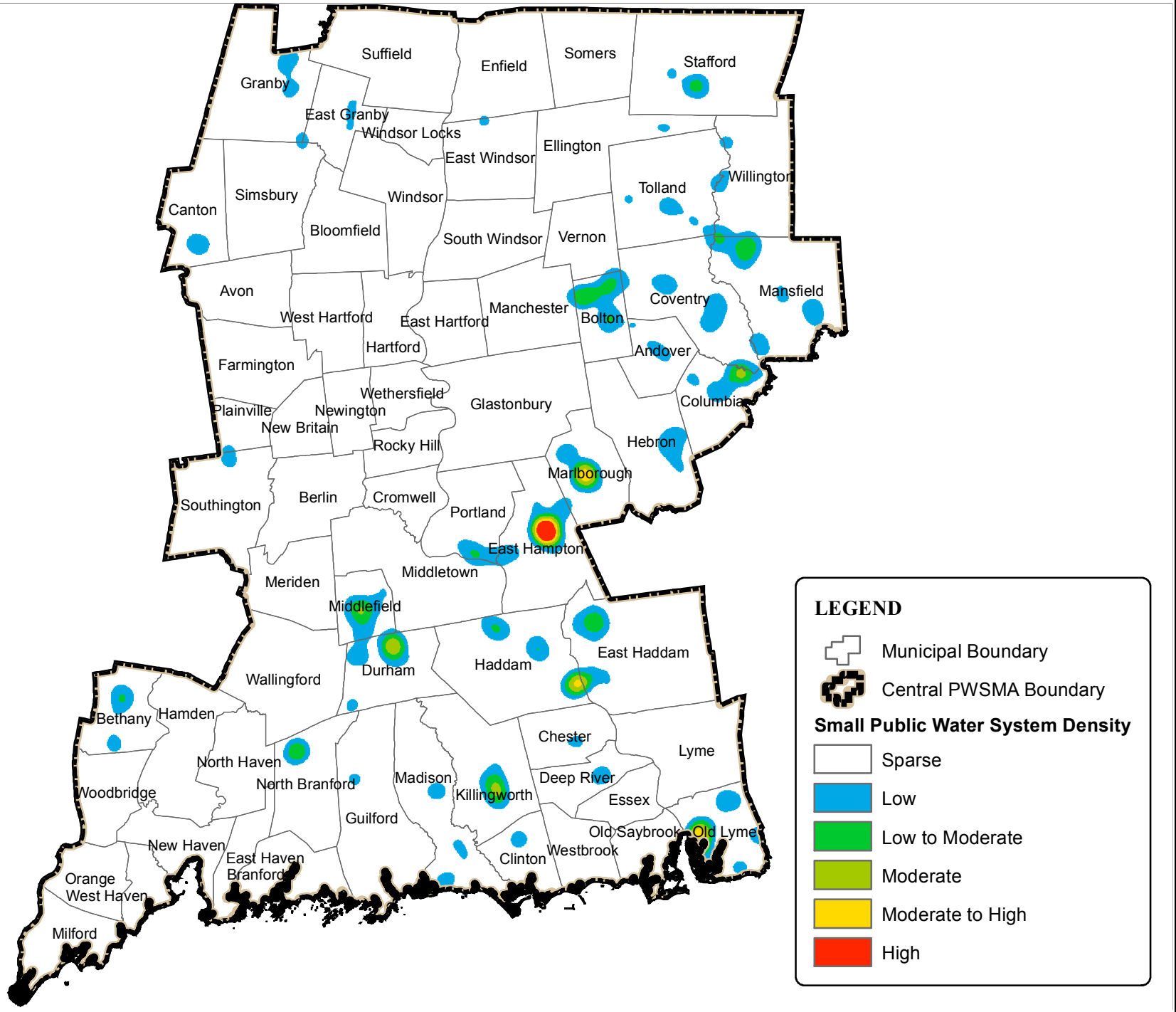
Source: Individual water supply plans, specific legislative and municipal documents, and/or personal communications.

The majority of the enabling legislation for the larger water systems falls under a special act or municipal charter, some of which date to the 1800s. Municipal charters are also commonly used for establishing water servicing rights for municipalities. However, one or more organizations may have been superseded by the current charter. As an example, in Wallingford, the initial water service areas were granted to the Borough of Wallingford and the Yalesville Water Company in 1881 and 1909 by Special Acts of the State Legislature, the first operating by public board and the latter a private company. Yalesville Water Company was purchased in 1946. The Borough and Town governments consolidated in 1958 with the Water Department under the jurisdiction of a new Board of Water Commissioners (which became the Public Utility Commission in 1962).

The 34 CWS serving greater than 1,000 people have a customer base that spans 57 municipalities, six of which are the urban centers of the region. Service in the remaining municipalities is generally limited to smaller areas where higher density development is prevalent. It is interesting to note that the majority of municipalities that are not serviced by CWS serving greater than 1,000 people lie on the eastern edge of the Central PWSMA.

Figure 4-1 presents the density of public water systems serving less than 1,000 people in the Central PWSMA, including both Community and Non-Community systems. The greatest concentration of small public water systems in the Central PWSMA is in East Hampton. Moderate-density clusters of small public water systems also exist in Columbia, Durham, East Haddam, Haddam, Killingworth, Marlborough, Middlefield, and Old Lyme. Low-to-moderate density clusters of small public water systems can be found in Bethany, Bolton, Mansfield, North Branford, Portland, Stafford, and Willington.

Also of interest, Connecticut General Statute 7-234, as passed in 1967, reaffirmed the authority of municipalities to provide water service and further established that any town, city, borough, or district organized for municipal purposes may acquire, construct, and operate a water system where there are no existing private waterworks systems or where private owners of existing systems are willing to sell. Then, in the early 1980s, Connecticut General Statute 16-262m was passed, providing construction specifications for CWS, including the requirement to obtain a certificate of public convenience and necessity from the Department of Public Utility Control (now PURA) for any construction or expansion of a water supply system. This certificate process was revised in 1984 to provide the opportunity for DPH to participate in the process, and revised again through Public Act 16-197 to have DPH govern the process with minimal involvement of PURA. The majority of CWS were created prior to 1984 and therefore predate the Act.



SOURCE(S):
CT DPH; CT DEEP

N

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

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5.0 POPULATION AND PROJECTED GROWTH

5.1 Municipal Classifications and Community Water System Population

The Central PWSMA contains 70 municipalities with a wide diversity of land area, total population, average household size, and population density. Such information is necessary to provide a baseline from which to project population and water demands into the future. A summary of municipal characteristics is presented in Table 5-1.

TABLE 5-1
Summary of Municipal Characteristics for Central PWSMA

Municipality	Land Area (Sq. Mi)	Population Density	2014 Population Estimate	Average Household Size (2010)
Andover	15.5	211.1	3,272	2.65
Avon	23.1	797.4	18,421	2.54
Berlin	26.4	780.7	20,610	2.54
Bethany	21.0	263.4	5,531	2.82
Bloomfield	26.0	800.7	20,819	2.32
Bolton	14.4	343.9	4,952	2.60
Branford	22.0	1,283.0	28,225	2.18
Canton	24.6	420.5	10,345	2.46
Chester	16.0	269.8	4,316	2.25
Clinton	16.3	805.5	13,129	2.49
Columbia	21.4	254.9	5,454	2.53
Coventry	37.7	329.4	12,419	2.59
Cromwell	12.4	1,138.1	14,113	2.36
Deep River	13.6	336.1	4,571	2.37
Durham	23.6	311.4	7,348	2.81
East Granby	17.5	297.8	5,212	2.50
East Haddam	54.3	168.1	9,127	2.51
East Hampton	35.6	361.6	12,874	2.54
East Hartford	18.0	2,835.2	51,033	2.50
East Haven	12.3	2,361.3	29,044	2.46
East Windsor	26.3	434.3	11,423	2.30
Ellington	34.1	463.2	15,795	2.49
Enfield	33.4	1,336.1	44,626	2.43
Essex	10.4	635.8	6,612	2.27
Farmington	28.1	912.0	25,627	2.38
Glastonbury	51.4	676.1	34,754	2.59
Granby	40.7	277.9	11,310	2.66
Guilford	47.2	474.9	22,413	2.53
Haddam	44.0	189.4	8,333	2.59
Hamden	32.8	1,872.6	61,422	2.37
Hartford	17.3	7,208.4	124,705	2.57
Hebron	36.9	259.2	9,564	2.84
Killingworth	35.3	183.9	6,490	2.64
Lyme	31.9	74.9	2,389	2.32

TABLE 5-1
Summary of Municipal Characteristics for Central PWSMA

Municipality	Land Area (Sq. Mi)	Population Density	2014 Population Estimate	Average Household Size (2010)
Madison	36.2	504.4	18,259	2.60
Manchester	27.3	2,128.4	58,106	2.32
Mansfield	44.5	583.8	25,977	2.44
Marlborough	23.3	276.0	6,430	2.75
Meriden	23.7	2,544.0	60,293	2.50
Middlefield	12.7	348.3	4,424	2.54
Middletown	40.9	1,150.2	47,043	2.21
Milford	22.6	2,361.0	53,358	2.41
New Britain	13.3	5,479.5	72,878	2.49
New Haven	18.9	6,893.2	130,282	2.43
Newington	13.2	2,324.6	30,685	2.40
North Branford	24.9	575.2	14,322	2.64
North Haven	20.8	1,149.5	23,909	2.61
Old Lyme	23.1	327.9	7,575	2.39
Old Saybrook	15.0	681.1	10,217	2.38
Orange	17.2	811.3	13,955	2.71
Plainville	9.7	1,835.2	17,801	2.32
Portland	23.4	403.6	9,444	2.45
Rocky Hill	13.5	1,488.4	20,094	2.28
Simsbury	33.9	707.2	23,975	2.64
Somers	28.3	399.4	11,303	2.73
South Windsor	28.0	922.3	25,823	2.58
Southington	36.0	1,217.1	43,815	2.54
Stafford	58.0	204.8	11,881	2.50
Suffield	42.2	374.7	15,814	2.55
Tolland	39.7	374.6	14,872	2.81
Vernon	17.7	1,644.0	29,098	2.22
Wallingford	39.0	1,155.7	45,074	2.46
West Hartford	22.0	2,878.4	63,324	2.42
West Haven	10.8	5,083.8	54,905	2.50
Westbrook	15.7	439.6	6,902	2.32
Wethersfield	12.4	2,132.7	26,446	2.36
Willington	33.3	178.2	5,934	2.48
Windsor	29.6	982.1	29,069	2.54
Windsor Locks	9.0	1,396.1	12,565	2.38
Woodbridge	18.8	474.7	8,925	2.67
Total	**1,820.1**	**945.6**	**1,721,055**	

Sources: Land Area: U.S. Census Bureau
2014 Population Estimate: Connecticut Department of Public Health
Average Household Size: 2010 U.S. Census

In order to clarify the analysis presented herein, the municipalities have been grouped by MMI into three classifications: urban, suburban, and rural as presented in Table 5-2. These classifications were determined based on population density. The general approach used in the municipal classification system is as follows: (1) urban – greater than 1,000 persons per square mile; (2) suburban – between

100 and 1,000 persons per square mile; and (3) rural – less than 100 persons per square mile. For purposes of trend analysis, municipalities are not shifted between classifications based on slight changes in density.

TABLE 5-2
Municipal Classification for Central PWSMA

Rural	Suburban		Urban
Lyme	Andover	Hebron	Branford
	Avon	Killingworth	Cromwell
	Berlin	Madison	East Hartford
	Bethany	Mansfield	East Haven
	Bloomfield	Marlborough	Enfield
	Bolton	Middlefield	Hamden
	Canton	North Branford	Hartford
	Chester	Old Lyme	Manchester
	Clinton	Old Saybrook	Meriden
	Columbia	Orange	Middletown
	Coventry	Portland	Milford
	Deep River	Simsbury	New Britain
	Durham	Somers	New Haven
	East Granby	South Windsor	Newington
	East Haddam	Stafford	North Haven
	East Hampton	Suffield	Plainville
	East Windsor	Tolland	Rocky Hill
	Ellington	Westbrook	Southington
	Essex	Willington	Vernon
	Farmington	Windsor	Wallingford
	Glastonbury	Woodbridge	West Hartford
	Granby		West Haven
	Guilford		Wethersfield
	Haddam		Windsor Locks

5.2 Historical Population

To fully evaluate the population projections for the region, it is necessary to understand past population figures and trends. Historical population figures are shown in Table 5-3. This data is summarized graphically in Figure 5-1. The historical population trends show consistent growth throughout the region until the 1980s and 1990s. At that time, the urban areas began to lose population while the suburban and rural municipalities, for the most part, kept increasing.

TABLE 5-3
Historical and Projected Population by Municipality for the Central PWSMA

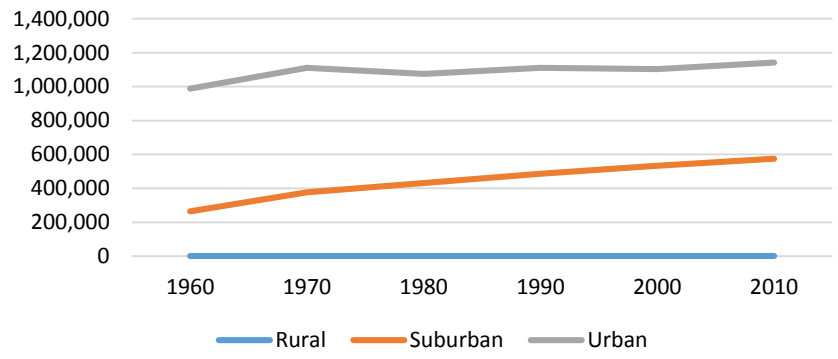
Municipality	Classification	1960	1970	1980	1990	2000	2010
Andover	Suburban	1,771	2,099	2,144	2,540	3,036	3,303
Avon	Suburban	5,273	8,352	11,201	13,937	15,832	18,098
Berlin	Suburban	11,250	14,149	15,121	16,787	18,215	19,866
Bethany	Suburban	2,384	3,857	4,330	4,608	5,040	5,563
Bloomfield	Suburban	13,613	18,301	18,608	19,483	19,587	20,486
Bolton	Suburban	2,933	3,691	3,951	4,575	5,017	4,980
Branford	Urban	16,610	20,444	23,363	27,603	28,683	28,026
Canton	Suburban	4,783	6,868	7,635	8,268	8,840	10,292
Chester	Suburban	2,520	2,982	3,068	3,417	3,743	3,994
Clinton	Suburban	4,166	10,267	11,195	12,767	13,094	13,260
Columbia	Suburban	2,163	3,129	3,386	4,510	4,971	5,485
Coventry	Suburban	6,356	8,140	8,895	10,063	11,504	12,435
Cromwell	Urban	6,780	7,400	10,265	12,286	12,871	14,005
Deep River	Suburban	2,968	3,690	3,994	4,332	4,610	4,629
Durham	Suburban	3,096	4,489	5,143	5,732	6,627	7,388
East Granby	Suburban	2,434	3,532	4,102	4,302	4,745	5,148
East Haddam	Suburban	3,637	4,676	5,621	6,676	8,333	9,126
East Hampton	Suburban	5,403	7,078	8,572	10,428	13,352	12,959
East Hartford	Urban	43,977	57,583	52,563	50,452	49,575	51,252
East Haven	Urban	21,388	25,120	25,028	26,144	28,189	29,257
East Windsor	Suburban	7,500	8,513	8,925	10,081	9,818	11,162
Ellington	Suburban	5,580	7,703	9,711	11,197	12,921	15,602
Enfield	Urban	31,464	46,189	42,695	45,532	45,212	44,654
Essex	Suburban	4,057	4,911	5,078	5,904	6,505	6,683
Farmington	Suburban	10,813	14,390	16,407	20,608	23,641	25,340
Glastonbury	Suburban	14,497	20,651	24,327	27,901	31,876	34,427
Granby	Suburban	4,968	6,150	7,956	9,369	10,347	11,282
Guilford	Suburban	7,913	12,033	17,375	19,848	21,398	22,375
Haddam	Suburban	3,466	4,934	6,383	6,769	7,157	8,346
Hamden	Urban	41,056	49,357	51,071	52,434	56,913	60,960
Hartford	Urban	162,178	158,017	136,392	139,739	121,578	124,775
Hebron	Suburban	1,819	3,815	5,453	7,079	8,610	9,686
Killingworth	Suburban	1,098	2,435	3,976	4,814	6,018	6,525
Lyme	Rural	1,183	1,484	1,822	1,949	2,016	2,406
Madison	Suburban	4,567	9,768	14,031	15,485	17,858	18,269
Manchester	Urban	42,102	47,994	49,761	51,618	57,740	58,241
Mansfield	Suburban	14,638	19,994	20,634	21,103	20,720	26,543
Marlborough	Suburban	1,961	2,991	4,746	5,513	5,709	6,404
Meriden	Urban	51,850	55,959	57,118	59,479	58,244	60,868
Middlefield	Suburban	3,255	4,132	3,796	3,925	4,203	4,425
Middletown	Urban	33,250	36,924	39,040	42,762	43,167	47,648
Milford	Urban	41,662	50,858	50,898	49,938	52,305	52,759
New Britain	Urban	82,201	83,441	73,840	75,491	71,538	73,206
New Haven	Urban	152,048	137,707	126,109	130,474	123,626	129,779
Newington	Urban	17,664	26,037	28,841	29,208	29,306	30,562

TABLE 5-3
Historical and Projected Population by Municipality for the Central PWSMA

Municipality	Classification	1960	1970	1980	1990	2000	2010
North Branford	Suburban	6,771	10,778	11,554	12,996	13,906	14,407
North Haven	Urban	15,935	22,194	22,080	22,247	23,035	24,093
Old Lyme	Suburban	3,068	4,964	6,159	6,535	7,406	7,603
Old Saybrook	Suburban	5,274	8,468	9,287	9,552	10,367	10,242
Orange	Suburban	8,547	13,524	13,237	12,830	13,233	13,956
Plainville	Urban	13,149	16,733	16,401	17,392	17,328	17,716
Portland	Suburban	7,496	8,812	8,383	8,418	8,732	9,508
Rocky Hill	Urban	7,404	11,103	14,559	16,554	17,966	19,709
Simsbury	Suburban	10,138	17,475	21,161	22,023	23,234	23,511
Somers	Suburban	3,702	6,893	8,473	9,108	10,417	11,444
South Windsor	Suburban	9,460	15,553	17,198	22,090	24,412	25,709
Southington	Urban	22,797	30,946	36,879	38,518	39,728	43,069
Stafford	Suburban	7,476	8,680	9,268	11,091	11,307	12,087
Suffield	Suburban	6,779	8,634	9,294	11,427	13,552	15,735
Tolland	Suburban	2,950	7,857	9,694	11,001	13,146	15,052
Vernon	Urban	16,961	27,237	27,974	29,841	28,063	29,179
Wallingford	Urban	29,920	35,714	37,274	40,822	43,026	45,135
West Hartford	Urban	62,382	68,031	61,301	60,110	63,589	63,268
West Haven	Urban	43,002	52,851	53,184	54,021	52,360	55,564
Westbrook	Suburban	2,399	3,820	5,216	5,414	6,292	6,938
Wethersfield	Urban	20,561	26,662	26,013	25,651	26,271	26,668
Willington	Suburban	2,005	3,755	4,694	5,979	5,959	6,041
Windsor	Suburban	19,467	22,502	25,204	27,817	28,237	29,044
Windsor Locks	Urban	11,411	15,080	12,190	12,358	12,043	12,498
Woodbridge	Suburban	7,673	7,673	7,761	7,924	8,983	8,990

Source: U.S. Census Bureau 1960 through 2010

Figure 5-1: Population Growth by Municipality Classification: Central PWSMA



A brief overview of population trends follows. It is divided into urban, suburban, and rural categories.

Urban

The urban areas of the Central region include New Haven, Hartford, and their denser neighboring communities, as well as a number of other densely settled towns along the I-91 corridor, giving the urban communities the largest population share in the region by a wide margin. In general, the population of these cities and towns saw little growth from the 1970s to 2000. This was driven by population losses in Hartford and New Haven, which combined lost over 70,000 residents between 1960 and 2000. However, from 2000 to 2010, this trend reversed, and both Hartford and New Haven added residents.

Suburban

In line with suburban growth seen across the nation, the Central region's suburban population has risen steadily over the past half century, with a particularly sharp rise in the 1960s. This growth has continued through the most recent decennial Census. Some communities (e.g. Avon and Killingworth) have seen significant growth in population, nearly doubling since 1980.

Rural

In the past several decades, rural communities have seen a noticeable population increase. Only one community, Lyme, is classified as rural in this region. Its population has doubled since 1960, but it remains a very small fraction of the region's overall population.

5.3 Municipal Population Projections

According to population projections from the Connecticut DOT, the regional population is projected to experience steady growth across urban, suburban, and rural areas. Urban areas are projected to experience modest but steady growth over the next three decades, continuing the trend seen since 2000. Suburban municipalities are projected to grow at more than twice the rate of the urban group, increasing by 20% by 2040. The rural category (Lyme) is projected to experience moderate growth. Table 5-4 presents population projections for the Central PWSMA. Figure 5-2 presents these future projections by municipal classification for the Central PWSMA.

TABLE 5-4
Population Projections by Municipality for the Central PWSMA

Municipality	Classification	2010 Pop.	CT SDC 2015 Proj.	CT SDC 2020 Proj.	CT SDC 2025 Proj.	CT DOT 2020 Proj.	CT DOT 2030 Proj.	CT DOT 2040 Proj.
Andover	Suburban	3,303	3,354	3,382	3,398	3,651	3,990	4,322
Avon	Suburban	18,098	18,904	19,665	20,403	20,167	22,184	24,161
Berlin	Suburban	19,866	20,531	21,017	21,390	21,290	22,678	24,038
Bethany	Suburban	5,563	5,761	5,909	6,040	5,933	6,294	6,648
Bloomfield	Suburban	20,486	20,846	21,084	21,215	21,049	21,598	22,136
Bolton	Suburban	4,980	4,953	4,882	4,794	5,289	5,590	5,885
Branford	Urban	28,026	27,764	27,346	26,718	29,425	30,789	32,126
Canton	Suburban	10,292	10,846	11,279	11,653	11,089	11,866	12,628
Chester	Suburban	3,994	3,996	3,973	3,946	4,272	4,543	4,809
Clinton	Suburban	13,260	13,125	12,841	12,417	13,880	14,484	15,076
Columbia	Suburban	5,485	5,665	5,793	5,875	6,115	6,729	7,331

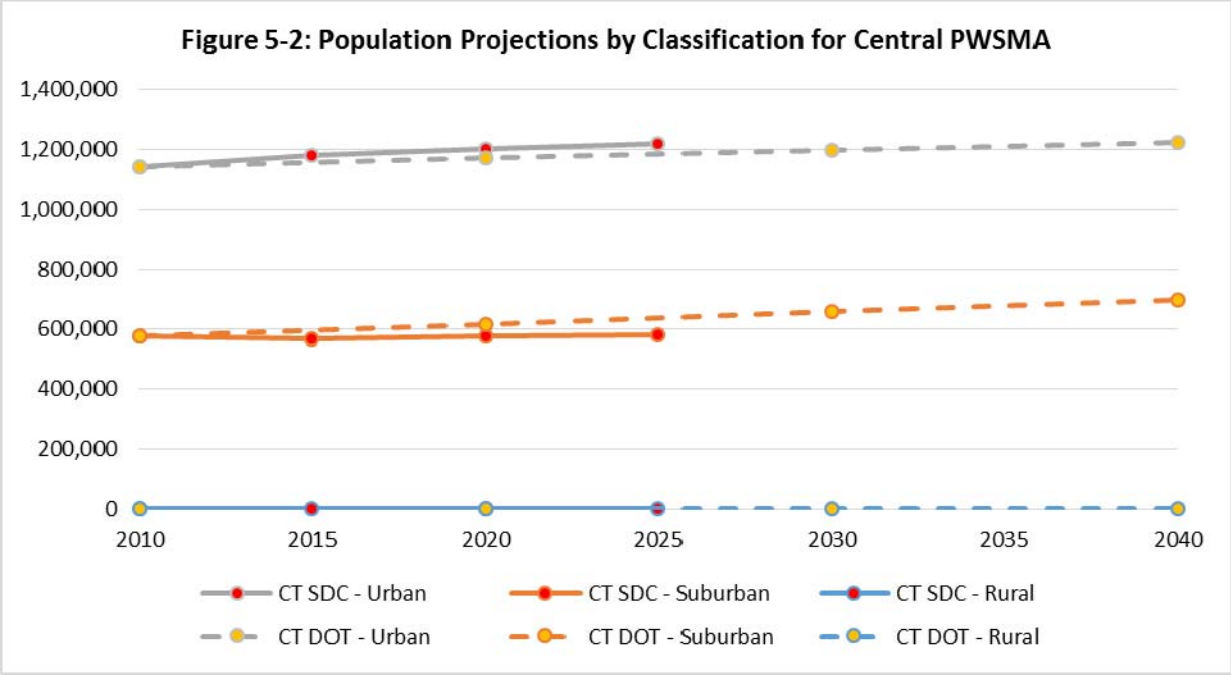
TABLE 5-4
Population Projections by Municipality for the Central PWSMA

Municipality	Classification	2010 Pop.	CT SDC 2015 Proj.	CT SDC 2020 Proj.	CT SDC 2025 Proj.	CT DOT 2020 Proj.	CT DOT 2030 Proj.	CT DOT 2040 Proj.
Coventry	Suburban	12,435	12,780	13,024	13,188	13,497	14,532	15,547
Cromwell	Urban	14,005	14,470	14,853	15,169	15,127	16,221	17,293
Deep River	Suburban	4,629	4,581	4,488	4,346	4,820	5,006	5,188
Durham	Suburban	7,388	7,623	7,803	7,968	8,062	8,719	9,363
East Granby	Suburban	5,148	5,270	5,341	5,359	5,462	5,768	6,068
East Haddam	Suburban	9,126	9,341	9,463	9,530	10,178	11,203	12,208
East Hampton	Suburban	12,959	12,740	12,693	12,392	14,275	15,558	16,815
East Hartford	Urban	51,252	52,305	53,383	54,296	51,471	51,608	51,704
East Haven	Urban	29,257	29,696	30,053	30,257	30,526	31,763	32,975
East Windsor	Suburban	11,162	11,879	12,542	13,095	11,833	12,487	13,128
Ellington	Suburban	15,602	16,878	18,019	19,088	17,369	19,092	20,781
Enfield	Urban	44,654	43,570	42,302	40,775	45,242	45,815	46,377
Essex	Suburban	6,683	6,644	6,562	6,442	7,165	7,635	8,095
Farmington	Suburban	25,340	26,092	26,688	27,153	28,020	30,633	33,194
Glastonbury	Suburban	34,427	35,278	35,915	36,554	37,457	40,411	43,306
Granby	Suburban	11,282	11,534	11,695	11,826	12,280	13,253	14,206
Guilford	Suburban	22,375	22,481	22,426	22,167	23,875	25,338	26,771
Haddam	Suburban	8,346	8,784	9,128	9,423	8,935	9,509	10,072
Hamden	Urban	60,960	63,231	65,986	68,779	63,927	66,820	69,655
Hartford	Urban	124,775	125,999	126,656	126,185	126,711	127,921	128,768
Hebron	Suburban	9,686	9,979	10,185	10,376	10,956	12,194	13,407
Killingworth	Suburban	6,525	6,608	6,618	6,582	7,290	8,036	8,767
Lyme	Rural	2,406	2,556	2,682	2,780	2,581	2,752	2,919
Madison	Suburban	18,269	18,133	18,036	17,782	19,540	20,780	21,995
Manchester	Urban	58,241	60,815	63,457	65,588	60,785	63,265	65,696
Mansfield	Suburban	26,543	26,967	27,479	28,096	28,316	30,044	31,738
Marlborough	Suburban	6,404	6,580	6,686	6,761	6,901	7,386	7,861
Meriden	Urban	60,868	62,067	63,141	63,925	61,993	63,090	64,165
Middlefield	Suburban	4,425	4,477	4,483	4,479	4,614	4,798	4,978
Middletown	Urban	47,648	49,482	51,373	52,922	50,230	52,748	55,215
Milford	Urban	52,759	53,062	53,039	52,658	53,317	53,861	54,394
New Britain	Urban	73,206	74,554	76,017	77,358	76,606	79,906	82,702
New Haven	Urban	129,779	135,175	140,446	144,711	130,391	130,926	131,408
Newington	Urban	30,562	31,487	32,301	33,031	31,078	31,581	32,074
North Branford	Suburban	14,407	14,469	14,378	14,211	15,263	16,098	16,916
North Haven	Urban	24,093	24,579	24,965	25,307	24,697	25,286	25,863
Old Lyme	Suburban	7,603	7,576	7,473	7,308	8,036	8,458	8,872
Old Saybrook	Suburban	10,242	9,993	9,640	9,226	10,529	10,808	11,082
Orange	Suburban	13,956	14,242	14,450	14,680	14,172	14,382	14,588
Plainville	Urban	17,716	18,145	18,498	18,760	18,111	18,496	18,873
Portland	Suburban	9,508	9,815	10,017	10,159	9,846	10,175	10,498
Rocky Hill	Urban	19,709	20,556	21,341	21,982	21,254	22,760	24,236
Simsbury	Suburban	23,511	23,343	23,208	22,854	24,216	24,903	25,577
Somers	Suburban	11,444	10,774	10,402	10,278	12,335	13,204	14,056
South Windsor	Suburban	25,709	26,089	26,172	26,112	28,262	30,751	33,191

TABLE 5-4
Population Projections by Municipality for the Central PWSMA

Municipality	Classification	2010 Pop.	CT SDC 2015 Proj.	CT SDC 2020 Proj.	CT SDC 2025 Proj.	CT DOT 2020 Proj.	CT DOT 2030 Proj.	CT DOT 2040 Proj.
Southington	Urban	43,069	44,295	45,141	45,806	44,926	46,737	48,511
Stafford	Suburban	12,087	12,381	12,585	12,692	12,933	13,758	14,566
Suffield	Suburban	15,735	15,768	15,766	15,778	17,667	19,551	21,397
Tolland	Suburban	15,052	15,682	16,191	16,672	16,659	18,226	19,762
Vernon	Urban	29,179	29,916	30,658	31,096	29,541	29,894	30,240
Wallingford	Urban	45,135	46,033	46,699	47,104	47,493	49,792	52,045
West Hartford	Urban	63,268	63,261	63,007	62,850	63,858	64,433	64,997
West Haven	Urban	55,564	56,172	56,739	57,064	55,961	56,308	56,620
Westbrook	Suburban	6,938	7,187	7,365	7,498	7,455	7,959	8,453
Wethersfield	Urban	26,668	27,051	27,342	27,636	26,777	26,873	26,959
Willington	Suburban	6,041	6,245	6,543	6,763	6,445	6,839	7,225
Windsor	Suburban	29,044	12,781	12,997	13,152	30,196	31,319	32,420
Windsor Locks	Urban	12,498	29,455	29,700	29,775	12,590	12,680	12,768
Woodbridge	Suburban	8,990	8,906	8,819	8,670	9,359	9,719	10,071

Source: U.S. Census Bureau 2010; Population Projections: Connecticut State Data Center (SDC) and Connecticut Department of Transportation (DOT)



A brief overview of the DOT population trends follows. It is divided into urban, suburban, and rural categories.

Urban

Population projections from the Connecticut DOT project that urban communities will grow by 7.2% up to 2040. Continuing recent trends, Hartford and New Haven are projected to see modest population gains. Smaller urban communities, such as Cromwell, Rocky Hill, Middletown, and Wallingford, are projected to experience higher rates of population growth.

Suburban

Suburban communities are projected to grow at nearly triple the rate of urban communities up to 2040. However, projected growth varies significantly from town to town. Smaller suburban towns located on the fringe of major urban areas such as Suffield, Tolland, Hebron, Columbia, Andover, and Killingworth are projected to see significant population growth over the next 25 years. On the contrary, other communities, such as Old Lyme, Old Saybrook, Simsbury, Bloomfield, and Orange, are projected to see slow growth rates of less than 10% during that period.

Rural

Lyme, the only community classified as rural, is projected to see its recent population growth continue, growing by a projected 21.3% in the next 25 years. However, due to its small population, this constitutes an increase of just 500 residents.

When the DOT projections are compared to those prepared by the Connecticut State Data Center (CTSDC), some discrepancies are noted. For instance, the CTSDC population projections show stronger population growth in core cities such as Hartford and New Haven. In addition, while the DOT projections show continued population growth across all municipalities, the CTSDC projections show several smaller suburban towns losing population up to 2025. This trend is supported by recent population estimates from the U.S. Census Bureau and Connecticut Department of Public Health, which show declining populations in many communities in the region.

When the DOT projections and the CTSDC projections are compiled by classification, similar trends emerge. The urban population projections are slightly higher for the CTSDC projections through 2025 than for the DOT projections, but the opposite is shown for the suburban projections where the DOT projections predict stronger population growth. Rural projections are essentially flat by comparison to the other two classifications, although Lyme is expected to continue growing under both projections. The CTSDC reports that its population projections will likely be updated by the spring of 2017 such that they will be available for the Integrated Report.

5.4 Community Water System Service Population Projections

Table 5-5 presents existing service population and future projections for the CWS serving greater than 1,000 people. Current population data was obtained from a variety of sources, including DPH, system representatives, and individual water supply plans. Projected populations for the 5-, 20-, and 50-year planning periods were taken from individual water supply plans and supplemented by information from system representatives. The 5-year planning period is the 5 years following development of the individual water supply plan. The 20- and 50-year planning periods are 20 and 50 years following the last decennial census. However, given the range in reference years for the current population and projected population, these planning periods do not necessarily correspond. Nevertheless, the service population projections are useful for planning purposes. Service population data for systems serving less than 1,000 people is included as Appendix D.

TABLE 5-5
Existing and Future Projected Population of Community Water Systems Serving >1,000 People

Community Water System	Reference Year and (Data Source)	Estimated Current Population Served	5-Year Projected Population Served	20-Year Projected Population Served	50-Year Projected Population Served
Aquarion Water Company – Simsbury System	2015 (PAR), 2006 (WSP)	15,041	15,258	15,633	16,669
Avon Water Company	2015 (PAR)	11468	12,205	13,097	16,670
Berlin Water Control Commission	2012 (PAR)	5,650	7,345	7,600	8,990
Connecticut Correctional Institute	2016 (DOC)	7,100	7,613	7,613	8,203
Connecticut Valley Hospital	2007 (WSP)	3,413	3,648	4,353	5,763
Cromwell Fire District Water Department	2012 (PAR)	13,500	14,141	15,191	18,330
CWC – Chester System*	2013 (PAR)	8,405	6,027	6,394	8,605
CWC – Collinsville Sys	2013 (PAR)	6,564	5,277	5,667	7,683
CWC – Guilford System	2013 (PAR)	59,953	40,980	43,483	58,727
CWC – Hebron Center	2013 (PAR)	851	NR	NR	NR
CWC – Legend Hill Condominium Association	2015 (DPH)	1,368	NR	NR	NR
CWC – Point O' Woods	2013 (PAR)	1,509	939	953	1,027
CWC – Sound View	2013 (PAR)	2,674	1,711	1,736	1,871
CWC – Stafford System	2013 (PAR)	3,703	2,444	2,569	2,823
CWC – Unionville System	2013 (PAR)	22,111	15,983	17,133	23,081
CWC – Western System	2013 (PAR)	126,253	79,076	87,295	117,626
Hazardville Water Company	2015 (PAR)	18,662	18,909	19,374	20,447
Kensington Fire District	2008 (WSP)	7,537	7,762	7,965	9,640
Manchester Water Department	2006 (WSP)	54,425	56,867	61,129	61,845
Meriden Water Division	2012 (PAR)	59,382	60,461	63,800	68,600
Metropolitan District Commission	2012 (PAR)	405,449	410,674	426,315	446,999
Middletown Water Department**	2010 (WSP)	43,282	45,313	47,344	52,188
New Britain Water Department	2006 (WSP)	73,200	75,100	84,600	88,600
Portland Water Department	2005 (WSP)	5,050	5,130	5,307	5,825
Salmon Brook District Water Department	2005 (WSP)	934	939	948	976
SCCRWA	2012 (PAR)	427,864	427,749	452,290	485,274
Southington Water Department	2012 (PAR)	45,220	36,267	37,467	44,667
Tariffville Fire District Water Department	2014 (PAR)	1,350	1,371	1,371	1,371
Tolland Water Department	2015 (PAR)	1,513	1,760	2,022	3,217
University of Connecticut - Main Campus	2015 (PC)	28,480	NR	NR	NR
Valley Water Systems, Inc.	2015 (PAR)	18,600	17,426	18,300	19,175
Wallingford Water Department	2012 (PAR)	41,017	40,137	41,694	46,464
Windham Water Works	2008 (WSP)	21,214	21,871	24,675	26,276
Worthington Fire District	2012 (PAR)	2,800	2,941	3,480	3,600

*These are year-round population estimates
**Projected population based on residential projections in Middletown-Durham permit application
Notes: PAR = PURA annual report; DOC = Department of Corrections data; WSP = water supply plan; WCP = water conservation plan; DPH = Department of Public Health, PC = Personal Communication

5.5 Land Uses and Available Land

5.5.1 Overview of the Central PWSMA

The Central PWSMA is comprised of three Councils of Government (COGs): the Capital Region (CRCOG), South Central (SCRCOG), and the Lower Connecticut River Valley (RiverCOG). It should be noted that COG boundaries in Connecticut changed in 2015, and that the most current Regional Plans of Conservation and Development may not correspond with the current boundaries of planning regions.

CRCOG is the largest COG in the state and includes the following municipalities: Andover, Avon, Berlin, Bloomfield, Bolton, Canton, Columbia, Coventry, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Hebron, Manchester, Mansfield, Marlborough, New Britain, Newington, Plainville, Rocky Hill, Simsbury, Somers, South Windsor, Southington, Stafford, Suffield, Tolland, Vernon, West Hartford, Wethersfield, Willington, Windsor, and Windsor Locks. CRCOG includes both the urbanized core of the Hartford metropolitan region as well as the less densely settled and more suburban towns of Tolland County.

SCRCOG represents New Haven and its surrounding communities, including Bethany, Branford East Haven, Guilford, Hamden, Madison, Meriden, Milford, New Haven, North Branford, North Haven, Orange, Wallingford, West Haven, and Woodbridge. It includes the relatively urbanized communities on the shoreline and I-91 corridor as well as suburbs with a more rural character such as Bethany and Woodbridge.

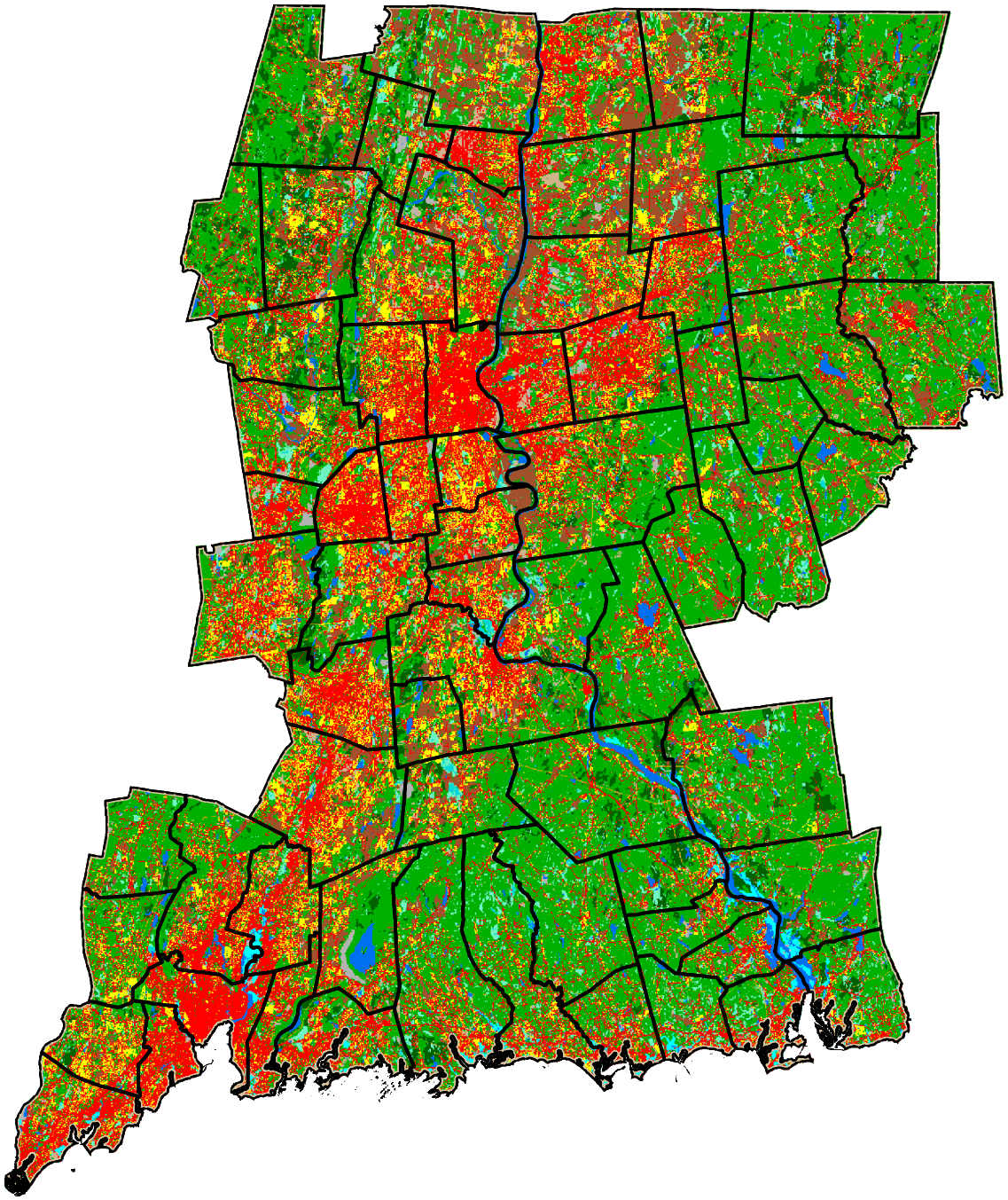
Finally, RiverCOG includes much of Middlesex County as well as Lyme and Old Lyme at the southern end of the Connecticut River. Member towns include Chester, Clinton, Cromwell, Deep River, Durham, East Haddam, East Hampton, Essex, Haddam, Lyme, Killingworth, Middlefield, Middletown, Old Lyme, Portland, and Westbrook. Middletown and Cromwell represent the most urbanized communities of the region. Its shoreline communities also have a denser level of development, while its interior communities are predominately lower-density suburban in character.

The reorganization of COGs in 2015 resulted in the expansion of the CRCOG from 30 to 38 municipalities. An earlier reorganization that took place in 2012 also resulted in the consolidation of RiverCOG from the Midstate and Estuary Regions. As a new regional COG, the RiverCOG does not yet have an adopted Regional Plan of Conservation of Development.

Land cover information for the Central PWSMA is made available through UConn's Center for Land Use Education and Research (CLEAR). Based on its 2010 land cover database, approximately 22% of the region as a whole is developed, with another 7% in agricultural use and the remainder in an undeveloped state.

5.5.2 Land Uses within the Central PWSMA

Based on UConn CLEAR's land cover data, Table 5-6 provides a summary of the land uses within the Central PWSMA. Within the category of undeveloped land, deciduous forests account for the largest category of land cover. Turf and grass (including uses such as sports fields and lawns) and agricultural lands (including fields, pastures, vineyards, and the like) also constitute important classes of land in the region. These land use classes are also presented on Figure 5-3.



LEGEND

- Town Boundary
- WUCC Boundary

2010 Land Cover

- Developed
- Turf and Grass
- Other Grass
- Ag. Field
- Deciduous Forest
- Utility (Forest)
- Coniferous Forest
- Water
- Non-forested Wetland
- Forested Wetland
- Tidal Wetland
- Barren

SOURCE(S):
CLEAR 2006

N

FIGURE 5-3: CENTRAL REGION LAND COVER

WATER SUPPLY ASSESSMENT
CENTRAL PWSMA

LOCATION: STATE OF CONNECTICUT

Map By:	EB
MMI#:	1017-05-02
Original:	6/16/2016
Revision:	7/26/2016
Scale:	1 in = 45,000 ft

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TABLE 5-6
Land Use Categories in the Central PWSMA

Land Use Category	Acres	Percent
Agricultural Field	84,762.9	6.7%
Barren Land	12,879.2	1.0%
Coniferous Forest	68,782.4	5.4%
Deciduous Forest	519,161.8	40.9%
Developed	274,658.2	21.7%
Forested Wetland	40,145.8	3.2%
Non-forested Wetland	3,894.4	0.3%
Other Grasses	28,686.9	2.3%
Tidal Wetland	12,017.9	0.9%
Turf & Grass	107,374.4	8.5%
Utility Corridor	5,007.6	0.4%
Water	111,102.2	8.8%

While almost two-thirds of the region's land is in an undeveloped state, the proportion of developed land in the Central PWSMA is substantially higher than that in the other two regions, especially the Eastern PWSMA. This higher intensity of land use reflects the greater levels of development in the greater Hartford metropolitan area as well as New Haven and the I-91 corridor as a whole.

CRCOG's Regional Plan of Conservation and Development provides greater detail on land uses permitted in the northern part of the region, in addition to broad categories of developed and undeveloped land. Based on an analysis of zoning across the region, approximately 79% of land is designated for residential use, with the remainder divided between approximately 4% for commercial use, 6% for industrial use, 2% for mixed uses, 8% for recreation, and 2% for other uses (e.g. rights-of-way). Much of this residentially zoned land is currently in an undeveloped state, and much of it is undevelopable for reasons ranging from protected conservation status to physical development constraints such as slopes and wetland soils.

5.6 Growth Trends

5.6.1 Housing Permits

As with previous analyses, the Central PWSMA municipalities have been organized into the three classifications of urban, suburban, and rural for this analysis. Data was collected for the 20-year period from 1996 to 2015. This period has been divided into two subgroup periods for comparative analysis: a 10-year span from 1996 to 2005 and a 10-year span from 2006 to 2015, representing the housing boom of the late 1990s and early 2000s and the Great Recession and post-Recession slow recovery. Table 5-7 presents these figures.

TABLE 5-7
Housing Permit Activity in Central PWSMA Municipalities, 1996-2015

Municipality	Classification	1996-2005		2006-2015	
		Total	Avg. Annual	Total	Avg. Annual
Andover	Suburban	193	19	45	5
Avon	Suburban	1262	126	390	39
Berlin	Suburban	1156	116	657	66
Bethany	Suburban	291	29	58	6
Bloomfield	Suburban	746	75	414	41
Bolton	Suburban	187	19	89	9
Branford	Urban	489	49	417	42
Canton	Suburban	748	75	134	13
Chester	Suburban	141	14	283	28
Clinton	Suburban	562	56	108	11
Columbia	Suburban	301	30	88	9
Coventry	Suburban	620	62	311	31
Cromwell	Urban	662	66	323	32
Deep River	Suburban	150	15	35	4
Durham	Suburban	474	47	113	11
East Granby	Suburban	256	26	127	13
East Haddam	Suburban	644	64	204	20
East Hampton	Suburban	902	90	351	35
East Hartford	Urban	81	8	186	19
East Haven	Urban	635	64	160	16
East Windsor	Suburban	529	53	487	49
Ellington	Suburban	1121	112	781	78
Enfield	Urban	549	55	174	17
Essex	Suburban	315	32	88	9
Farmington	Suburban	1279	128	425	43
Glastonbury	Suburban	1387	139	519	52
Granby	Suburban	581	58	112	11
Guilford	Suburban	939	94	297	30
Haddam	Suburban	411	41	215	22
Hamden	Urban	1247	125	175	18
Hartford	Urban	1202	120	612	61
Hebron	Suburban	543	54	138	14
Killingworth	Suburban	427	43	90	9
Lyme	Rural	126	13	33	3
Madison	Suburban	777	78	220	22
Manchester	Urban	1961	196	918	92
Mansfield	Suburban	567	57	222	22
Marlborough	Suburban	386	39	74	7
Meriden	Urban	904	90	247	25
Middlefield	Suburban	140	14	56	6
Middletown	Urban	1866	187	983	98
Milford	Urban	2222	222	2004	200

TABLE 5-7
Housing Permit Activity in Central PWSMA Municipalities, 1996-2015

Municipality	Classification	1996-2005		2006-2015	
		Total	Avg. Annual	Total	Avg. Annual
New Britain	Urban	266	27	370	37
New Haven	Urban	957	96	1867	187
Newington	Urban	710	71	399	40
North Branford	Suburban	494	49	33	3
North Haven	Urban	923	92	138	14
Old Lyme	Suburban	409	41	91	9
Old Saybrook	Suburban	348	35	174	17
Orange	Suburban	381	38	124	12
Plainville	Urban	307	31	215	22
Portland	Suburban	532	53	95	10
Rocky Hill	Urban	946	95	499	50
Simsbury	Suburban	531	53	602	60
Somers	Suburban	426	43	254	25
South Windsor	Suburban	1161	116	354	35
Southington	Urban	1999	200	866	87
Stafford	Suburban	453	45	143	14
Suffield	Suburban	885	89	307	31
Tolland	Suburban	1092	109	200	20
Vernon	Urban	1117	112	948	95
Wallingford	Urban	1554	155	491	49
West Hartford	Urban	454	45	743	74
West Haven	Urban	320	32	120	12
Westbrook	Suburban	387	39	210	21
Wethersfield	Urban	366	37	86	9
Willington	Suburban	186	19	44	4
Windsor	Suburban	575	58	412	41
Windsor Locks	Urban	303	30	200	20
Woodbridge	Suburban	324	32	41	4
	Total Rural	**126**	**13**	**33**	**3**
	Total Suburban	**26,219**	**2,622**	**10,215**	**1,022**
	Total Urban	**22,040**	**2,204**	**13,141**	**1,314**
	Total All	**48,385**	**4,839**	**23,389**	**2,339**

Construction in all categories (urban, suburban, and rural) of towns dropped substantially in the second 10-year period examined, largely driven by the sharp crash in housing starts that accompanied the onset of the recent recession of 2008-2009. Overall, permitting activity dropped by 52%, but the suburban housing market was harder hit, with new housing permits down 61% over the decade. By contrast, urban locations saw a 40% decline in permits, and a few urban locations saw increases in housing.

Urban

As a whole, permitting activity declined in urban locations by nearly 9,000 units over the 10-year period, equating to a 40% decline. Among urban communities, Wethersfield, Meriden, Hamden, and East

Haven were among the communities that saw the largest declines in new housing. However, urban areas also represented some of the strongest growth in housing starts in the region. New Haven, for example, nearly doubled the annual permits issued in the 2006-2015 window, owing to a large boom in multifamily housing. Other municipalities that saw moderate increases in homebuilding in the second 10-year period include Chester, East Hartford, New Britain, Simsbury, and West Hartford.

Suburban

Suburban communities saw larger declines in new home construction compared to urban communities. From 1996-2005, suburban housing permits averaged 2,622 annually. During the second 10-year window, this had declined to just 1,022, a decline of 61%. Only the towns of Simsbury and Chester have seen housing starts grow over the last 10-year period. The sharpest declines occurred in Canton, Clinton, Granby, Hamden, Marlborough, North Branford, North Haven, Tolland, and Woodbridge, where housing starts declined by over 80% over the last 10-year period.

Rural

Lyme, the only rural community in the Central PWSMA, saw housing permits drop sharply since 2006. The town averaged 13 permits annually between 1996 and 2005 and has subsequently seen permitting drop to an average of three permits per year between 2006 and 2015. This constitutes a drop of nearly 80%.

5.6.2 Zoning

Existing zoning information was obtained from local plans of conservation and development and is presented in Table 5-8. The majority of each community is zoned residential with some commercial and industrial zoning prevalent in urban and suburban communities. The majority of smaller communities are zoned primarily residential.

TABLE 5-8
Generalized Zoning

Municipality	Classification	Comment
Andover	Suburban	91% of town is zoned for single-family residential on 1- to 2-acre lots. The small amount of land that is zoned for Business or Industrial is either developed or is constrained.
Avon	Suburban	Zoning is largely residential, but also includes neighborhood business, other commercial, Avon Village Center, Industrial, Office Park, Education Land, Recreation/Open Space, and Agricultural.
Berlin	Suburban	Primarily residential zoning with commercial downtown; limited industry.
Bethany	Suburban	Large lot residential with three small business zones. 3/4 of land is in aquifer protection area or public water supply watershed.
Bloomfield	Suburban	Approx. 76% zoned residential, 24% zoned business.
Bolton	Suburban	Mostly zoned for single-family residential. Business, Industrial, and mixed-use zones are located along Route 6 and 44.
Branford	Urban	36% low-density residential, 34% medium-density residential, 6% high-density residential, 3% multifamily, 5% commercial, 9% industrial, and 7% right-of-way.
Canton	Suburban	Primarily 2- and 4-acre residential north of Route 44/202, with denser mix of residential/business uses to the south.

TABLE 5-8
Generalized Zoning

Municipality	Classification	Comment
Chester	Suburban	Residential zones from Planned Residential Development to 2-acre lots. Also have Commercial District, Controlled Development District, Waterfront Design District, Research and Light Manufacturing District, and Tidal Wetlands District.
Clinton	Suburban	Primary residential zone allows densities of 10-20,000 SF when public water is available, 20-40,000 SF on private wells. Suburban and Rural Residential lots have larger sizes. Also Special Mixed Districts, Downtown Village Zone, Marine Districts, Business, Industrial, and Open Space Districts.
Columbia	Suburban	Commercial and Manufacturing Corridor along Route 6. Majority of Town is Residential Agricultural, with additional protective zones around Columbia Lake.
Coventry	Suburban	Majority is zoned Residential (R-80, R-40, or Lake Residential). 600 acres commercial/retail.
Cromwell	Urban	Residential zones 61%, Business zones 6.6%, Industrial zones 14.7%, Flood Plain District 17.3%.
Deep River	Suburban	Small town with active village center, largely rural residential.
Durham	Suburban	Large majority is zoned for Farm Residential. Significant Heavy Industrial area, followed by small areas of Design Development District, and a strip of commercial and denser residential zones along Main Street.
East Granby	Suburban	39% agricultural, 35% single-family residential, 16% industrial, 4% roads, 2% multifamily, 2% quarry, and 1% business.
East Haddam	Suburban	Predominantly 1- to 4-acre residential zoning with small areas of commercial.
East Hampton	Suburban	95% zoned for residential, 2% for mixed uses, 3% for commercial or industrial.
East Hartford	Urban	Six residential zones, six business zones, and three industrial zones.
East Haven	Urban	Zoning includes Agricultural - Limited Development (for areas without utilities), residential zones from 1 to 12 units per acre, Transitional, Neighborhood Commercial, Central Business, General Commercial, Industrial, Industrial and Business Parks, and Office.
East Windsor	Suburban	The largest zoning district is agricultural, followed by residential. Also large tracts of industrial-zoned land and a business corridor along Route 5/I-91.
Ellington	Suburban	84% residential, 3% commercial, 4% industrial, 8% open space.
Enfield	Urban	74.5% residential, 16.3% industrial, 3.9% business, 0.3% Thompsonville Village Center, 0.2% Special Development.
Essex	Suburban	5 Village Node areas. Predominantly rural residential, with areas of village residential/mixed uses around nodes and along transportation corridors.
Farmington	Suburban	Low-density zoning. 32% residential, 8% business, 14% misc., 32% open space, and 14% vacant land.
Glastonbury	Suburban	Planning areas are split into suburban, fringe suburban, rural, Town Center, Village Center, and Employment area.
Granby	Suburban	Majority Rural Zone (R2A), followed by other rural residential zones. Central commercial district.
Guilford	Suburban	29 zoning districts: 11 residential districts, 6 commercial, shopping center, Service Center West, 2 Transitional and Service Districts, 2 industrial, Marine Recreational, 3 mixed use/conservation/open space, and 2 Post Road Village Districts.

TABLE 5-8
Generalized Zoning

Municipality	Classification	Comment
Haddam	Suburban	Primarily residential zoning.
Hamden	Urban	System of residential (5 zones) and transect/density (5 zones) zoning. Several village centers. Concentration of uses/higher density along Route 10 and 5, with lower-density rural uses to the periphery.
Hartford	Urban	Hartford is currently going through a re-zoning process and plans to adopt form-based regulations.
Hebron	Suburban	11 zoning districts with majority Residential 1 or 2, with small Village Green area.
Killingworth	Suburban	4 zoning districts: commercial, industrial, rural residential, and floodplain.
Lyme	Rural	5 zoning districts: C-40 commercial, RU-120 rural district, RU-80 rural district (majority of Town), and WF-20 Waterfront Business District.
Madison	Suburban	Moderate densities south of I-95, low densities between I-95 and Green Hill Road, and lowest densities north of Green Hill Road.
Manchester	Urban	10 residential zones, 8 business zones, and 9 "other" including form-based zones, flood zone overlays, historic, etc.
Mansfield	Suburban	Predominantly Rural Agricultural Residence 90. Large Institutional zone for UConn campus. 5 residential zones, 10 business zones, Storrs Center Special Design District, R&D Limited Industrial, and Flood Hazard Zones.
Marlborough	Suburban	Residential 69.21%, Commercial/industrial 2.1%, Design Rec 3.0%, Institutional 0.66%, Open Space 22.81%, and 4.55% roads.
Meriden	Urban	26 zones and 6 overlay districts; predominantly residential.
Middlefield	Suburban	13 zoning districts, with the majority in low-density residential.
Middletown	Urban	28 different zoning districts. All residential 74.9%, business 2.7%, industrial 15.1%, and other (Transitional Development, Institutional Development, and Riverfront Recreation) 7.3%.
Milford	Urban	8 zoning types: single-family residential, multifamily residential, mixed use, mixed residential/commercial, business/industrial, commercial, industrial, and open space.
New Britain	Urban	17 zoning districts: 7 residential districts, 4 industrial districts, and 6 business/other districts.
New Haven	Urban	23 zoning districts, which include 6 residential, 9 business, and 3 industrial districts.
Newington	Urban	Residential - single family 48%, residential - multifamily 9%, commercial / industrial / mixed use 25%, public land 4%, right-of-way 14%.
North Branford	Suburban	10 zoning districts: 4 residential (predominantly R-40 and R-80), 3 business, and 3 industrial. Significant land area owned by SCCRWA.
North Haven	Urban	North Haven has 3 residence zones, 1 office zone, 1 limited office zone, 1 limited commercial zone, 3 residence-apartment zones, 1 office-apartment zone, 4 commercial zones, 3 industrial zones (2 light and 1 general), and one elderly housing zone.
Old Lyme	Suburban	15 zoning districts: 2 rural residential, 3 residential, 3 multifamily residential, waterfront business, 3 commercial, light industry, Sound View Village District, and School District.
Old Saybrook	Suburban	16 zoning districts: 7 residential, 4 business, 1 industrial, Marine Commercial, 3 Saybrook Point Districts.
Orange	Suburban	81% zoned for residential, 8% zoned for business. Remaining land is unzoned road or right-of-way.

TABLE 5-8
Generalized Zoning

Municipality	Classification	Comment
Plainville	Urban	Residential 56%, commercial 7%, industrial 21%, tech park 0.35%, flood plain 7%, roads/rights-of-way 9%.
Portland	Suburban	12 zoning districts: 5 residential zones, 3 business, 3 industrial, and a floodplain district.
Rocky Hill	Urban	68% residential, 19% business/industrial, 13% agricultural/floodplain.
Simsbury	Suburban	Residential 90.6%, business 2.6%, industrial 6.8%.
Somers	Suburban	Four zoning districts: Residential A and A-1 (98% of land area), commercial Business (less than 1%), and Industrial (1.3%).
South Windsor	Suburban	Residential zones 82%, business zones 18%.
Southington	Urban	Single-family residential 75%, multifamily residential 8%, business 7%, and 10% industrial. Most of the land is for single-family residential uses.
Stafford	Suburban	12 zoning districts: 5 residential zones, 3 commercial zones, 1 industrial zone, and 3 misc. districts.
Suffield	Suburban	Residential 89%, Industrial 9.5%, Commercial 0.2%, planned development apartment use 0.5%, and village districts 0.4%.
Tolland	Suburban	Residential 91%, commercial/industrial 3%, other 6%.
Vernon	Urban	Residential 72%, business 8%, Rockville Historic District 6%, other 3%, No Zone 12%.
Wallingford	Urban	Wallingford has 4 residence districts (R-18, R-15, R-11, R-6); three rural districts (RU-120, RU-80, RU-40); five multifamily residence districts (RM-40, RM-18, RM-12, RM-11, RM-6); two limited business districts; five commercial districts; a Route 5 district; a housing opportunity district; two industrial districts; an industrial expansion district; an interchange district; a design district; a Tracy Zone; a Downtown Apartment District; and a Quarry Support Overlay Zone.
West Hartford	Urban	The majority of West Hartford's land is zoned for medium to high density residential uses. The town has 6 residence districts; 7 multifamily residence districts; 4 other residence districts; an Elizabeth Park district; 8 business districts; 4 industrial districts, a special development overlay district; a traditional neighborhood design overlay district.
West Haven	Urban	West Haven has 8 residential zones (R1 through R-5, plus RPD, RCPD, and SPD mixed-use zones that permit commercial development.) The City also seven additional non-residential zoning districts.
Westbrook	Suburban	Westbrook has 13 separate zoning districts: 1 commercial boating district; 1 coastal conservation district; 3 commercial districts; 4 residential districts; 1 planned residential development district; 2 industrial districts, and a turnpike interchange district. Northern Westbrook is largely zoned rural residential. South of the railroad, residential uses are more dense.
Wethersfield	Urban	Wethersfield has 14 zones: 6 residential zones, 5 of which are for single-family development and 1 of which is for special residential development; 1 open space development zone; 6 commercial, business, and office zones; and 1 agriculture zone. A large swath of the eastern portion of town lies within the agriculture zone.

TABLE 5-8
Generalized Zoning

Municipality	Classification	Comment
Willington	Suburban	The vast majority of Willington is in the R80 residential zone. Commercial, industrial, community residential, and small, individual neighborhood commercial zones lie alongside I-84 and the Town's other major roadways. An elderly residential zoning area and two recreation/campground zoning areas stand in the midst of the overriding R-80 zone.
Windsor	Suburban	Windsor has six zoning districts for commercial and industrial development with the majority (4,082 acres or 24% of Windsor) zoned for industrial use and warehouses. These industrial and warehouse zones are concentrated primarily in the Day Hill Corporate Area, near the airport, and the northern end of Kennedy Road. Windsor's residential zones allow densities from 1.2 to 3 housing units per acre. Windsor has 7 residential zones that comprise 41% of the Town, an Agricultural zone that comprises 22% of the Town, a PUD that comprises 1% of the Town, 4 business zones that comprise 2% of the Town, 2 industrial zones that comprise 24% of the Town, and one Public/Quasi Public zone that comprises 10% of the Town.
Windsor Locks	Urban	Windsor Locks has three Residence zones (AA, A, B); a Multiple Family Special Development Zone (MFSD); 2 Business Zones (numbered 1 and 2); 3 Industrial Zones (numbered 1, 2, and 3); 2 Downtown Renewal District Zones (Residence and Business); an Airport Interchange Overlay Zone; and a Main Street Overlay Zone.
Woodbridge	Suburban	The vast majority of the Town's land area is located in the Residential A zoning district, which allows for single-family housing on parcels 1.5 acres and larger. Less than a tenth of Woodbridge's land area has other zoning designations, including denser residential zones, a very small business/ industrial zone, a general business district, and two development districts. The Woodbridge Village District is delineated by three zoning designations amenable to commercial and industrial uses: BI (Business and Industrial), DEV1 (Development District 1), and GB (General Business).

Table 5-9 presents information on projected buildout presented in each POCD.

Table 5-9
Municipal Buildout Analyses from Plans of Conservation and Development

Municipality	Classification	Comment
Andover	Suburban	Number of households has increased steadily since 1950. Available land will continue to be subdivided into large-lot SF residential. Lack of affordable housing or rental units keeps out younger people, predicted to become even more of a retirement/bedroom community due to lack of infrastructure. While there are significant amounts of constrained land, there is still ample land available for 1- to 2-acre SF residential lots. POCD notes that Andover cannot afford to continue to grow in this manner.
Avon	Suburban	Low-density suburban community. Higher-than-average growth compared to State, but has slowed over last two decades. Estimated buildout potential of 1,200 more homes.

Table 5-9
Municipal Buildout Analyses from Plans of Conservation and Development

Municipality	Classification	Comment
Berlin	Suburban	High rate of growth for the region (9% from 2000 to 2010). Potential for an additional 1,660 residential lots and a population increase of 5,681.
Bethany	Suburban	Town plans to focus on Responsible Growth, redevelopment of existing sites, and not growing beyond well/septic capacity. Development constrained by lack of water and sewer.
Bloomfield	Suburban	No buildout analysis.
Bolton	Suburban	Potential for continued decreasing population. No buildout analysis.
Branford	Urban	Growth has slowed in Branford, and projections show flat to slight growth. 1,800 acres (13% of land) of residential land is vacant.
Canton	Suburban	Moderate growth is expected to continue, with an increase in retirement-age residents. No buildout analysis.
Chester	Suburban	Relatively low population growth since 1995. 818 acres vacant residential could yield approximately 1,300 lots.
Clinton	Suburban	No buildout analysis, but POCD suggests that the residential market has cooled and regulatory changes (flood hazard mitigation, aquifer protection, etc.) will have an effect on future development.
Columbia	Suburban	2002 Build Out found 4,008 acres (28% of Town's area) of buildable land. Full buildout could yield 1,650 single-family dwellings, for a projected total population of 9,300.
Coventry	Suburban	2008 analysis indicates 2,329 dwellings can be built on average 4.5-acre lots; 3,417 dwellings on average 3 acre lots.
Cromwell	Urban	Three different buildout scenarios are analyzed, with between 6,490 and 7,400 dwelling units possible.
Deep River	Suburban	Rate of housing development has slowed considerably; 3 units per year from 2007 to 2013. Possible decline in population through 2020.
Durham	Suburban	No buildout analysis. Projected slow to moderate growth.
East Granby	Suburban	Potential for another 1,058 housing units for a total of 3,067. At 2.49 persons per dwelling, total population could be 7,640.
East Haddam	Suburban	Potential for 4,091 more dwelling units.
East Hampton	Suburban	37% of land is vacant, could support 3,530 additional housing units.
East Hartford	Urban	After population losses from 1980 to 2000, there was a 3.4% increase in population from 2000 to 2010. Limited vacant land indicates that existing site redevelopment will be more feasible than developing new land.
East Haven	Urban	Potential for a 23% increase in population over year 2000 totals to 34,545.
East Windsor	Suburban	Potential yield of 3,120 more residential building lots.
Ellington	Suburban	Housing growth expected to continue. Full buildout could accommodate 8,465 dwelling units, for an increase in population of 23,788 people.
Enfield	Urban	Potential for 1,825 more residential units, 244,716 SF of commercial, and 16.3 million SF of industrial.
Essex	Suburban	Future growth is expected to be flat. No buildout analysis.
Farmington	Suburban	Estimated buildout of 31,811, or a 21% increase over 2005 population.
Glastonbury	Suburban	No buildout analysis.
Granby	Suburban	No buildout analysis.
Guilford	Suburban	Growth of 4.57% from 2000 to 2010. No buildout analysis.
Haddam	Suburban	Large amounts of open land remaining (vacant or residential underdeveloped), but also heavily constrained.
Hamden	Urban	No buildout analysis.

Table 5-9
Municipal Buildout Analyses from Plans of Conservation and Development

Municipality	Classification	Comment
Hartford	Urban	No buildout analysis - largely built out urban city.
Hebron	Suburban	Up to an additional 2,750 dwelling units, for a maximum capacity population of 17,459.
Killingworth	Suburban	No buildout analysis. Slow growth expected.
Lyme	Rural	19.3% increase from 2000 to 2010, for a total of 2,016. Projected to grow an additional 11.5% in the next 10 years. Residents are aging in place and population is aging. No buildout analysis.
Madison	Suburban	2004 study identified the possibility of 600 to 900 additional units.
Manchester	Urban	No buildout analysis. Slow growth expected.
Mansfield	Suburban	Residential development has been modest, with most recent developments occurring in Storrs. No buildout analysis.
Marlborough	Suburban	Buildout could yield an additional 1,200 to 1,400 dwelling units, for 3,350 to 4,100 additional people. Steady growth expected.
Meriden	Urban	Potential yield of 6,003 additional dwelling units.
Middlefield	Suburban	No buildout analysis. Slow growth anticipated.
Middletown	Urban	Potential yield of 9,342 additional units for an increase of population by 21,485.
Milford	Urban	142 acres of undeveloped residentially-zoned land.
New Britain	Urban	Yield of 1,650 additional dwelling units. Population expected to continue declining.
New Haven	Urban	No buildout analysis - largely built out urban city.
Newington	Urban	Growth has slowed in recent years due to limited land availability - future estimates are not clear. No buildout analysis.
North Branford	Suburban	Potential for an additional 1,364 single-family dwelling units in Town.
North Haven	Urban	Approximately 1,212 additional dwelling units potentially could be built within residential zones, over 721 net buildable acres and 222 under-developed parcels. Outside the residential zones, the town has 851 acres of net buildable land, mostly in industrial zones along the Quinnipiac River.
Old Lyme	Suburban	Population decline over last decade. No buildout analysis.
Old Saybrook	Suburban	Buildout analysis only done to determine estimated future levels of impervious land cover and effect on watershed. Population projected to shrink in coming decades.
Orange	Suburban	Potential yield of 700 additional housing units. Moderate growth projected to continue.
Plainville	Urban	Potential yield of 1,153 residential lots.
Portland	Suburban	No buildout analysis. Slow to moderate growth expected to continue.
Rocky Hill	Urban	No buildout analysis. Slow to moderate growth expected to continue.
Simsbury	Suburban	No buildout analysis.
Somers	Suburban	Potential yield of 6,400 additional housing units, for a total of 9,400 units. Potential for population of 25,900.
South Windsor	Suburban	Buildout analysis done for Main Street only: over 250 new housing units possible under current zoning. Rate of growth has slowed, and town will likely see only small increases in population in the next 10 years.
Southington	Urban	No buildout analysis. Slow to moderate growth expected to continue.

Table 5-9
Municipal Buildout Analyses from Plans of Conservation and Development

Municipality	Classification	Comment
Stafford	Suburban	The analysis indicates there is the potential for an additional 6,762 residential development lots in the Town, for a potential population increase of approximately 17,000 persons.
Suffield	Suburban	No buildout analysis. Slow to moderate growth expected.
Tolland	Suburban	Potential yield of 1,600 additional housing units, with 4,573 additional residents.
Vernon	Urban	No buildout analysis.
Wallingford	Urban	Buildout identifies an additional 3179 potential new dwelling units, largely concentrated in RU-40 and R-18 Districts.
West Hartford	Urban	No buildout analysis included in plan. Modest growth in housing stock expected.
West Haven	Urban	8.3% of the City is classified as vacant or agricultural land. This includes 153 buildable acres. 147 acres of non-residential buildable land are located within the City. The distribution of non-residentially zoned vacant land is heavily concentrated (over 90%) north of I-95.
Westbrook	Suburban	A buildout analysis conducted as part of the planning process found that, under current regulations, Westbrook may eventually be a community of about 4,800 housing units. This estimate is predicated on potential buildout of the 2,225 acres of residentially-zoned land that is free of environmental constraints and is either vacant, oversized, or presently used for other purposes.
Wethersfield	Urban	Most developable land area in Wethersfield has already been committed, the focus in the future should probably be on appropriate redevelopment of existing properties. If recent trends continue, Wethersfield may have about 28,000 people by the year 2040.
Willington	Suburban	Residential - The gross area of vacant residential land in town is approximately 11,900 acres or 53% of the town's 22,500 acres of total land area. Approximately 6,500 acres (about 29% of the town's total land area) is vacant and usable and has the potential to accommodate future development of housing. Assuming an average lot size of 1.85 acres, approximately 3,049 additional dwelling units could be built in the town. This figure represents a 125% increase over the 2,429 dwelling units calculated during Census 2000. Assuming an average number of 2.45 persons per household and full buildout of all "Net Buildable" residential zoned land in town, the potential additional population is 7,470. Added to the Census 2000 population count of 5,959 persons, the future population of Willington is projected to be 13,429 persons. Commercial/Industrial - the gross area of vacant commercial or industrial zoned land in town is approximately 632 acres or 2.8% of the town. Approximately 290 commercial or industrial acres (about 1.3% of the town's total land area) are vacant and usable. The town can expect that this land will accommodate approximately 4,420,000 gross square feet of additional commercial and industrial development. Most of this projected development (63%) would occur in the DI (Designed Industrial) zoned land.
Windsor	Suburban	No built out analysis included. POCD notes that over 4,000 multifamily units have been approved but remain unbuilt. If built, Windsor could experience significant population growth.

Table 5-9
Municipal Buildout Analyses from Plans of Conservation and Development

Municipality	Classification	Comment
Windsor Locks	Urban	The Windsor Locks industrial areas may be close to buildout in the next decade. The Town has very little developable land left for residential use, even though the Town has rezoned new areas for residential use over the past few years. It is unlikely that large numbers of new homes will be built.
Woodbridge	Suburban	Woodbridge has largely been built to the limits allowed by Town development regulations, but opportunities for building new homes and commercial properties still exist. Up to 613 new homes could be developed and approximately 438,000 square feet of additional commercial and industrial space could be constructed in future years.

5.6.3 Conclusions

The population projections indicate that urban municipalities will continue to see population growth over the next 25 years. Recent growth in the core cities of Hartford and New Haven are projected to continue at a modest pace. Continuing the trends of the last 50 years, suburban communities are expected to grow at a moderate rate, adding 125,000 new residents by 2040. However, within suburban communities, growth rates are uneven. Suburban communities with developable land located on the urban periphery are projected to experience the highest growth rates. Municipalities in the Central PWSMA are largely residentially zoned with varying levels of potential buildout possible.

Housing data shows a slow but steady recovery in the regional housing market in the years following the recession of 2008-2009. Urban communities in general have recovered at a faster pace than suburban communities. A handful of municipalities such as Milford, New Haven, West Hartford, and Vernon have exceeded their prerecession permitting activity in 2015. Based on recent data, it is anticipated that in the short term, new home construction will be concentrated in a small number municipalities and will primarily consist of multifamily housing developments.

6.0 STATUS OF WATER SYSTEM PLANNING

6.1 Individual Water System Planning

Table 6-1 presents the status of individual water supply plans for CWS serving greater than 1,000 people in the Central PWSMA. All of the utilities serving more than 1,000 people in the Central PWSMA have submitted water supply plans, and 19 have currently approved plans.

TABLE 6-1
Individual Water Supply Plan (WSP) Status

Community Water System	Date Next WSP Due	Date of Most Recently Approved/Revised WSP	Additional Notes
Aquarion Water Company – Simsbury	2018	2006	Approved 2012
Avon Water Company	2017	2008	Approved 2013
Berlin Water Control Commission	2020	2010	Approved 2014
Connecticut Correctional Institute	2009	2002	Approved 2003
Connecticut Valley Hospital	TBD	2008	Approval Pending
Cromwell Fire District Water Department	TBD	2005	Approved 2008
CWC – Chester System	TBD	2010	Approved 2015
CWC – Collinsville Sys	2016	2010	Modification Pending
CWC – Guilford System	TBD	2010	Approved 2015
CWC – Hebron Center	TBD	2003	Approved 2006
CWC – Legend Hill Condominium Assoc.	TBD	2010	Approved 2015
CWC – Point O' Woods	TBD	2010	Approved 2015
CWC – Sound View	TBD	2010	Approved 2015
CWC – Stafford System	2016	2006	Approved 2008
CWC – Unionville System	2016	2010	Approval Pending
CWC – Western System	2016	2006	Approved 2008
Hazardville Water Company	TBD	2012	Approval Pending
Kensington Fire District	TBD	2009	Approval Pending
Manchester Water Department	2016	2007	Approved 2013
Meriden Water Division	TBD	2007	Approved 2012
Metropolitan District Commission	2018	2008	Approved 2012
Middletown Water Department	TBD	2011	Approval Pending
New Britain Water Department	TBD	2007	Approval Pending
Portland Water Department	TBD	2007	Modification Pending
Salmon Brook District Water Department	TBD	2005	Approval Pending
South Central CT Regional Water Authority	TBD	2009	Approved 2014
Southington Water Department	TBD	2006	Modification Pending
Tariffville Fire District Water Department	TBD	2013	Approved 2014
Tolland Water Department	TBD	2009-2010	Approved 2014
University of Connecticut - Main Campus	2023	2011	Approved 2014
Valley Water Systems, Inc.	TBD	2004	Approval Pending
Wallingford Water Department	TBD	2006	Approved 2007
Windham Water Works	2017	2012	Approved 2012
Worthington Fire District	TBD	2009	Approved 2014

Most of the plans are 5 or more years old from the completion date, with 14 plans more than 10 years old. Additionally, the time from completion to approval is often 5 or more years. This points to a need for a more streamlined review and approval process.

6.2 Municipal Planning

Connecticut General Statute (CGS) 8-23 requires that planning and zoning commissions "*prepare, adopt, and amend a plan of development for the municipality.*" The purpose of a Plan of Conservation and Development is to record the vision and ideals of the municipality with respect to its future growth and direction for both public and private development. The Plan should provide a long-term perspective of the community but also offer guidance for short-term decision making.

Public Act 85-279 amended CGS 8-23 and CGS 22a-42 to require municipal planning and zoning commissions as well as inland wetland agencies to incorporate consideration of existing and potential surface and groundwater source protection in their local plans and regulations. Table 6-2 lists each municipality, its corresponding plan, and the date of the most recent revision to its plan.

TABLE 6-2
Summary of Municipal Plans of Conservation and Development

Municipality	Date of Last Publication / Revision	Comprehensive Planning Horizon	Municipality	Date of Last Publication / Revision	Comprehensive Planning Horizon
Andover	5/16/2016	2015-2025	Manchester	12/17/2012	2012-2020
Avon	9/30/2014	2006-2016	Mansfield	9/8/2015	2015-2025
Berlin	9/1/2013	2013-2023	Marlborough	11/24/2009	2009-2019
Bethany	8/31/2010	2010-2020	Meriden	3/9/2009	2009-2019
Bloomfield	8/152012	2012-2022	Middlefield	6/10/2008	2002-2012
Bolton	10/1/2015	2015-2025	Middletown	5/12/2010	2010-2020
Branford	11/20/2008	2008-2018	Milford	12/1/2012	2012-2022
Canton	5/19/2014	2014-2024	New Britain	12/6/2010	2010-2020
Chester	3/19/2009	2009-2019	New Haven	11/18/2015	2015-2025
Clinton	9/1/2015	2015-2025	Newington	6/9/2010	2010-2020
Columbia	6/27/2016	2016-2026	North Branford	11/19/2009	2009-2019
Coventry	5/1/2010	2010-2020	North Haven	2/22/2005	2005-2015
Cromwell	9/1/2007	2007-2017	Old Lyme	12/28/2010	2010-2020
Deep River	10/15/2015	2015-2025	Old Saybrook	8/1/2014	2006-2016
Durham	7/20/2016	2016-2026	Orange	5/19/2015	2015-2025
East Granby	11/9/2004	2004-2014	Plainville	1/1/2009	2009-2019
East Haddam	8/7/2008	2008-2018	Portland	3/3/2016	2016-2026
East Hampton	6/1/2016	2016-2016	Rocky Hill	6/8/2015	2015-2025
East Hartford	6/25/2014	2014-2024	Simsbury	10/9/2007	2007-2017
East Haven	9/5/2007	2007-2017	Somers	6/11/2015	2015-2025
East Windsor	4/24/2012	2004-2014	South Windsor	6/23/2013	2013-2023
Ellington	9/22/2014	2008-2018	Southington	5/17/2016	2016-2026
Enfield	4/7/2011	2011-2021	Stafford	10/9/2012	2012-2022
Essex	11/12/2015	2015-2025	Suffield	9/20/2010	2010-2020
Farmington	2/22/2008	2007-2017	Tolland	7/1/2011	2009-2019
Glastonbury	1/1/2007	2007-2017	Vernon	10/17/2011	2012-2022

TABLE 6-2
Summary of Municipal Plans of Conservation and Development

Municipality	Date of Last Publication / Revision	Comprehensive Planning Horizon	Municipality	Date of Last Publication / Revision	Comprehensive Planning Horizon
Granby	2/27/2007	2005-2015	Wallingford	6/6/2016	2016-2026
Guilford	7/24/2015	2015-2025	West Hartford	12/1/2008	2009-2019
Haddam	1/24/2008	2008-2018	West Haven	7/13/2004	2004-2014
Hamden	9/22/2009	2004-2014	Westbrook	6/30/2011	2011-2021
Hartford	6/3/2010	2010-2020	Wethersfield	5/7/2013	2013-2023
Hebron	6/10/2014	2014-2024	Willington	2/5/2008	2008-2018
Killingworth	1/1/2008	2008-2018	Windsor	9/29/2015	2015-2025
Lyme	12/14/2015	2015-2025	Windsor Locks	6/18/2007	2007-2017
Madison	10/3/2013	2013-2023	Woodbridge	3/23/2015	2015-2025

Most of the plans are relatively up to date, and the plans do consider public water supply concerns as presented in Table 6-3. However, plans can quickly become outdated as a result of the rapidly changing character of some areas within the region. Within the Central PWSMA, several municipalities are due for an update of their 10-year POCD. The municipalities of Avon, Columbia, Durham, East Granby, East Hampton, East Windsor, Granby, Middlefield, Old Saybrook, North Haven, West Haven, and Willington are currently due or overdue in their POCD update cycle.

TABLE 6-3
Water Supply Comments Addressed in Municipal Plans of Conservation and Development

Town	Water Supply Comments
Andover	No public sewer/water system. Notes that lack of sewer infrastructure impedes large business development. Recommendation to seek infrastructure grants, among other options.
Avon	Served by three private water companies: Avon Water Company (most of Avon), Unionville Water Company (southwest area of Avon), and Connecticut Water Company (western area of Avon). Has public sanitary sewer service, but sends to a treatment plant in neighboring towns.
Berlin	Water supplied by City of New Britain, Cromwell, and Meriden. Has considered developing new water supplies, but has determined that it will not seek self-sufficiency. Also determined that separating from Mattabesset District's sewer system and constructing own treatment plant was not feasible. Recommendation to not expand piped utilities to areas suitable for agriculture and to discourage development in such areas.
Bethany	Regional public water supply watershed. No significant public water or sewer supply due to distance and topography.
Bloomfield	Metropolitan District (MDC) manages public sewer, remaining non-sewered areas are Sewer Avoidance. Water service is MDC, private wells, or neighborhood wells. MDC anticipates they can meet water needs of region for next 10 years.
Bolton	Private wells, but the provision of water service along Route 44 is encouraged should the opportunity arise. Most have private septic. Sewer recently installed near Lower Bolton Lake, discharged to Manchester. All other areas are sewer avoidance.
Branford	South Central Connecticut Regional Water Authority (SCCRWA) provides water to over 8,300 homes, and Town of Branford provides sewer service for 85% of Town. Some areas still rely on private wells and septic.

TABLE 6-3
Water Supply Comments Addressed in Municipal Plans of Conservation and Development

Town	Water Supply Comments
Canton	Sewer and public water are available generally south of Route 44/202. Does not mention water company/who operates the system.
Chester	Water service supplied by Connecticut Water Company (CWC) to a portion of Town. Chester Village West adult community is served by a well system owned by CWC. Other areas served by private wells. Projections suggest that supply is sufficient to meet demand for the next 50 years.
Clinton	Connecticut Water Company (CWC) provides public water to shoreline area. Supply from Kelseytown Reservoir. Currently 90% of all business and industrial districts are serviced by public water. Approximately 45% of the residential properties, which are mostly below the I-95 corridor, are serviced by public water. Until the reservoir expansion or other future source of additional water is assured, significant expansion of the public water system will probably not occur.
Columbia	Private wells for nearly all households.
Coventry	Some areas are served by public water, but are recommended for areas currently without infrastructure.
Cromwell	The Water Division of the Cromwell Fire District provides public water service to most of the Town of Cromwell.
Deep River	No discussion of water service. Sewer service has been extended since last plan.
Durham	Durham Center System serves 35 families in Durham Center. "Another private water company located in North Branford" serves two roads. The authors stated that it was doubtful that current areas served would be expanded at that time; however, the Town currently reports that the Durham Center water system will expand along Main Street with a planned interconnection with Middletown's water system to address issues related to contamination of private wells.
East Granby	Providers are Metropolitan District Commission, Aquarion Water Company, Connecticut Water Company (airport area), Old Newgate Ridge Water Company, and several CWS wells servicing multifamily developments. None are expected to serve additional development in the future.
East Haddam	Town is dependent on private wells and onsite septic.
East Hampton	As of POCD writing, the Town had submitted an Initial Water Supply Plan to the State Dept. of Health for proposed municipal water system. Town residents were on private or CWS well systems, but groundwater contamination has proved to be a public health issue.
East Hartford	The Metropolitan District Commission (MDC) provides the Town of East Hartford's entire water supply system.
East Haven	Regional Water Authority provides water supply to developed areas of Town. Current systems are capable of supporting all anticipated growth.
East Windsor	Drinking water not addressed. Town's wastewater treatment plant has excess capacity, and sewer extension is discussed as part of an economic development plan.
Ellington	Public water well field operated by the Connecticut Water Company, Ellington Acres Water Company, private well fields, and the Shenipsit Lake reservoir (owned by CWC).
Enfield	Domestic water is supplied by two privately-owned public utilities: the Connecticut Water Company and the Hazardville Water Company. Unserved areas have private wells.
Essex	Connecticut Water Company (CWC) provides public water.
Farmington	Farmington Water Company merged Unionville Water Company in 1985. In 2004 a connection was reestablished with Metropolitan District Commission. With the connection to the MDC system it is believed doubtful that additional underground supplies will be identified and developed.
Glastonbury	Public water utility landholdings include those of Manchester Water Department and Metropolitan District Commission in northeastern Glastonbury. Public water and sewer widely available.

TABLE 6-3
Water Supply Comments Addressed in Municipal Plans of Conservation and Development

Town	Water Supply Comments
Granby	Two public water companies (not named). Extension of public water lines north along Salmon Brook Street suggested.
Guilford	Sewer avoidance plan - relies on septic. Public water service expansion from Connecticut Water Company is encouraged.
Haddam	No extensive public waters or municipal sewer.
Hamden	No utilities discussion posted.
Hartford	Public water and sewer systems are owned and operated by the Metropolitan District Commission (MDC). Every street is served.
Hebron	Connecticut Water Company operates public water supply systems to 7 neighborhoods, with the majority of Town relying on private wells.
Killingworth	On-site domestic wells and septic systems.
Lyme	"Aggressive" sewer avoidance plan. No extensive public water systems.
Madison	Limited septic availability in Madison Center.
Manchester	Water & Sewer Department manages 4,000 acres of publically-owned water supply watershed land in Manchester, protecting 65% of the land draining to seven reservoirs. Town also operates 10 active wells which account for 40% of Manchester's water supply.
Mansfield	Residents generally rely on onsite wells, along with 19 CWS well systems. Contract operator for UConn system is Connecticut Water Company/New England Water Utility Services. Town of Windham serves southern Mansfield.
Marlborough	Sanitary sewer and public water was to be introduced to the Town Center commercial area in the next 2-5 years (from 2009).
Meriden	City's Water Division of Public Utilities provides water to 99.9% of residents of Meriden, as well as small portions of Berlin, Cheshire, Middletown, Southington, and Wallingford.
Middlefield	City of Middletown provides service to several structures on Route 66 and Zygo Corporation on Brookside Drive. Eastern Connecticut Water District serves about 50 locations on a seasonal system. Town is exploring expansion of Middletown system.
Middletown	Lack of public utilities in some industrial zones.
Milford	Public water is provided by the Regional Water Authority.
New Britain	Piped utilities not addressed.
New Haven	Watersheds are maintained by the South Central Connecticut Regional Water Authority (RWA), and serves 124,000 people in New Haven. 27% decrease in water use per-capita from 1987 to 2008 is attributed to decrease in heavy industry and manufacturing uses and more efficient home technologies.
Newington	Recommendation to expand the Metropolitan District water service to those areas not served and to where future development is anticipated.
North Branford	Water service is provided by the South Central Regional Water Authority (RWA) to properties in the vicinity of Route 80, Route 22, and near the Durham town line. There is adequate capacity to serve any potential expansions in North Branford, but there are no plans to do so at this time.

TABLE 6-3
Water Supply Comments Addressed in Municipal Plans of Conservation and Development

Town	Water Supply Comments
North Haven	Public Water - The South Central Regional Water Authority (SCCRWA) serves almost all the Town of North Haven and 89% of the Town's population. SCCRWA is in the process of constructing new pumping stations to move surface water north to areas currently served by groundwater sources. One of the new stations was completed in North Haven. Public Sewer - sanitary sewer system currently serves most of the developed areas in North Haven. Approximately 70% of the Town is sewered with the remaining areas on local septic systems. These non-sewered areas include the extreme southeast section of Town, the far north area and the northwestern section of Town. The North Haven Water Pollution Control Authority is responsible for sanitary sewer operations in the Town. The operational and maintenance responsibilities have been sub-contracted out to United States Filter Operating Services under the direction of the Public Works Department. The water treatment facility has a design capacity of 4.5 MGD. Current average daily flows are 3.2 MGD or 71.1% of design capacity.
Old Lyme	"Aggressive" sewer avoidance policy. POCD supports completion of a safe and adequate interconnected public water supply system in the beach areas, while relying primarily on individual on-site water systems throughout the remainder of the town.
Old Saybrook	The Connecticut Water Company (CWC) supplies drinking water by a central public water supply system, generally south of I-95. Remainder on private wells.
Orange	Much of Orange is served by public water through South Central Regional Water Authority (SCCRWA). No present plans to expand, but opportunities should be explored.
Plainville	Public sewers in 85% of Town. No mention of public water.
Portland	Public water for 2,400 users supplied from Metropolitan District Commission and the Glastonbury Well. Others rely on private wells.
Rocky Hill	No discussion of public water.
Simsbury	Water system is served by Aquarion Water Company and Tariffville Water District.
Somers	Public water service is provided by the Connecticut Water Company (CWC), Hazardville Water Company (HWC) and Ellington Acres Company (EAC) utilizing Town-owned water lines. The vast majority of the town is served by private wells.
South Windsor	Most public water is provided by the Connecticut Water Company (CWC) or the Metropolitan District Commission (MDC). No large water projects are anticipated nor have any issues been identified related to the ability to provide water today and in the next 10 years.
Southington	The Southington Water Department provides water service to most areas of the community.
Stafford	The original public water supply was established as a service for residents of the Borough of Stafford Springs. Currently the system that supplies the former Borough is owned and operated by CWC. The source is from reservoirs in the Roaring Brook Watershed which extends from eastern Stafford eastward into Union. Much of the watershed is on privately-owned land. Due to development outside CWC's service area, an increasing number of residents in Stafford rely on private wells and septic systems.
Suffield	Two water companies service the town: Connecticut Water, and West Service Corporation (note: this system is now the Aquarion Water Company – West Suffield System). Connecticut Water serves the eastern portion of Suffield and closely follows the sewer lines. West Service Corporation located in West Suffield serves a much smaller geographic area near the Congamond Lakes. West Service Corporation maintains approximately five miles of water main and serves a population of 760 residents through 208 service connections
Tolland	Public water is provided by the Town (478 customers) and the Connecticut Water Company (500 customers). Overall, both systems indicated that there is an adequate supply to serve current customers and to expand to additional areas in Tolland. In addition, several private systems exist.

TABLE 6-3
Water Supply Comments Addressed in Municipal Plans of Conservation and Development

Town	Water Supply Comments
Vernon	Vernon's residents and businesses obtain their water either from a water system or from onsite wells. A regional water provider, the Connecticut Water Company, is the predominant water provider to those properties on a public system. Overall CWC anticipates they can meet water needs of the region for at least the next t10 years.
Wallingford	From 2005 Plan- A new sewer treatment plant went on line in 1989 with an eight-million gallon per day capacity. It is projected that the existing plant will accommodate future flows through at least the next 20 years. The water and sewer division owns property totaling 45.5 acres. 50% of (the village of) Tracy does not have access to municipal sewers. Public water services are not addressed in the plan.
West Hartford	The plan provides no info on public water or sewer infrastructure.
West Haven	Water - The South Central Regional Water Authority (SCCRWA) serves almost all the City of West Haven. According to the RWA, 100% of the City's population is served. Sewer - The City is responsible for sanitary sewer operations for its residents and maintains an extensive, but aging sanitary sewer system that currently serves all of the developed areas in West Haven. The West Haven water treatment facility has a design capacity of 12.5 MGD. Current average daily flows are 7.0 MGD or 56% of design capacity. This includes approximately 350,000 gallons per-day from the Town of Orange.
Westbrook	Westbrook depends on privately managed on-site septic systems for wastewater management. Westbrook has higher density neighborhoods with older septic systems and as a result, areas in the community were identified as being high risk by CTDEEP. As a result of these investigations, Westbrook determined that sewer avoidance was the most cost effective strategy for the entire community. An Onsite Wastewater Management Plan (Sewer Avoidance Plan) was adopted in 2005. Westbrook's public water system is owned and operated by the Connecticut Water Company, a private company. The company has not indicated any near-term plans to construct new lines or expand the service area in Westbrook; however, the Town often requires waterlines to be extended to serve new development. Well use in areas near the shoreline are of concern because of the density of development and septic systems. This area is labeled as a "High Priority" area for Public Water Supply.
Wethersfield	Water and sewer services are available in most areas of the community. These utilities are provided by the Metropolitan District Commission, a regional organization.
Willington	Sanitary Sewers/ Sewer Treatment Plant: None. All residences and businesses in town rely on on-site septic disposal systems. Water: No municipal water services. Most residences and businesses in town rely on private wells.
Windsor	Public Water - The Metropolitan District Commission (MDC) provides drinking water from out of-town reservoirs to most of Windsor. Only a small proportion of properties depend upon groundwater for drinking water. The MDC prioritizes domestic water use over firefighting capacity. The MDC is planning to install a new 30-inch water main in Bloomfield over the next 5 years. Although its purpose is to improve domestic supply, it might also alleviate some of the pressure issues related to fire fighting in the western part of Windsor. Sewer - Windsor is generally served by the Metropolitan District Commission (MDC) sewer system.
Windsor Locks	The plan cites a number of areas where the CT Water Company owns land, but does not indicate where public water is available in the text or in any mapping. It mentions that a sewer treatment plant is located in the SE corner of town, but gives no indication what areas are served by public sewers.

TABLE 6-3
Water Supply Comments Addressed in Municipal Plans of Conservation and Development

Town	Water Supply Comments
Woodbridge	Sewer - Woodbridge's sanitary sewer system provides service to a limited area of the Town's southeastern corner. Areas with service include Lower Amity (south of Bond Road), with an extension to Amity Regional High School, and a limited service area adjacent to Ansonia Road and Beecher Road, terminating at the Beecher Road School. Approximately 11% of the Town's population, are served by the system. Woodbridge's sewer system is owned and operated by the Greater New Haven Water Pollution Control Authority (GNHWPCA), which also serves New Haven, Hamden, and East Haven. Water - Woodbridge's water supply is managed by the South Central Connecticut Regional Water Authority, which provides service to a regional population of approximately 430,000 people. In Woodbridge, the Authority serves approximately 1,361 people and holds 1,911 acres of land and 200 acres of conservation easements.

In more rural areas, many municipalities are nearly reliant on on-site wells and septic systems and pursue a policy of avoiding municipal utilities - both because the demand is not enough to justify the expense, and as a way to control future growth.

6.3 Land Use Planning and Coordination for Source Protection

With respect to land use planning and coordination for water supply, source protection is a major issue of concern. Individual water supply plans address this topic at various levels of detail. Most community plans, such as zoning regulations and plans of conservation and development, also include pertinent information that directs allowable and anticipated uses in watershed areas, as well as radially from public supply groundwater wells.

Smaller, non-municipally owned CWS tend to have less opportunity for inclusion in broader planning objectives. Protection of these smaller systems often depends entirely on ownership of the land surrounding the source and state regulations that have established minimum allowable distances between a point source of pollution and a CWS water supply. Similarly, Non-Community water systems often rely on land ownership and setback distances.

6.3.1 Community Water System Source Protection Efforts

The following discussion focuses on the efforts of the larger CWS serving greater than 1,000 people to provide source protection, as well as to coordinate with local planning efforts. Various methods of source protection have been utilized by these systems and the associated municipalities, including zoning overlays of aquifer and public water supply watershed areas; purchase of watershed lands; and encouragement of easements from development. Source protection efforts are described below for each CWS serving greater than 1,000 people.

Aquarion Water Company – Simsbury System

Aquarion actively protects its surface and groundwater supplies through a comprehensive source protection program administered by Aquarion's Watershed and Environmental Management (WEM) Department. Elements of the WEM source protection plan include annual watershed sanitary

inspections, regular monitoring of source area activities and conditions, review of proposed land use and development changes with local regulatory agencies, emergency spill response procedures, and coordination with state and local authorities for remediation activities. Aquarion also performs daily patrol and maintenance of Aquarion watershed properties through full-time and part-time security patrol officers. Aquarion's WEM Department monitors water quality continually and field technicians often support source protection initiatives.

Aquarion owns most of the sanitary radii for all its production wells in this system, and Aquarion owns 8% of the reservoir watershed area for this system. The Town of Simsbury has regulatory and enforcement authority in aquifer protection areas, and Aquarion coordinates with local commissions and agencies to track and respond to potential pollution sources. Aquarion is also a partner of the Connecticut Source Water Collaborative as described in Section 6.3.4.

Avon Water Company

Avon Water Company owns nearly all of the sanitary radii for its production wells. All of the Company's wells have been mapped to Level A standards according to the Aquifer Protection Area Program, with the aquifer protection areas for the final three wells under review by CT DEEP. The majority of existing land use served by Avon Water Company's supply sources are comprised of low to medium-density residential uses. Avon Water Company works closely with the local Planning and Engineering Departments to ensure that proposed development is consistent with source water protection.

Berlin Water Control Commission

The Berlin Water Control Commission owns all of the sanitary radii for all its production wells. 61% of the land use served by its system is residentially zoned. Level A mapping was completed and approved by CT DEEP and the Commission is actively working with the Town's Inland Wetland Agency to develop source water protection areas consistent with the aquifer mapping regulations. Spills are reported to the fire department and hazmat personnel are requested as needed.

Connecticut Correctional Institute

The State of Connecticut owns 100% of the sanitary radii for all production wells. All five of the wells are bedrock wells; therefore, Level A Aquifer Protection Area mapping is not required. The correctional facility land is zoned residential and there is no anticipated land use change. Source protection measures employed by the Institute have been mostly remedial, such as relocating a sewer line and the installation of an oil separator in the floor drains. The heating system was converted from oil to natural gas in compliance with CT DPH regulations.

Connecticut Valley Hospital

This system is generally well-protected due to extensive holdings of the state. Connecticut Valley Hospital owns 55.5% of their active reservoir watershed area and the land is sparsely developed. Connecticut Valley has a moderate need for source protection, mostly due to the potential for illegal dumping. Fishing is not permitted on the watershed lands. Regular watershed inspections and reporting is conducted by the hospital. Connecticut Valley Hospital intends to work with the City of Middletown to establish local watershed protection regulations on adjacent property that favor

protection of public drinking water supply. Development within land owned by Connecticut Valley Hospital is subject to review at the state level.

Cromwell Fire District

The Town of Cromwell has established aquifer protection zones, and Level A mapping is approved by the CT DEEP. The primary wellfield is located within the 1% annual chance floodplain of the Connecticut River. Source protection measures in place to protect the wellfield include heavy-duty flood doors and relocating the chemical feed and control building to higher ground to prevent flooding and facilitate access during a storm event. The Cromwell Fire District also has an Emergency Response Plan in place.

Connecticut Water Company

The Connecticut Water Company conducts an "aggressive, multi-faceted" source protection program which include monitoring proposed land use and development changes, regular watershed inspections with reporting, emergency spill response procedures, and performing Level A Aquifer Protection Area mapping as part of the Aquifer Protection Area Program. The CWC also works to obtain sanitary easements and/or deed restrictions for source water areas. The CWC does not take a lead role in initiating development of municipal aquifer protection regulations but coordinates with local authorities regarding proposed land use. The CWC also consults with CT DEEP and CT DPH for issues with contaminants as necessary.

Hazardville Water Company

Regular visual inspections are performed of all Hazardville Water Company (HWC) properties to identify potential contaminant sources. The HWC also monitors proposed land use and development changes, working closely with the local Planning and Zoning Departments. Local land use regulations favor aquifer protection. Level B mapping has been completed for its three stratified drift wellfields and Level A maps have been completed for two other wellfields. The company has no immediate plans for future land acquisition.

Kensington Fire District

As a consecutive system, the Kensington Fire District does not own or operate any source of supply. All source water protection is the responsibility of the New Britain Water Department.

Manchester Water Department

The Town of Manchester has taken a number of proactive measures to ensure source protection including conducting Level A Aquifer Protection Area mapping for all stratified drift wellfields. The town anticipates adopting an aquifer protection overlay zone and ordinances in response to their approved Level A mapping. Emergency prevention is the primary strategy for the Town of Manchester to ensure the protection and quality of drinking water.

Active water supply sources are inspected regularly and watershed sanitary surveys are conducted for all reservoirs in the system. The town's reservoir watersheds are protected through zoning regulations, which act to preserve watershed lands as open space. Watershed lands are also marked with signage at the appropriate locations. Other forms of source protection include monitoring proposed land use and

development changes, a spill response program, a communitywide hazardous waste collection service, and coordination with town fire departments for all activities related to water supply sources. The town also plans to acquire certain commercial and industrial parcels located in aquifer protection areas of various wells.

Meriden Water Division

The Meriden Water Division depends on coordination from Cheshire, Wallingford, Berlin, and Southington to help protect their reservoirs, as the watersheds of the division are mostly located in surrounding municipalities. The Meriden Water Division owns 45% to 96% of the watershed lands for its surface water supplies. Source protection strategies include posting watershed signs along roads, fencing, and performing regular sanitary surveys of watershed lands. Implementation of watershed protection overlay zones is pending for the four watersheds.

The Meriden Water Division owns the majority of the sanitary radii for its active production wells. Level A Aquifer Protection Area mapping was completed in 2008. The division continues to pursue the acquisition of critical watershed and wellhead properties.

Metropolitan District Commission

The drinking water watersheds utilized by the MDC are very well-protected due to the large percentage of tributary lands which are permanently protected through MDC ownership, ownership by state agencies, and ownership by land conservation groups. MDC has partnered with some land conservation groups in order to protect land from future development. The MDC owns and manages over 25,000 acres of forest land which help safeguard the water supplies by acting as a natural filter and a buffer to potential contaminants.

The major surface water watersheds utilized by the MDC are primarily undeveloped forest land and low-density residential zones. The MDC conducts an "aggressive, multi-faceted" source protection program that includes regular watershed inspections and reporting; daily water quality sampling; monitoring and testing utilizing an in-house State-certified laboratory; an in-house emergency spill response program; land use monitoring including the review of municipal land use plans and development proposals; regular monitoring of watershed land use activities; coordination with state and local authorities to address source protection concerns; coordination with planning and zoning agencies in the development of public water supply watershed protection overlay zones; technical assistance and education; active watershed forest management; and land acquisition. The MDC also maintains a special police force that performs regular patrols of all watershed lands.

Middletown Water Department

The City of Middletown takes many actions to protect its groundwater and surface water supply sources. The city owns the sanitary radii for most wells and is working to obtain easements for the remaining wells. The city performs regular watershed inspections and also has zoning regulations which apply to both aquifer protection areas and the Watershed Protection Areas (WPA). Proposed development is subject to a Site Plan Review Process. The city is also a partner of the Connecticut Source Water Collaborative.

New Britain Water Department

The New Britain Water Department relies on coordination with local municipalities, including local planning and zoning boards and inland wetlands agencies, to protect its surface water supplies. The Department has surface supply watersheds located in the Towns of Southington, Berlin, Wolcott, Plainville, and Burlington, in addition to the City of New Britain. Groundwater wells are located within the City of Bristol and the Town of Southington.

Land acquisition and management is the primary source protection technique utilized by the New Britain Water Department. Other elements of source protection by the department include a hazardous spill response program and regular watershed inspections. The New Britain Water Department also patrols the watersheds regularly and has installed fencing where appropriate.

Portland Water Department

Portland Water Department owns most of the sanitary radius for its wellfield and the wellfield has been mapped to Level A standards. Portland is also reliant on the MDC for source protection. One goal of the Portland Water Division's source protection is the reduction of the potential for contamination. Examples of reducing the potential for contamination include upgrading a salt storage facility that protects the stored salt from the rain and weather and also updating the Town of Portland Public Works Garage fuel storage facilities.

Salmon Brook District Water Department

The Salmon Brook District was granted an exemption from mapping its wellfield to Level A mapping requirements. However, Granby has zoning regulations for an aquifer protection zone. The district owns approximately one-third of the land within the sanitary radius for one well and the district has an easement from the Town of Granby for the second well. Another element of the district's source protection program includes an emergency response plan.

South Central Connecticut Regional Water Authority

SCCRWA has developed a multifaceted source protection program to protect its drinking water supplies. Aspects of the source protection program include watershed inspection, emergency spill response, site plan reviews, and land acquisition. SCCRWA source protection specialists work closely with local officials on protecting its drinking water sources. SCCRWA also inspects existing land use to make sure development is consistent with local and state water quality regulations. Detailed Aquifer Maps have been created for all wellfields and watershed boundaries have been delineated. SCCRWA is also a partner of the Connecticut Source Water Collaborative.

Southington Water Department

The Town of Southington owns approximately 90% of the total watershed area for its reservoirs, including some land in the Western PWSMA. Source protection measures in place for the surface water sources include regular watershed surveys, fencing and signage, a spill response program coordinated with local fire and police departments, and also a *"Watershed Resource Inventory and Management Plan"* that determines best management practices for existing watershed land.

The Town of Southington owns or has acquired easements for the sanitary radii for all its production wells. Level A Aquifer Protection Area mapping has been completed and the Town of Southington has active aquifer protection regulations which prevent activities detrimental to groundwater supply. The Southington Water Department conducts regular sanitary surveys on all department-owned land.

Tariffville Fire District

Tariffville Fire District groundwater sources have been mapped to Level A standards and local aquifer protection regulations have been adopted by the Town of Simsbury to limit activity detrimental to groundwater supply. Approximately 25% of the source water area is preserved as open space. Although all the sources are groundwater, regular sanitary surveys are still performed to protect water quality.

Tolland Water Department

Level A Aquifer Protection Area mapping was recently approved by CT DEEP and adoption of local regulations is expected to occur. The town owns all of the sanitary radii for its wells and the surrounding areas are primarily open space or residentially zoned. The Tolland Water Commission has prepared a Water Supply Emergency Contingency Plan which includes procedures for spill response.

University of Connecticut

The University of Connecticut is proactive in their efforts to protect their two groundwater sources. The university owns the sanitary radii for each of its wellfields and has completed Level A Aquifer Protection Area mapping delineating the areas of contribution and recharge to both its wellfields. The Towns of Mansfield, Willington, and Coventry administer local aquifer protection regulations for the two wellfields. The wellfields are also inspected regularly. Furthermore, the university maintains a close-working relationship with local authorities and encourages watershed protection near their respective wellfields.

Valley Water Systems

The wellfields owned and operated by Valley Water Systems, Inc. have been mapped to Level A standards and aquifer protection overlay zones have been established. One wellfield is located within a 1% annual chance flood plain and wells have been constructed to be protected from flooding. The Company also reviews proposed land use and development changes in coordination with the Town of Plainville.

Wallingford Water Department

The Town of Wallingford employs many source water protection strategies for its surface and groundwater sources. Approximately 16% of the total reservoir watershed lands are owned by the Town of Wallingford. The majority of development in the reservoir watersheds is low-density residential housing and agricultural uses. The Town of Wallingford has established a Watershed Protection District to protect the reservoir watersheds. Additionally, there is signage for watershed boundaries, and signs are posted at the reservoirs that indicate restrictions of activities.

Level A Aquifer Protection Area mapping was completed for the two active wellfields in production. The Town of Wallingford owns nearly all of the land within the sanitary radii of its wells. The town has

designated an Aquifer Protection District for its groundwater supply. Regular aquifer surveys are undertaken to identify potential pollutants and water quality testing is conducted.

Windham Water Works

The Windham Water Works reservoir watershed is the largest public water supply watershed in the State of Connecticut, spanning 11 Connecticut municipalities and into the Town of Sturbridge, Massachusetts. Windham Water Works owns less than 1% of the watershed area. However, they have taken many steps to protect their drinking water supply. A key element of source water protection is the watershed inspection program. Regular inspections are made throughout the watershed and all communities within its watershed are notified. Windham Water Works also focuses on outreach related to septic system maintenance and general source protection.

The municipalities within the watershed have a variety of means to control development and protect water quality relative to zoning, regulated areas and set-backs, and development policies. The State Department of Transportation has also installed signs marking watershed boundaries.

Worthington Fire District

As a consecutive system, the Worthington Fire District does not own or operate any source of supply. All source water protection is the responsibility of the Berlin Water Control Commission.

6.3.2 Source Water Assessment Program

The state administers a variety of programs devoted to drinking water protection via the Public Health Code and the Connecticut General Statutes. In addition to overseeing the WUCC process, the Department of Public Health, as well as DEEP, is involved in the administration of a variety of source water quality protection programs.

Specifically, the DPH oversees water supply system compliance for CWS and Non-Community systems and administers permitting, enforcement, and water supply planning programs. These areas include regulation of water company lands; involvement in local planning and zoning activities; water supply system site inspections; treatment plant and distribution system operator training and certifications; and administration of programs for annual watershed sanitary surveys and cross connection prevention.

In response to the 1996 Amendments to the Safe Drinking Water Act, the Department of Public Health initiated the Source Water Assessment and Protection Program (SWAP) in 1997. Surface water and wellhead protection programs previously developed by the Departments of Public Health and Environmental Protection serve as the foundation of the SWAP. In accordance with this program and EPA guidance, a Source Water Assessment must be completed for each public water supply in the state.

A Source Water Assessment must include three basic components, varying in level of precision and detail with the size or type of water system. Delineation of a protection area surrounding the public water supply contributing water to the well(s) or reservoir must be completed; a Potential Pollution Source Inventory must be completed, identifying potential sources of contamination or activities within and around the delineated protection area that pose a threat to the public water supply; and finally, the Source Water Assessment must include a Susceptibility Determination for provision of a clear understanding of the sources' susceptibility to contamination.

6.3.3 Regional Source Water Protection Efforts

Despite having some of the oldest source protection laws on the books, Connecticut has strived to make advances in source protection. The programs described above have accomplished significant source protection, but DPH has recognized the need for additional tools.

The phrase "Drinking Water Quality Management Plan" (DWQMP) was first developed by the DPH in 2005. The DWQMP concept is similar to traditional source protection, but it emphasizes and focuses on the public health aspects of maintaining high-quality potable water supplies through the first barrier of the multi-barrier approach. The DWQMP approach is meant to highlight and spotlight drinking water quality and public health protection. The guidelines and recommendations for the DWQMP as set by the DPH were first articulated in a presentation entitled "*Drinking Water Quality Management Planning*," given in May 2006. Numerous elements of a DWQMP are possible. In general, the DWQMP is a *locally based, comprehensive planning mechanism* to define and implement quality management mechanisms for public source water.

A regional DWQMP was completed in southeastern Connecticut in 2009. This DWQMP was developed to become a model for other collaborative DWQMPs to be developed in Connecticut. However, to date, few have been developed, and those that have been developed are site-specific rather than communitywide.

6.3.4 Connecticut Source Water Collaborative

Source protection has gained traction again recently with establishment of the "Connecticut Source Water Collaborative." This is a group of organizations, including water utilities and government regulatory bodies, who are working together towards the protection of drinking water sources. A charter formalizing the group was signed on May 4, 2016. The mission, as laid out in the charter, is to "facilitate collaborative approaches and creative solutions for drinking water protection through identification and implementation of complementary objectives, education, outreach, stewardship, and leveraging of resources." DPH anticipates that the collaborative will be helpful in promoting source water protection in the coming years.

6.4 Coordination among Community Water Systems

Formal organizations exist within the region that provide opportunity for administrative and technical staff of CWS to interact with one another on issues of water supply. These include the American Water Works Association (including the Connecticut Chapter), Connecticut Water Works Association, the Atlantic States Rural Water Association, and the regional planning organizations such as CRCOG, SCRCOG, and RiverCOG.

In addition, many informal and unwritten agreements currently exist between CWS and municipalities in the region for exchange of equipment and services. The Connecticut section of the American Water Works Association maintains a database of water systems that have agreed to accept phone calls for providing technical assistance. The Connecticut Water/Wastewater Agency Response Network (CtWARN) also supports and promotes statewide emergency preparedness, disaster response, and mutual assistance for public and private water and wastewater utilities. Water utilities in the Central PWSMA who are members of CtWARN include the Aquarion Water Company, Connecticut Correctional

Institute, CWC, Coventry Housing Authority, Hazardville Water Company, North Willington Condo Association, Portland Water Department, SCCRWA, Southington Water Department, and the Wallingford Water Department.

7.0 ISSUES, NEEDS, AND DEFICIENCIES IN THE REGION

Various issues, needs, and deficiencies have been identified for the Central PWSMA as determined throughout the planning process via data research, correspondence, and discussions with WUCC members, agency staff, and interested parties. The following discussion summarizes some of the issues that are currently facing the region. All of the following will be addressed in the Integrated Report.

7.1 Sources of Supply

Existing Supply Sources – Some groundwater sources require maintenance to maintain the hydraulic capacity and water quality, while other sources require eventual replacement. Finding locations for replacement wells is challenging and expensive due to the cost of land, encroaching developments, permitting, and other factors.

Future Supply Sources – Several of the CWS in the region have identified the need for additional water supply sources to meet current and future projected demands due to continued development within their existing service areas. Many systems rely on modest networks of surface water supplies and groundwater supplies that are located within municipal boundaries or nearby in adjacent communities, and they do not have the ability to easily develop new sources of supply. Even larger utilities such as the MDC have identified the potential need for additional supply sources if future conditions warrant.

Impacts of Climate Change – The resiliency of water systems to climate change and natural hazards is a significant concern, particularly given the extensive power outages that occurred throughout the state during Tropical Storm Irene, Winter Storm Alfred, and Hurricane Sandy. Many smaller systems do not have standby power facilities. A DPH study will soon be underway headed by UConn Connecticut Institute for Resilience & Climate Adaptation (CIRCA) to develop a Drinking Water Vulnerability Assessment and Resiliency Plan for Connecticut to consider the impacts of flooding from extreme weather, drought, and other impacts of climate change on public water systems.

Impact of Existing and Future Anticipated Regulations – Regulations that affect public water systems will remain an issue for this region as well as for water systems statewide. The total coliform rule (TCR) is one such example. The TCR will lead to proliferation of new and improved treatment systems, and it may lead to abandonment of some water supply wells. If the Streamflow Regulations are modified in the future to include progressive cutbacks of groundwater withdrawals, the adverse impact on available water will be significantly felt in the region and statewide. These and other as-of-yet unknown future regulations can be costly to implement and maintain and significantly affect the logistics of operating a public water system.

Impacts of Streamflow Regulations – Several of the CWS in the region may experience reductions in reservoir safe yields upon full implementation of the Streamflow Regulations by 2026 or 2027. The regulations will mainly affect mid-sized systems with surface water supplies such as Meriden, Manchester, and Wallingford. These systems rely on surface water supplies that are not exempt from the Streamflow Regulations. Future water supply sources may be needed to offset reductions in safe yield. Therefore, implementation of the Streamflow Regulations is believed to be a primary driver for determining the need for future interconnections and new source development across the state.

Source Water Protection – Wellhead and watershed protection for both existing and future supply sources has made significant progress in the past 15 to 20 years with completion of the Source Water Assessment Program (SWAP), completion of the majority of the Level A mapping, and full implementation of the Aquifer Protection Area (APA) Regulations. However, continued land development and the need to address issues that cross jurisdictional boundaries are of particular interest regarding watershed lands. For example, Windham Water Works has a significant reservoir watershed area spanning two PWSMAs and extending through eight Connecticut communities (and more in Massachusetts); CWC, SCCRWA, Middletown Water Department, Manchester Water Department, and New Britain Water Department among others also have reservoir watersheds spanning multiple communities. While DPH has promoted a potential program (the Drinking Water Quality Management Planning process) to address protection of drinking water supplies on a regional scale, there has been little traction for using this unique collaborative approach in the Central PWSMA.

Well Water Quality – It is recognized that well water utilized for public drinking water in the region tends to be variable with respect to quality and quantity. Elevated concentrations of arsenic, radioactive elements, and/or iron and manganese are prevalent in certain public water system well supplies, and treatment can be costly. An example is Durham, where a small NTNC system is located that was recently required to install an arsenic removal system. Areas in Ellington, East Windsor, Glastonbury, Portland, Simsbury, Somers, and Enfield have impacted groundwater as a result of the use of ethylene dibromide as a soil fumigant for tobacco and strawberry farming. Other areas within the region continue to be affected by legacy industrial contamination that has impacted public and private drinking water quality. Federal funding for support of contaminated private wells is coming to an end thus placing a greater emphasis on finding solutions for these areas. In general, poor water quality and legacy contamination may present a disproportionate burden on small CWS and Non-Community water systems, and it may necessitate extending public water systems into areas served by private wells or creation of new public water systems as noted in this paragraph and below.

7.2 Planning

Coordination of Water Utility Planning – In the years since the Bioterrorism Act of 2002, and throughout the revision and updates to Emergency Contingency Plans, many larger water utilities have made significant advancements in emergency planning with other utilities through memorializing mutual aid agreements and formalizing other forms of cooperation. Additional coordination between CWS with respect to various aspects of water supply, such as shared use of equipment and technical staff, is also desirable from a financial perspective. Improved coordination has the potential to greatly benefit smaller systems that may not have the financial ability to purchase equipment such as that required for spill response or emergency power. Finally, a key benefit of improved coordination among water utilities is the potential to establish a more organized and holistic approach to the exploration of future water supplies and interconnections such as those described below. The WUCC process is precisely aimed at such coordination efforts.

Coordination of Planning between Utilities and Communities – In some cases, state, regional, and local planners have limited understanding of the long-term planning goals of water utilities and vice-versa. For example, although larger utilities account for local planning efforts as part of their water supply plans, this information does not necessarily inform the local planner. Review of the Coordinated Water System Plan should be encouraged as part of local planning efforts, along with increasing the lines of communication between larger utilities and local staff. In addition, planning between water utilities and

communities is typically performed in a staggered manner, with utilities reviewing current planning documents that may be several years old.

Disjointed Service Areas – Numerous communities are served by multiple public water systems (whether privately owned or municipal or regional) that are located proximal to one another but not actively interconnected, which can result in higher cost of operation, lack of efficiency, and lack of redundancy. In some cases, the cost for a customer to purchase water can be significantly more expensive in one system than the other despite their proximity.

Exclusive Service Areas – The eastern portions of the Central PWSMA have not undertaken the assignment of ESAs, and unassigned areas remain interspersed throughout the portion of the region that undertook ESA assignments in the past. A well-planned assignment of ESAs in this region will help address many challenges that emerge in the future, including those described above regarding new and existing small systems as well as water quality challenges in some communities. Assignment of ESAs will be resolved as part of the Part II of the Coordinated Water System Planning process. Encouragement of reasonable coordinating planning will be a goal of the WUCC moving forward.

Use of Current Data – The Coordinated Water System Planning process requires the use of current data, but many data sets are out of date or current as of several years ago. These include water supply plans (discussed in Section 6.1), plans of conservation and development (discussed in Section 6.2), publically available data from state agencies, and population projections (discussed in Section 5.3). In some cases, very little data is available to state agencies: for example, the majority of public water systems (those without DEEP diversion permits or required to provide a WSP) are required to record, but not report, usage data. While the Coordinated Water System Planning process will make use of the best available data, it is necessary for WUCC members, state agencies, COGs, municipalities, and interested parties to perform a detailed review and provide current data where necessary to inform the process.

7.3 Interconnections

Development of New Interconnections – New interconnections may be desired where not already present. This can help address water supply imbalances and increase redundancies that are desirable during water supply emergencies or droughts. For example, The Connecticut Water Company has recently completed a regional pipeline and interconnection to Mansfield to address supply needs at UConn and in Mansfield, and has identified several other interconnections within its long-term planning. One example of a system lacking interconnections with adjacent water systems is Middletown. Long-discussed interconnections with Cromwell Fire District and the Town of Berlin have not been constructed. However, Middletown is pursuing an interconnection with the Durham municipal system. Some interconnections in Table 2-10 will require pumping stations, meter pits, and/or pressure-reducing valves, which can greatly add to the project cost.

Movement of Water through Interconnections – The movement of water from areas of surplus to areas of need is not always straightforward where interconnections exist. Potential barriers include water quality differences, pressure gradients, the challenges associated with diversion permitting, and/or lack of agreements for the movement of water. For example, several interconnections and associated permits are in place to move water between MDC and adjacent systems on all sides. However, with the exception of Portland and Farmington, water is seldom moved in this manner. In the future, it may be desirable to facilitate new instances of active, daily transfers of water. In addition, there are often

concerns about the potential long-term environmental and economic development impacts of transfers of water into or out of a basin.

7.4 Small Water Systems

Challenges of Operating Small Systems – Many municipalities and privately owned public water utilities, including East Hampton, East Haddam, Durham, and others, own and operate numerous small systems. Operational requirements such as regulatory permitting, technical assessment, system maintenance, infrastructure replacement, and water supply need require a disproportionate amount of time and money compared to the operation of a larger system. In particular, the lack of proper planning and/or asset management planning for many small CWS (particularly a lack of knowledge regarding the full cost of providing a safe and reliable supply of drinking water) has resulted in systems with no financial capacity to address public health code issues.

New Public Water Systems – In general, the need for new public water systems in the region is driven by the following conditions:

- Creating public water systems in some village centers may be necessary due to high densities and challenging lot sizes coupled with a desire for nominal growth. Examples include Bolton, which has considered public water service along Route 44 near the Manchester town line, and East Hampton, which has been challenged for many years in its public water system needs.

- Creating public water systems in some village centers or neighborhoods may be necessary due to water quality concerns. An example is Durham, which will expand its municipal system after the interconnection with Middletown is complete. East Hampton has a similar need.

- Over time, developers are expected to approach municipalities about new projects ranging from commercial establishments to various types of residential developments. Many of these will necessitate the development of new public water systems (whether Community or Non-Community). A relatively recent example is the Goodspeed Actor Housing in East Haddam. In order to make construction of the actor housing possible in 2012-2013, a new CWS was established. New developments are perennially proposed in East Hampton, where the municipal water system has not been able to be expanded.

Some of the above needs may be addressed through extension of existing public water systems. However, not all areas may will be easily served by water main extensions and system expansions and creation of new systems is costly.

Viability of Small Water Systems – The number of small public water systems in the region is not viewed as an issue per se. However, the viability of these systems is an issue of concern, particularly in regions where the density of small systems is moderate to high such as East Hampton, Haddam, and Old Lyme. Additionally, the operation of small water systems immediately adjacent to larger systems can result in a disparity of the cost of water among populations in close proximity. The cost of interconnecting small systems can be prohibitive or at the very least a disincentive. More fully understanding the technical, managerial, and financial capacity of small systems to provide water supply is of interest. Several sets of challenges are facing the region:

- Eliminating the proliferation of small systems may be possible in communities where larger public water system expansions have occurred and these larger systems are now immediately adjacent to small systems. For example, some small systems may be able to receive water from the regional pipeline extended to Mansfield and UConn, and the Region 13 School District will be able to retire some of its NTNC systems when the Middletown-Durham pipeline and interconnection is complete. Typical barriers to connecting small systems to larger systems (thus eliminating the small separate systems) include lack of funding and/or desire to make the investment, lack of interest from the small system, potential changes in water quality, and potential changes in pressure. For the most part, these types of barriers should be feasible to transcend provided funding is available.

- Reducing the number of small systems may be possible in some communities where options are limited. For example, some of the small systems in East Hampton may be able to explore localized supply and consolidation options together rather than waiting for an expanded town center public water system.

- Potential acquisitions of water systems may be of interest to system owners that are not in the business of providing water. For example, numerous small water systems are in operation in Mansfield away from the regional pipeline provide water to apartment complexes. Many are already operated by CWC, and the increasing presence of CWC in the town could make it more financially viable for an owner to sell the system components.

- Potential acquisitions of water systems may be of interest to owners that are currently experiencing significant technical, managerial, and capacity challenges. These systems particularly the numerous Non-Community systems, could benefit from different ownership.

7.5 Water Usage

Continued Impacts of De-regulation of Electrical Industry – One of the impacts of deregulation of the electrical industry more than 10 years ago was the development of power development facilities in the state. Some of these facilities have required water commitments from nearby public water systems for active daily supply as well as potential peaking supply, and there is often a large discrepancy between these figures. While this is currently an issue facing the western and eastern WUCC regions, it is not a current pressing issue in the Central region. However, this could change in the future.

Declining Revenue and Increasing Costs – Some water systems are experiencing a trend of decreasing average day demands. With continued conservation, the decline of industry, and the housing market decline of the Great Recession, water systems have been challenged by declining revenue. This has, in some cases, made paying for infrastructure more challenging. Examples can be found throughout the region. Creative solutions are needed to recapture lost revenue and/or pay for maintenance and improvements.

Increasing Ratio of Peak Day Demands to Average Day Demands – Some water systems are experiencing a trend of decreasing average day demands along with an increase in peak day demands. This negatively impacts the ability to manage sources and treatment facilities in some systems, and points to a need for conservation during peak day conditions. This is often the case during the summer months coincident with irrigation and water-intensive recreational activities. Although reservoir systems are typically better able to handle increased peak day demands than groundwater systems from a supply perspective, increased peak day usage by reservoir systems is of concern to DPH as overuse of surface

water sources can result in taste and odor complaints, elevated levels of cyanotoxins, and other water quality concerns.

Infrastructure – Water infrastructure is aging, with the cost of replacement, the need for asset management, and mechanisms for funding being shared across small and large systems alike. Replacement cycles are getting longer and infrastructure is getting older and more vulnerable to failure.

Lack of Fire Protection – Many rural parts of the Western and Eastern PWSMAs are relying on ponds, dry wells, and cisterns for fire protection. While this is less common in the Central PWSMA, the eastern fringe of the Central region does rely on these types of protection. These approaches will continue in most of the rural and less densely populated areas, but may not be desired in specific areas that would benefit from increased protection afforded by a public water system with storage and adequate pressure. Additionally, some parts of the region (e.g. East Hampton) are already served by public water systems where hydrants are installed, but pressures are currently insufficient for fire flows.

Lack of Funding – A continued lack of straightforward access to capital improvement funding has delayed many desired projects in the region. The Drinking Water State Revolving Fund 2011 Needs Survey identified $3.5 billion in infrastructure replacement needs over the next 20 years, and the 2015 Survey results to be published in the spring of 2017 are expected to be even higher. An example is the extension of public water service from Chester into the Tylerville section of Haddam.

Prioritization of Users – Utilities required to prepare a Water Supply Plan are also required to present lists of priority users. In many cases, priority user lists include high-volume industrial and commercial users in the same vein as hospitals and other residential care facilities. Typically, these are considered priority users because they employ a significant number of people, and the desire of local officials is to get as many people back to work as soon as possible following a disaster or emergency. In other cases, such as power plants, they are required to get back online so that areas experiencing power outages (particularly homeowners with private wells) can return to normalcy. However, certain high-volume users may not employ many people, or use water that may be better served for residential customers connected to the system. The recent widely reported and protested commercial bottling plant in Bloomfield is an example of this issue.

Water Conservation – In some cases, significant conservation measures have already been enacted, and additional water conservation efforts by a utility may have a minimal return and therefore may not be worth the investment. While all of the larger utilities practice water conservation, smaller systems typically limit conservation to end-user controls such as low-flow toilets, faucets, and showers. Continuing education is necessary to remind users of conservation methods, but additional education is needed for the general public regarding the amount water is being saved today that may have been wasted in the past. In addition, while larger systems track unaccounted-for water to determine leakage, smaller systems with water mains typically have minimal meter readings, and the amount of water lost is unclear.

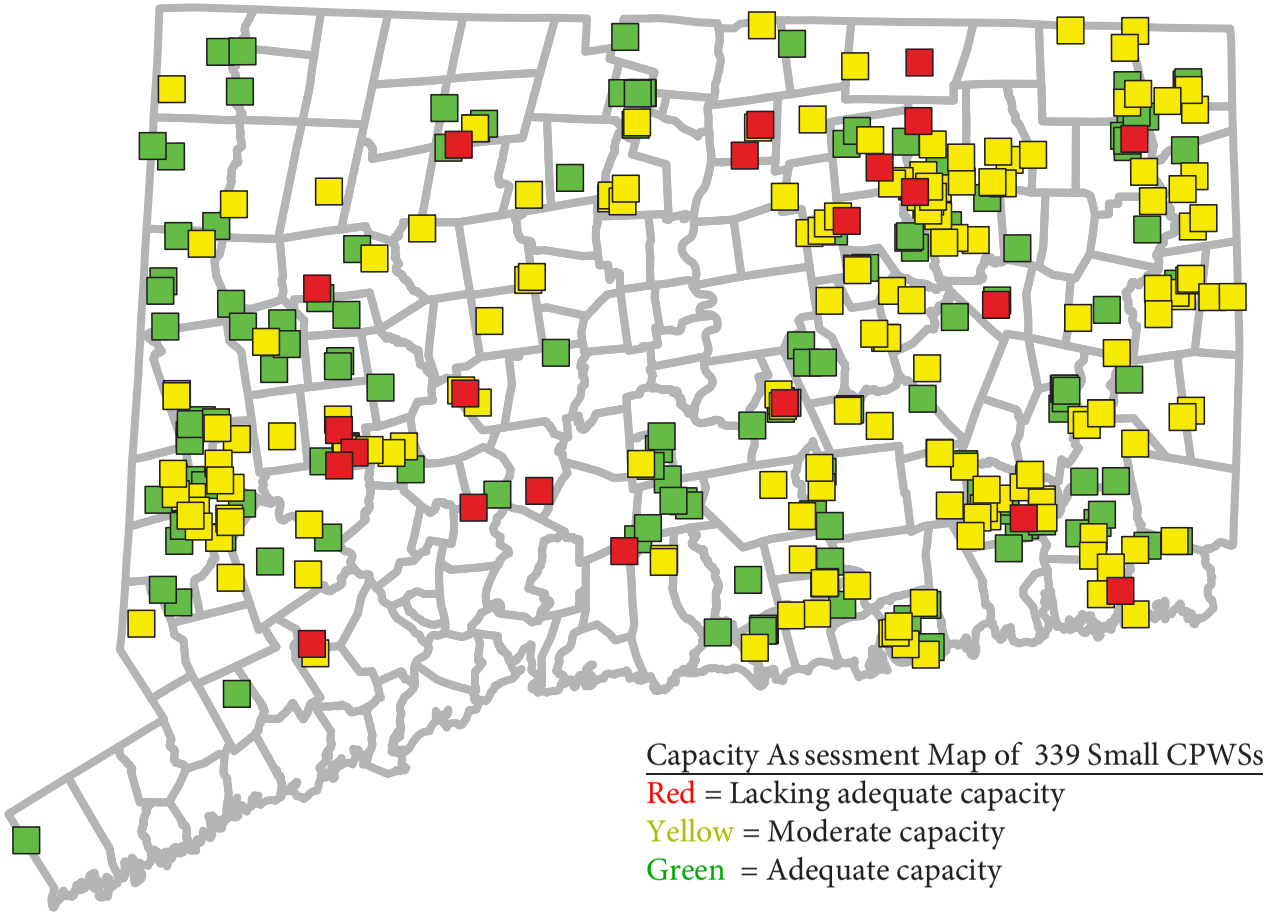
7.6 Final Thoughts

These and other issues that may arise during the Coordinated Water System planning process will be evaluated in the *Integrated Report*, including existing and future projected population, existing and alternative water supplies, source protection, water conservation, existing and potential interconnections, system ownership and management, satellite management/ownership issues,

minimum design standards, financial considerations, potential impacts on other uses of water resources, and land acquisition for source water protection.

APPENDED FIGURES

Figure 1: Small Community Public Water System Capacity Assessment Map

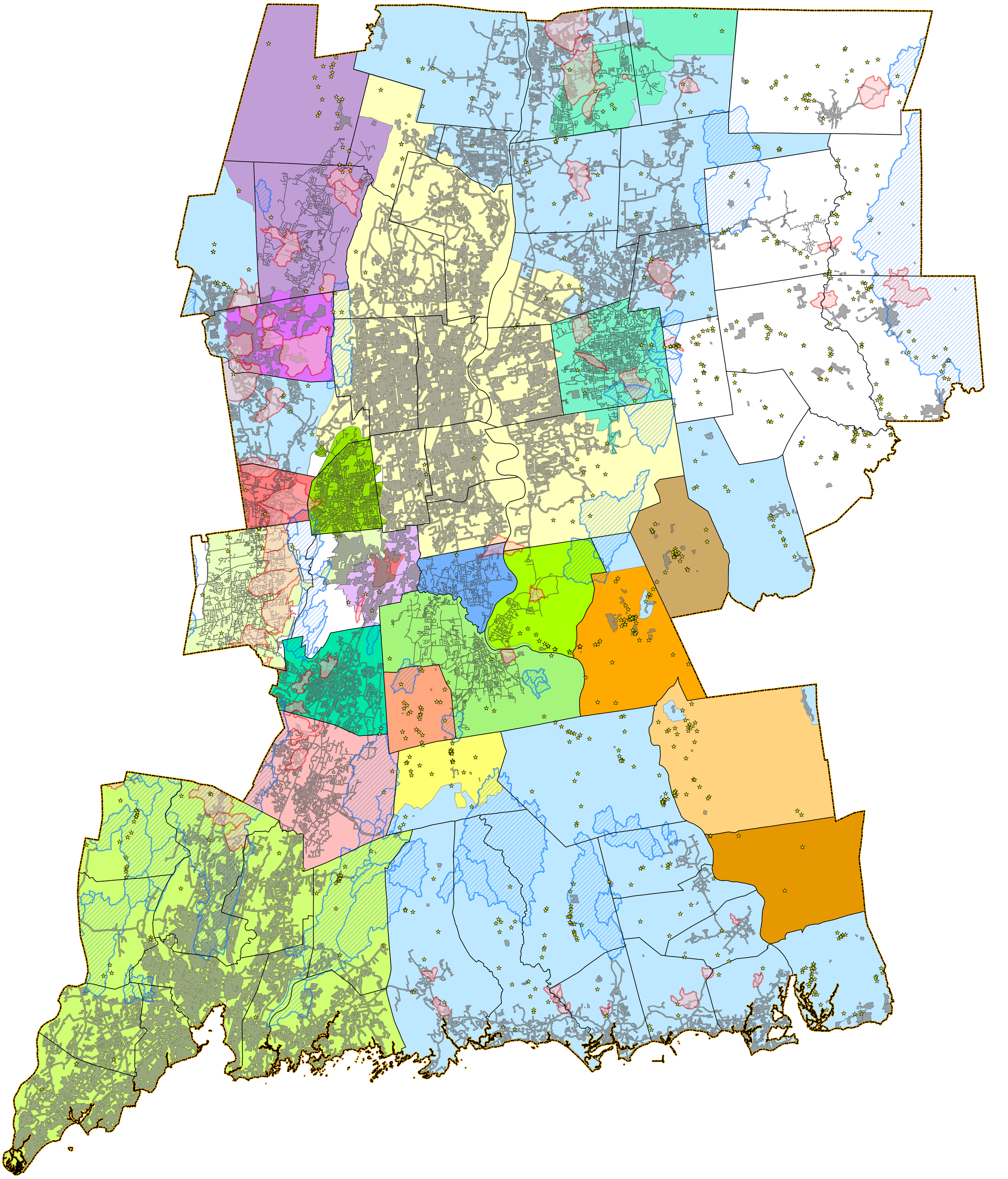


LEGEND

- NON-COMMUNITY SYSTEMS
- AQUIFER PROTECTION AREAS (APA)
- PWS WATERSHED
- COMMUNITY WATER SYSTEMS

EXCLUSIVE SERVICE AREA

- EXCLUSIVE UNASSIGNED/UNDEFINED
- AQUARION WATER CO.
- AVON WATER CO
- BERLIN WATER CONTROL COMMISSION
- CROMWELL FIRE DISTRICT WATER DEPARTMENT
- CONNECTICUT WATER CO.
- HAZARDVILLE WATER COMPANY
- KENSINGTON FIRE DISTRICT
- MANCHESTER WATER DEPARTMENT
- MERIDEN WATER DIVISION
- METROPOLITAN DISTRICT COMMISSION
- MIDDLETOWN WATER DEPARTMENT
- NEW BRITAIN WATER DEPARTMENT
- PORTLAND WATER DEPARTMENT
- SOUTH CENTRAL CT REGIONAL WATER AUTHORITY
- SOUTHINGTON WATER DEPARTMENT
- TOWN OF DURHAM
- TOWN OF EAST HADDAM
- TOWN OF EAST HAMPTON
- TOWN OF LYME
- TOWN OF MARLBOROUGH
- TOWN OF MIDDLEFIELD
- VALLEY WATER SYSTEMS, INC.
- WALLINGFORD WATER DEPARTMENT
- WORTHINGTON FIRE DISTRICT



CENTRAL PWSMA OVERVIEW

CENTRAL CONNECTICUT
WATER SUPPLY ASSESSMENT

N
W E
S

SOURCE:
CT DPH, CT DEEP

SJB	SJB	DM
DESIGNED	DRAWN	CHECKED

SCALE:
1:148,000

PROJECT NO.:
1017-05-02

Engineering,
Landscape Architecture
and Environmental Science

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DATE:
September 6, 2016

SHEET:
APPENDED
FIGURE 2

APPENDIX A

NOTIFICATIONS

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor

Nancy Wyman
Lt. Governor

Drinking Water Section

DWS Circular Letter #2016-14

To: Related State Agencies
Chief Elected Officials
Town Planners
Town Clerks
Planning and Zoning Officers
Executive Directors of Councils of Governments
Local Health Departments and Districts
Public Water Systems
Other Interested Persons

From: Lori J. Mathieu, Public Health Section Chief, Drinking Water Section

Date: May 20, 2016

Subject: Official Convening of the Water Utility Coordinating Committees

Pursuant to *Conn. Gen. Stat.* § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, the Commissioner of Public Health, following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies, plans to convene the Water Utility Coordinating Committees in the following order, dates, and times:

Western	Town of Brookfield Town Hall Tuesday, June 14, 2016 from 10 am to 12 pm
Central Corridor	City of Middletown City Hall Wednesday, June 15, 2016 from 1:30 pm to 3:30 pm
Eastern	Southeast Connecticut Council of Governments Friday, June 17, 2016 from 1pm to 3pm

Attached for your information is a copy of the legal notice and the official convening announcement. The legal notice has been published in a newspaper, which has the largest daily circulation within each of the WUCC management areas. These notices are also available on the Drinking Water Section's website at the following link: http://www.ct.gov/dph/WUCC.

DPH is an equal opportunity provider. If you require aid/accommodation to participate fully and fairly, please contact Eric McPhee at (860) 509-7333.

cc: Ellen Blaschinski, Public Health Branch Chief, DPH

Keeping Connecticut Healthy
DPH
Connecticut Department of Public Health

Phone: (860) 509-7333 • Fax: (860) 509-7359 • VP: (860) 899-1611
410 Capitol Avenue, P.O. Box 340308, MS#51WAT
Hartford, Connecticut 06134-0308
www.ct.gov/dph/publicdrinkingwater

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor

Nancy Wyman
Lt. Governor

NOTICE OF THE CONVENING OF THE
WESTERN WATER UTILITY COORDINATING COMMITTEE

Pursuant to *Conn. Gen. Stat.* § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, I have convened the Western Water Utility Coordinating Committee ("Western WUCC") by publishing on a legal notice, a copy of which is enclosed, in the Waterbury Republican which is the newspaper having the largest daily circulation in the Western public water supply management area, as well as in the Danbury News-Times, NE News Today and La Voz Hispana newspapers. As stated in the legal notice, a meeting will be held on **June 14, 2016** at **10 a.m. in Conference Room 133 at the Brookfield Town Hall, 100 Pocono Road, Brookfield, Connecticut** to implement the planning process established by *Conn. Gen. Stat.* §§ 25-33f, 25-33g and 25-33h.

You are receiving a copy of the legal notice because, based on the Department of Public Health's ("DPH") currently available records, you are an eligible member of the Western WUCC. The eligible members of the Western WUCC consist of one representative of each public water system with a source of water supply or a service area within the Western public water supply management area and one representative from each regional council of governments within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional council of governments.

In addition, I have convened the Central Corridor and Eastern WUCCs. The meeting of the Central Corridor WUCC is on June 15, 2016 at 1:30 p.m. in Common Council Chambers at the Middletown City Hall, 24 deKoven Drive, Middletown, Connecticut and the meeting of the Eastern WUCC is on June 17, 2016 at 1 p.m. at the Southeast Connecticut Council of Governments office, 5 Connecticut Avenue, Norwich, Connecticut.

Information regarding the WUCCs is available on the Department of Public Health ("DPH") Drinking Water Section's website at: http://www.ct.gov/dph/WUCC.

I appreciate your involvement in the very important WUCC planning process. If you have any questions, please do not hesitate to call Justin Milardo, DPH Drinking Water Section, at (860) 509-7333.

05/19/16
Date

Raul Pino, MD, MPH
Commissioner of the
State of Connecticut Department of Public Health

Enc.

Phone: (860) 509-8000 • Fax: (860) 509-7184
410 Capitol Avenue, P.O. Box 340308
Hartford, Connecticut 06134-0308
www.ct.gov/dph
Affirmative Action/Equal Opportunity Employer

LEGAL NOTICE

Pursuant to *Conn. Gen. Stat*. § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, the Commissioner of Public Health, following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies on October 24, 2014, hereby convenes the Western Water Utility Coordinating Committee ("Western WUCC") on June 14, 2016 at 10 a.m. in Meeting Room 133 at the Brookfield Town Hall, 100 Pocono Road, Brookfield, Connecticut to implement the planning process established by *Conn. Gen. Stat*. §§ 25-33f, 25-33g and 25-33h. The eligible members of the Western WUCC consist of one representative of each public water system with a source of water supply or a service area within the Western public water supply management area and one representative from each regional council of governments within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional council of governments.

Following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies on October 24, 2014, the Commissioner of Public Health plans to convene the Central Corridor WUCC on June 15, 2016 at 1:30 p.m. in Common Council Chambers at the Middletown City Hall, 24 deKoven Drive, Middletown, Connecticut and the Eastern WUCC on June 17, 2016 at 1 p.m. in the Southeast Connecticut Council of Governments office, 5 Connecticut Avenue, Norwich, Connecticut.

Information regarding the WUCCs is available on the Department of Public Health Drinking Water Section's website at: http://www.ct.gov/dph/WUCC.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor

Nancy Wyman
Lt. Governor

NOTICE OF THE CONVENING OF THE
CENTRAL CORRIDOR WATER UTILITY COORDINATING COMMITTEE

Pursuant to *Conn. Gen. Stat.* § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, I have convened the Central Corridor Water Utility Coordinating Committee ("Central Corridor WUCC") by publishing on a legal notice, a copy of which is enclosed, in the Hartford Courant which is the newspaper having the largest daily circulation in the Central Corridor public water supply management area, as well as in the New Haven Register, NE News Today and La Voz Hispana newspapers. As stated in the legal notice, a meeting will be held on **June 15, 2016** at **1:30 p.m. in the Common Council Chambers at the Middletown City Hall, 24 deKoven Drive, Middletown, Connecticut** to implement the planning process established by *Conn. Gen. Stat.* §§ 25-33f, 25-33g and 25-33h.

You are receiving a copy of the legal notice because, based on the Department of Public Health's ("DPH") currently available records, you are an eligible member of the Central Corridor WUCC. The eligible members of the Central Corridor WUCC consist of one representative of each public water system with a source of water supply or a service area within the Central Corridor public water supply management area and one representative from each regional council of governments within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional council of governments.

In addition, I have convened the Western and Eastern WUCCs. The meeting of the Western WUCC is on June 14, 2016 at 10 a.m. in Meeting Room 133 at the Brookfield Town Hall, 100 Pocono Road, Brookfield, Connecticut and the meeting of the Eastern WUCC is on June 17, 2016 at 1 p.m. at the Southeast Connecticut Council of Governments office, 5 Connecticut Avenue, Norwich, Connecticut.

Information regarding the WUCCs is available on the Department of Public Health ("DPH") Drinking Water Section's website at: http://www.ct.gov/dph/WUCC.

I appreciate your involvement in the very important WUCC planning process. If you have any questions, please do not hesitate to call Justin Milardo, DPH Drinking Water Section, at (860) 509-7333.

05/19/16
Date

Raul Pino, MD, MPH
Commissioner of the
State of Connecticut Department of Public Health

Enc.

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Hartford, Connecticut 06134-0308
www.ct.gov/dph
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LEGAL NOTICE

Pursuant to *Conn. Gen. Stat*. § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, the Commissioner of Public Health, following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies on October 24, 2014, hereby convenes the Central Water Utility Coordinating Committee ("Central WUCC") on June 15, 2016 at 1:30 p.m. in the Common Council Chambers at the Middletown City Hall, 24 deKoven, Middletown, Connecticut to implement the planning process established by *Conn. Gen. Stat*. §§ 25-33f, 25-33g and 25-33h. The eligible members of the Central WUCC consist of one representative of each public water system with a source of water supply or a service area within the Central public water supply management area and one representative from each regional council of governments within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional council of governments.

Following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies on October 24, 2014, the Commissioner of Public Health plans to convene the Western WUCC on June 14, 2016 at 10 a.m. in Meeting Room 133 at the Brookfield Town Hall, 100 Pocono Road, Brookfield, Connecticut and the Eastern WUCC on June 17, 2016 at 1 p.m. in the Southeast Connecticut Council of Governments office, 5 Connecticut Avenue, Norwich, Connecticut.

Information regarding the WUCCs is available on the Department of Public Health Drinking Water Section's website at: http://www.ct.gov/dph/WUCC.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor

Nancy Wyman
Lt. Governor

NOTICE OF THE CONVENING OF THE
EASTERN WATER UTILITY COORDINATING COMMITTEE

Pursuant to *Conn. Gen. Stat.* § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, I have convened the Eastern Water Utility Coordinating Committee ("Eastern WUCC") by publishing a legal notice, a copy of which is enclosed, in the New London Day which is the newspaper having the largest daily circulation in the Eastern public water supply management area, as well as in the Norwich Bulletin, NE News Today and La Voz Hispana newspapers. As stated in the legal notice, a meeting will be held on **June 17, 2016** at **1 p.m. at the Southeast Connecticut Council of Governments office, 5 Connecticut Avenue, Norwich, Connecticut** to implement the planning process established by *Conn. Gen. Stat.* §§ 25-33f, 25-33g and 25-33h.

You are receiving a copy of the legal notice because, based on the Department of Public Health's ("DPH") currently available records, you are an eligible member of the Eastern WUCC. The eligible members of the Eastern WUCC consist of one representative of each public water system with a source of water supply or a service area within the Eastern public water supply management area and one representative from each regional council of governments within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional council of governments.

In addition, I have convened the Western and Central Corridor WUCCs. The meeting of the Western WUCC is on June 14, 2016 at 10 a.m. in Meeting Room 133 at the Brookfield Town Hall, 100 Pocono Road, Brookfield, Connecticut and the meeting of the Central Corridor WUCC is on June 15, 2016 at 1:30 p.m., in the Common Council Chambers, at the Middletown City Hall, 24 deKoven Drive, Middletown, Connecticut.

Information regarding the WUCCs is available on the Department of Public Health ("DPH") Drinking Water Section's website at: http://www.ct.gov/dph/WUCC.

I appreciate your involvement in the very important WUCC planning process. If you have any questions, please do not hesitate to call Justin Milardo, DPH Drinking Water Section, at (860) 509-7333.

05/19/16
Date

Raul Pino, MD, MPH
Commissioner of the
State of Connecticut Department of Public Health

Enc.

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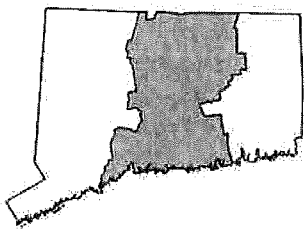
LEGAL NOTICE

Pursuant to *Conn. Gen. Stat*. § 25-33f and § 25-33h-1(b) of the Regulations of the Connecticut State Agencies, the Commissioner of Public Health, following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies on October 24, 2014, hereby convenes the Eastern Water Utility Coordinating Committee ("Eastern WUCC") on June 17, 2016 at 1 p.m. at the Southeast Connecticut Council of Governments office, 5 Connecticut Avenue, Norwich, Connecticut to implement the planning process established by *Conn. Gen. Stat*. §§ 25-33f, 25-33g and 25-33h. The eligible members of the Eastern WUCC consist of one representative of each public water system with a source of water supply or a service area within the Eastern public water supply management area and one representative from each regional council of governments within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional council of governments.

Following the final altered priorities established pursuant to *Conn. Gen. Stat.* § 25-33e and § 25-33h-1(j) of the Regulations of the Connecticut State Agencies on October 24, 2014, the Commissioner of Public Health plans to convene the Western WUCC on June 14, 2016 at 10 a.m. in Meeting Room 133 at the Brookfield Town Hall, 100 Pocono Road, Brookfield, Connecticut and the Central WUCC on June 15, 2016 at 1:30 p.m. in the Common Council Chambers, at the Middletown City Hall, 24 deKoven Drive, Middletown, Connecticut.

Information regarding the WUCCs is available on the Department of Public Health Drinking Water Section's website at: http://www.ct.gov/dph/WUCC.

Central Region
Water Utility Coordinating Committee



June 28, 2016

David Radka, Co-Chair
DRadka@ctwater.com
860-669-8630

Bart Halloran, Co-Chair
bhalloran@themdc.com
860-726-7810

Brendan Avery,
Recording Secretary
bavery@hazardvillewater.com
860-749-0779

Justin Milardo
Connecticut Department of Public Health
410 Capitol Avenue; #51WAT
Hartford, CT 06134

RE: Notice of Preliminary Water Supply Assessment
Central Region WUCC

Dear Mr. Milardo:

In accordance with Section 25-33h-1(c)(5) of the Regulations of Connecticut State Agencies, we request that you share the attached notification to all eligible WUCC members, municipalities within the Central Region management area, and other interested persons on the DPH mailing list. We further ask that the notification be posted on the DPH sponsored web page.

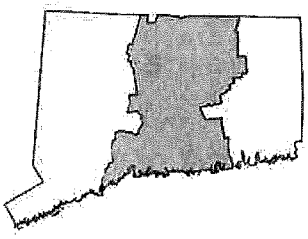
Please do not hesitate to contact any one of us should you have any questions or require further clarification.

Very Truly Yours,

David Radka
Central Region WUCC Co-Chair

Bart Halloran
Central Region WUCC Co-Chair

Central Region
Water Utility Coordinating Committee



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Brendan Avery,
Recording Secretary
bavery@hazardvillewater.com
860-749-0779

June 28, 2016

WUCC Members
Municipal Officials
Interested Persons

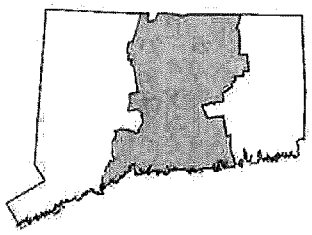
RE: Notice of Commencement Preliminary Water Supply Assessment
Central Region WUCC

The Central Region Water Utility Coordinating Committee (WUCC) has begun a two year drinking water supply planning process in the central region public water supply management area. In accordance with Section 25-33h-1(c)(5) of the Regulations of Connecticut State Agencies, this letter is being sent to all eligible WUCC members within the central public water supply management area, Chief Administrative Officials, and other interested persons to provide notice that a preliminary assessment of public drinking water supply conditions and problems is being undertaken. A Preliminary Water Supply Assessment will be prepared and shared with WUCC members and the general public as part of the Central Region Coordinated Water System Plan.

Eligible WUCC members include one representative from each public water system with a source of supply or service area within the public water supply management area and one representative from each regional planning agency within the public water supply management area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional planning agency. A public water system is any private, municipal or regional utility supplying water for human consumption through pipes or other constructed conveyances to at least 15 service connections or that serves an average of at least 25 people daily for at least 60 days per year.

The Water Supply Assessment (WSA) will be the first of four documents that will be created through the Central Region WUCC planning process. The WSA is a review of the existing public water supply systems, assessing conditions, needs, issues, and deficiencies. Specifically, the assessment will include a description of existing water systems; availability and adequacy of any future water sources; existing service area boundaries and public water system limits established by statute, special act, or administrative decision; present and projected growth rates; and status of water system planning, land use planning, and coordination between public water systems.

Central Region
Water Utility Coordinating Committee



The Central Region WUCC encourages participation in all stages of the WUCC process in order to receive input from all affected parties. It is important to participate in order to understand how this process and specifically the water supply assessment document will affect public water systems, communities, and the region. Discussion of this topic will begin at the next regularly scheduled WUCC meeting to be held on July 20, 2016 at Middletown City Hall; 245 deKoven Drive; Middletown, CT at 1:30 p.m. Members of the public may attend.

Additional information pertaining to the Central Region Water Utility Coordinating Committee, including past and future meeting agendas, meeting minutes, correspondence, mapping, and publications may be found at the following web site: http://www.ct.gov/dph/cwp/view.asp?a=3139&q=576506

Very Truly Yours,

David Radka
Central Region WUCC Co-Chair

Bart Halloran
Central Region WUCC Co-Chair

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor

Nancy Wyman
Lt. Governor

Drinking Water Section

DWS Circular Letter #2016-19

To: Related State Agencies
Chief Elected Officials
Town Planners
Town Clerks
Planning and Zoning Officers
Executive Directors of Councils of Governments
Local Health Departments and Districts
Public Water Systems
Other Interested Persons

From: Lori J. Mathieu, Public Health Section Chief, Drinking Water Section

Date: June 29, 2016

Subject: Webinar Explaining the Water Utility Coordinating Committee Process

The Connecticut Department of Public Health Drinking Water Section (DWS) will be conducting a webinar on August 25, 2016 at 1pm, to discuss steps taken to date in order to convene the three Water Utility Coordinating Committees (WUCCs).

The Western, Central Corridor, and Eastern WUCCs have been convened on June 14, 2016, June 15, 2016 and June 17, 2016 respectively. This webinar will cover the history and implementation of *Conn. Gen. Stat* §§ 25-33f, 25-33g and 25-33h. Other topics to be discussed include the data collection process, the contract and role of Milone and MacBroom to facilitate the process, in addition to the responsibilities each WUCC is mandated to complete over the next 24 months.

We would encourage those involved or interested in the WUCC process to register for this informational webinar. For more information, please visit the DWS Water Utility Coordinating Committee website at www.ct.gov/dph/WUCC.

Keeping Connecticut Healthy
DPH
Connecticut Department of Public Health

Phone: (860) 509-7333 • Fax: (860) 509-7359 • VP: (860) 899-1611
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Hartford, Connecticut 06134-0308
www.ct.gov/dph/publicdrinkingwater

Central Region
Water Utility Coordinating Committee

August 5, 2016

David Radka, Co-Chair
DRadka@ctwater.com
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Bart Halloran, Co-Chair
bhalloran@themdc.com
860-726-7810

Brendan Avery,
Recording Secretary
bavery@hazardvillewater.com
860-749-0779

Council of Government Representatives to the Central Region WUCC

Mr. Sam Gold, Lower CT River Valley COG
Mr. Carl Amento, South Central Regional COG
Ms. Rebecca Andreucci, South Central Regional COG
Ms. Mary Ellen Kowalewski, Capitol Region COG

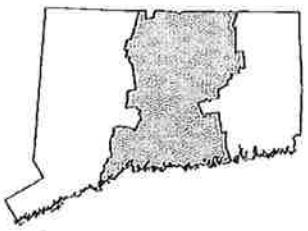
RE: Request for Information
Preliminary Water Supply Assessment
Central Region WUCC

The Central Region Water Utility Coordinating Committee (WUCC) has initiated a Water Supply Assessment as part of the coordinated planning process. The Assessment will include a description of existing water systems; availability and adequacy of water supply sources; existing service area boundaries and public water system limits; present and projected growth rates; and status of water system planning, land use planning and coordination between public water systems. Importantly, it is intended to identify local and regional needs, issues, and deficiencies, as they may pertain to public water.

In order to complete this critical task, the WUCC is seeking input from each municipality within the Central WUCC Region. To that end, you are respectfully requested to contact your member municipalities to obtain feedback and insight on the following types of information:

- Where is additional water supply needed?
  - Is the creation of a public water system desired in any village center where one does not now exist? If so, what are the issues such a system would be looking to address?
  - Are there any areas where a water main extension is needed to address poor water quality and/or availability issues?
- Are there issues with existing small water systems?
  - Are there any small water systems with unmet needs and/or operating challenges?
  - Are there any instances where it may be prudent to consolidate water systems?
  - Is there a desire to reduce the number of small systems, even where options are limited?

Central Region
Water Utility Coordinating Committee



- Are there financial challenges?
  - Has the town lacked funding for desired water system expansion?
  - Are any town-owned water system capital and/or O&M needs unmet?

Please plan on bringing any information to our August 17, 2016 meeting for discussion. If you have any questions, please feel to contact us or Milone and MacBroom.

Additional information pertaining to the Central Region Water Utility Coordinating Committee, including past and future meeting agendas, meeting minutes, correspondence, mapping, and publications may be found at the following web site: http://www.ct.gov/dph/cwp/view.asp?a=3139&q=576504

Very Truly Yours,

David Radka
Central Region WUCC Co-Chair

Barbara Malloran
Central Region WUCC Co-Chair

Central Region
Water Utility Coordinating Committee

David Radka, Co-Chair
DRadka@ctwater.com
860-669-8630

Bart Halloran, Co-Chair
bhalloran@themdc.com
860-726-7810

Brendan Avery,
Recording Secretary
bavery@hazardvillewater.com
860-749-0779

August 10, 2016

Central WUCC Members

RE: Review of Draft Preliminary Water Supply Assessment

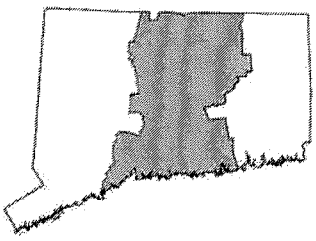
In accordance with CGS 25-33g, the Central Connecticut Water Utility Coordinating Committee (WUCC) has prepared a draft Preliminary Water Supply Assessment ("Preliminary Assessment"). The next WUCC meeting is scheduled for August 17, 2016, and a discussion of the preliminary draft will transpire during the meeting. If you would like to receive a copy prior to the meeting, please contact Brendan Avery, Recording Secretary, listed on this letterhead.

Very truly yours,

David Radka
Central Region WUCC Co-Chair

Bart Halloran
Central Region WUCC Co-Chair

Central Region
Water Utility Coordinating Committee



September 6, 2016

Via Electronic Mail

David Radka, Co-Chair
DRadka@ctwater.com
860-669-8630

Bart Halloran, Co-Chair
bhalloran@themdc.com
860-726-7810

Brendan Avery,
Recording Secretary
bavery@hazardvillewater.com
860-749-0779

To: State Agency Representatives:

Mr. Rob Klee, CT DEEP, Commissioner
Ms. Corinne Fitting, CT DEEP
Ms. Melissa Czarnowski, CT DEEP
Mr. Rob Hust, CT DEEP
Mr. Michael Sullivan, CT DEEP

Dr. Raul Pino, CT DPH, Commissioner
Ms. Lori Mathieu, CT DPH
Mr. Eric McPhee, CT DPH
Mr. Justin Milardo, CT DPH
Mr. Rich Iozzo, CT DPH

Mr. Benjamin Barnes, CT OPM, Secretary
Mr. Bruce Wittchen, CT OPM
Mr. Eric Lindquist, CT OPM
Mr. Matt Pafford, CT OPM

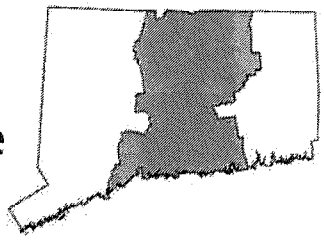
Mr. Arthur House, CT PURA, Chairman
Mr. Nicholas Neeley, CT PURA
Ms. Gail Lucchina, CT PURA

RE: Consultation on Draft Preliminary Water Supply Assessment

In accordance with CGS 25-33g, the Central Connecticut Water Utility Coordinating Committee (WUCC) has prepared a Draft Preliminary Water Supply Assessment ("Preliminary Assessment") for the Central Connecticut Public Water Supply Management Area (PWSMA). CGS 25-33g(a) requires that the WUCC prepare this document in consultation with the Commissioner of Public Health, the Commissioner of Energy and Environmental Protection, the Secretary of the Office of Policy and Management, and the Public Utilities Regulatory Authority. A copy of the draft document is attached.

Please be advised that this document has not yet been approved by the WUCC for public release. At this time, we ask that your agencies begin reviewing this document to provide consultation to the Central WUCC. The next WUCC meeting is scheduled for September 21, 2016, and it is anticipated that the Preliminary Assessment will be approved at that time for release to the public for review and comment.

Central Region
Water Utility Coordinating Committee



The public comment period is anticipated to extend until late October, with final comments being necessary from members and your agencies prior to the end of November. Please provide comments via electronic mail to the Recording Secretary, Brendan Avery, via mail at the mailing address of the Recording Secretary listed below, or by attendance at our WUCC meetings. If you have any questions, please do not hesitate to contact any of the WUCC officers or our consultant, Ms. Jeanine Armstrong Gouin of Milone & MacBroom, Inc., at 203-271-1773 or jgouin@mminc.com.

Thank you for the continued attendance of your agencies at one or more of the monthly WUCC meetings in each region. We look forward to hearing your thoughts and concerns. For up to date information regarding the WUCC process, please visit the DPH website at http://www.ct.gov/dph/wucc.

Very Truly Yours,

David Radka
Central Region WUCC Co-Chair

Bart Halloran
Central Region WUCC Co-Chair

APPENDIX B

CENTRAL WUCC MEMBER LIST

WUCC Membership

Per RCSA Sec. 25-33h-1(b):

(6) Eligible WUCC members are as follows:

(A) One representative of each public water system which has either:

(i) A source of supply within the management area which is a source of potable water approved by the department, including reservoirs, wells, other water bodies and associated watershed land, or

(ii) A service area within the management area including areas where service is currently provided to customers or where a public water system has the authority to provide such service as determined by legal rights such as legislative franchises, municipal charters, or interlocal agreements for the sale of water.

(B) One representative of each regional planning agency serving at least one municipality within the management area as elected by majority vote of the chief elected officials of the municipalities that are members of such regional planning agency.

Central Corridor WUCC

RCSA Sec. 25-33h-1(b)(6)(A)(i): Membership as a result of a reservoir or associated watershed land in a management area

PWS_ID	PWS_NAME
CT1280021	AQUARION WATER CO OF CT-SIMSBURY SYSTE
CT0830021	CONNECTICUT VALLEY HOSPITAL
CT0880011	CTWC - NAUGATUCK REGION-CENTRAL SYSTEM
CT1340011	CTWC - NORTHERN REG-STAFFORD SYSTEM
CT0473011	CTWC - NORTHERN REG-WESTERN SYSTEM
CT0261031	CTWC - SHORELINE REGION-CHESTER SYSTEM
CT0608011	CTWC - SHORELINE REGION-GUILFORD SYSTE
CT0770021	MANCHESTER WATER DEPARTMENT
CT0800011	MERIDEN WATER DIVISION
CT0640011	METROPOLITAN DISTRICT COMMISSION
CT0830011	MIDDLETOWN WATER DEPARTMENT
CT0890011	NEW BRITAIN WATER DEPARTMENT
CT1130011	PORTLAND WATER DEPARTMENT
CT0930011	REGIONAL WATER AUTHORITY
CT0020021	REGIONAL WATER AUTHORITY-ANSONIA
CT1310011	SOUTHINGTON WATER DEPARTMENT
CT1100011	VALLEY WATER SYSTEMS, INC.
CT1480011	WALLINGFORD WATER DEPARTMENT
CT1630011	WINDHAM WATER WORKS

Central Corridor WUCC

RCSA Sec. 25-33h-1(b)(6)(A)(i): Membership as a result of a well or associated aquifer protection area land in a management area

PWS_ID	PWS_NAME
CT1280021	Aquarion Water Co Of CT - Simsbury System
CT0040011	Avon Water Company
CT0070021	Berlin Water Control Commission
CT0170011	Bristol Water Department
CT0330011	Cromwell Fire District Water Department
CT0880011	CTWC - Naugatuck Region - Central System
CT1290011	CTWC - Northern Region - Somers System
CT1340011	CTWC - Northern Region - Stafford System
CT0473011	CTWC - Northern Region - Western System
CT0261031	CTWC - Shoreline Region - Chester System
CT0608011	CTWC - Shoreline Region - Guilford System
CT0520011	CWC - Unionville
CT0490021	Hazardville Water Company
CT0770021	Manchester Water Department
CT0800011	Meriden Water Division
CT0830011	Middletown Water Department
CT1130011	Portland Water Department
CT0930011	South Central Connecticut Regional Water Authority
CT1310011	Southington Water Department
CT1280011	Tariffville Fire District Water Department
CT1423011	Tolland Water Department
CT0780021	University of Connecticut - Main Campus
CT1100011	Valley Water Systems, Inc
CT1480011	Wallingford Water Department

Central Corridor WUCC

RCSA Sec. 25-33h-1(b)(6)(A)(ii): Membership as a result of a service area within the management area including areas where service is currently provided to customers

PWS_ID	PWS_NAME
CT0121051	166 & 180 BOSTON TURNPIKE
CT0231011	298-302 ALBANY TURNPIKE
CT0419221	31 GRIST MILL RD
CT0121081	890 BOSTON TURNPIKE
CT0261001	AARON MANOR NURSING & REHAB CENTER
CT0670021	ABBY WATER LLC
CT1310031	APPLE VALLEY VILLAGE
CT0790051	AQUARION WATER CO OF CT-BIRCHWOOD ESTATE
CT0378011	AQUARION WATER CO OF CT-EAST DERBY
CT0420011	AQUARION WATER CO OF CT-EAST HAMPTON DIV
CT1280021	AQUARION WATER CO OF CT-SIMSBURY SYSTEM
CT1240011	AQUARION WATER CO OF CT-VALLEY SYSTEM
CT0780211	AQUARION WATER CO OF CT-VALLEY VIEW
CT0040011	AVON WATER CO
CT1420021	BAXTER FARMS COMMUNITY WATER ASSOC
CT0420031	BELLWOOD COURT
CT0070021	BERLIN WATER CONTROL COMMISSION
CT0081011	BETHANY MOBILE HOME PARK
CT0827081	BITTERSWEET RIDGE WATER ASSOCIATION
CT0990011	BLUE TRAILS WATER ASSOCIATION
CT1051011	BOXWOOD CONDOMINIUM ASSOCIATION
CT0170011	BRISTOL WATER DEPTARTMENT
CT0780181	CARRIAGE HOUSE APARTMENTS
CT1600081	CEDAR RIDGE APARTMENTS
CT1050011	CHADWICK HOMEOWNERS ASSN., INC.
CT0424011	CHATHAM ACRES ELDERLY HOUSING
CT0420071	CHATHAM APARTMENTS
CT0408011	CHELSEA COMMON CONDOMINIUM ASSOCIATION
CT0411061	CHESTELM HEALTH & REHABILITATION CENTER
CT0780101	CLUB HOUSE APARTMENTS
CT0490031	CONNECTICUT CORRECTIONAL INSTITUTE
CT0830021	CONNECTICUT VALLEY HOSPITAL
CT0120111	COOK DRIVE ASSOCIATION
CT0320171	COVENTRY HOUSING AUTHORITY-LOWER SYSTEM
CT0320181	COVENTRY HOUSING AUTHORITY-UPPER SYSTEM
CT0330011	CROMWELL FIRE DIST WATER DEPT
CT0670331	CTWC - AMSTON LAKE DIVISION
CT0429011	CTWC - BAKER HILL DIVISION
CT0410744	CTWC - BANNER VILLAGE

CT0780121 CTWC - BIRCHWOOD HEIGHTS
CT0300011 CTWC - COLUMBIA HEIGHTS DIV.
CT0671001 CTWC - COUNTRY MANOR APARTMENTS
CT0320091 CTWC - COVENTRY HILLS DIV
CT0787011 CTWC - CRYSTAL SPRINGS DIV.
CT0791201 CTWC - FLORENCE LORD (MASH)
CT0320071 CTWC - GENERAL WATER DIVISION
CT0672031 CTWC - HEBRON CENTER DIVISION
CT0410792 CTWC - LAKE HAYWARD
CT0765101 CTWC - LEGEND HILL CONDOMINIUM ASSN, INC
CT0670011 CTWC - LONDON PARK DIVISION
CT0790031 CTWC - MARLBOROUGH GARDENS
CT0672011 CTWC - MILL AT STONECROFT DIV
CT0230011 CTWC - NAUGATUCK REG-COLLINSVILLE SYS
CT0230011 CTWC - NAUGATUCK REG-COLLINSVILLE SYS
CT0880011 CTWC - NAUGATUCK REGION-CENTRAL SYSTEM
CT0320021 CTWC - NORTHERN REGION-LAKEVIEW TERRACE
CT0320011 CTWC - NORTHERN REGION-LAKEWOOD
CT0120021 CTWC - NORTHERN REG-LLYNWOOD SYSTEM
CT0320031 CTWC - NORTHERN REG-NATHAN HALE SYSTEM
CT1462011 CTWC - NORTHERN REG-RESERVOIR HEIGHTS
CT1340011 CTWC - NORTHERN REG-STAFFORD SYSTEM
CT0473011 CTWC - NORTHERN REG-WESTERN SYSTEM
CT0320041 CTWC - PILGRIM HILLS DIVISION
CT0780081 CTWC - PINEWOODS LANE DIV
CT0770041 CTWC - REDWOOD FARMS DIVISION
CT1130021 CTWC - RIVERCREST DIVISION
CT1609111 CTWC - RIVERSEDGE DIVISION
CT0792011 CTWC - SACHEM VILLAGE CONDO
CT0261081 CTWC - SHORELINE REG-CHESTER VLLG WEST
CT0261031 CTWC - SHORELINE REGION-CHESTER SYSTEM
CT0608011 CTWC - SHORELINE REGION-GUILFORD SYSTEM
CT1050752 CTWC - SHORELINE REGION-POINT O WOODS
CT1050732 CTWC - SHORELINE REGION-SOUND VIEW
CT0428031 CTWC - SPICE HILL DIVISION
CT0520011 CTWC - UNIONVILLE SYSTEM
CT0672021 CTWC - WELLSWOOD VILLAGE DIV
CT0427021 CTWC - WESTCHESTER EAST
CT0790011 CTWC- FOREST HOMES DIVISION
CT0309051 DARTMOUTH VILLAGE ELDERLY HOUSING
CT1600071 DEER PARK APARTMENTS
CT0380021 DURHAM CENTER DIVISION
CT0380641 DURHAM ELDERLY HOUSING DIVISION
CT0380651 DURHAM LEXINGTON PLACE DIVISION
CT0429121 EAST HAMPTON WPCA - ROYAL OAKS SYSTEM
CT0429031 EAST HAMPTON WPCA - VILLAGE CENTER
CT0450011 EAST LYME WATER & SEWER COMMISSION

CT0470071 EAST WINDSOR HOUSING AUTHORITY
CT1420081 EASTVIEW KOZLEY WATER ASSOCIATION
CT0420021 EDGEMERE CONDOMINIUM ASSN., INC.
CT1280051 ETHEL WALKER SCHOOL
CT0270041 EVERGREEN TRAILER PARK - SYSTEM #1
CT0270091 EVERGREEN TRAILER PARK - SYSTEM #2
CT0270101 EVERGREEN TRAILER PARK - SYSTEM #3
CT0270111 EVERGREEN TRAILER PARK - SYSTEM #4
CT0418011 FRANKLIN ACADEMY
CT0419211 GOODSPEED ACTOR HOUSING - THE VILLAGE
CT0400041 GQC WELL COMMISSION
CT0110011 GRANT HILL ASSOCIATES, INC.
CT0760021 GREEN SPRINGS SUBDIVISION
CT0490021 HAZARDVILLE WATER COMPANY
CT0670041 HEBRON ARMS APARTMENTS
CT0500021 HEMLOCK APARTMENTS
CT0500011 HERITAGE COVE CONDOMINIUMS
CT0614021 HIGH MEADOW
CT0670051 HILLSIDE CONDOMINIUMS
CT0790021 HILLSIDE CORPORATION
CT0780091 HUNTING LODGE APARTMENTS
CT1429201 IVY WOODS
CT0700011 JENSENS, INC. BEECHWOOD RESIDENTIAL
CT0780141 JENSENS, INC. ROLLING HILLS RESIDENTIAL
CT1340032 JOHNSON MEMORIAL HOSPITAL, INC
CT0110051 JUNIPER CLUB INC.
CT0070011 KENSINGTON FIRE DISTRICT
CT0780051 KNOLLWOOD ACRES APARTMENTS
CT1056231 LAUREL HEIGHTS ASSOCIATION, INC.
CT0790041 LAUREL HILL WATER ASSOCIATION
CT1059251 LYME ACADEMY APARTMENTS,LLC
CT1050141 LYME REGIS, INC.
CT1056221 LYMEWOOD ELDERLY HOUSING
CT0427011 MALLARD COVE CONDOMINIUM ASSN.
CT0770021 MANCHESTER WATER DEPARTMENT
CT0780251 MANSFIELD VILLAGE, LLC
CT0780161 MAPLEWOOD APARTMENTS
CT0470044 MARKOWSKI FARMS
CT0791001 MARLBOROUGH HEALTH CARE CENTER, INC
CT0480081 MEADOWBROOK APARTMENTS, LLC
CT0501001 MEADOWBROOK MANOR LLC
CT0800011 MERIDEN WATER DIVISION
CT0400061 METACOMET HOMES-WELL 1
CT0408021 METACOMET HOMES-WELL 1
CT0640011 METROPOLITAN DISTRICT COMMISSION
CT1051021 MIAMI BEACH WATER COMPANY
CT0820031 MIDDLEFIELD HOUSING AUTHORITY

CT0830011 MIDDLETOWN WATER DEPT
CT1050131 MILE CREEK APARTMENTS
CT0363011 MOUNT SAINT JOHN SCHOOL
CT1600101 NATURAL PARK APARTMENTS, LLC
CT0890011 NEW BRITAIN WATER DEPTARTMENT
CT0270051 NOD HILL APARTMENTS
CT1600061 NORTH WILLINGTON VILLAGE CONDO ASSOC.
CT0990031 NORTHFORD GLEN CONDOMINIUM ASSOCIATION
CT1420091 NORWEGIAN WOODS APARTMENTS
CT0413011 OAK GROVE SENIOR HOUSING CORP
CT0820501 OLD INDIAN TRAIL
CT0400051 OLD NEWGATE RIDGE WATER COMPANY INC
CT0780061 ORCHARD ACRES ASSOCIATION
CT0110041 ORCHARD HILL ASSOCIATION
CT1130011 PORTLAND WATER DEPT
CT0600041 QUONNIPAUG HILLS - MAIN SYSTEM
CT0606011 QUONNIPAUG HILLS - SECTION I
CT0930011 REGIONAL WATER AUTHORITY
CT0821001 REJA - RAINBOW SPRING WATER COMPANY
CT0780171 RENWOOD APARTMENTS
CT1600051 RIDGEVIEW HEIGHTS
CT0361011 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #1
CT0363031 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #2
CT0363041 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #3
CT0363051 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #4
CT0781131 ROCKRIDGE CONDOMINIUMS
CT1056241 RYE FIELD MANOR ELDERLY HOUSING
CT0780271 S & P PROPERTIES LLC
CT1548011 SAFE HARBOR, INC.
CT0560011 SALMON BROOK DISTRICT WATER DEPT
CT0614031 SAYBROOK AT HADDAM
CT0470021 SCHOOL HILL ASSOCIATION, INC.
CT0490041 SHAKER HEIGHTS WATER COMPANY
CT0110031 SHARON HEIGHTS WATER ASSOCIATION
CT0320051 SOUTH COVENTRY WATER SUPPLY COMPANY
CT1310011 SOUTHINGTON WATER DEPARTMENT
CT0120031 SOUTHRIDGE PARK APARTMENTS
CT1426011 STONE POND CONDOMINIUMS
CT0120041 SUNSET APARTMENTS LLC
CT0826061 SYLVAN RIDGE CONDOMINIUMS
CT1280011 TARIFFVILLE FIRE DISTRICT WATER DEPT
CT1423011 TOLLAND WATER DEPT
CT1429191 TOLLAND WATER DEPT - TORRY ROAD
CT1299031 TOWN OF SOMERS - RYE HILL SYSTEM
CT0400031 TURKEY HILL OF EAST GRANBY, LLC
CT0320061 TWIN HILLS WATER DISTRICT
CT0381011 TWIN MAPLES NURSING HOME

CT0780021	UNIVERSITY OF CONNECTICUT - MAIN CAMPUS
CT1100011	VALLEY WATER SYSTEMS, INC
CT1463011	VERNON VILLAGE INC.
CT1429171	VILLAGE AT CRYSTAL SPRINGS
CT1600041	WALDEN APARTMENTS
CT1480011	WALLINGFORD WATER DEPARTMENT
CT0671021	WELLSWOOD ESTATES FOUNDATION, INC.
CT1390021	WEST SERVICE CORPORATION
CT0421001	WESTSIDE MANOR
CT0780041	WHITE OAK CONDOMINIUMS
CT1600021	WILLINGTON OAKS APARTMENTS
CT1606111	WILLINGTON RIDGE CONDOS - SYSTEM #1
CT1606211	WILLINGTON RIDGE CONDOS - SYSTEM #2
CT1609141	WILLINGTON SENIOR CENTER & HOUSING
CT1630011	WINDHAM WATER WORKS
CT1600031	WOODHAVEN APARTMENTS
CT1420041	WOODLAND SUMMIT COMMUNITY WATER ASSN
CT0300071	WOODLAND TERRACE
CT0780131	WOODS EDGE APARTMENTS, LLC
CT0070031	WORTHINGTON FIRE DISTRICT
CT0421011	Z, INC.

Central Corridor WUCC

RCSA Sec. 25-33h-1(b)(6)(A)(i): Membership as a result of a public water supply well in a management area

PWS_ID	PWS_NAME
CT0750104	1 FERRY ROAD
CT0769103	1 ORCHARD PARK INDUSTRIAL AREA
CT0565073	1 SALMON BROOK STREET - GRANBY
CT0389134	1041 NEW HAVEN ROAD - DURHAM
CT0610454	106 BRIDGE ROAD - HADDAM
CT0820044	108 MAIN STREET
CT0520124	1097 FARMINGTON AVENUE
CT1311054	1103 QUEEN STREET, LLC
CT0120344	1135 BOSTON TURNPIKE - BOLTON
CT0490044	117 HAZARD AVENUE
CT0080154	119 AMITY ROAD
CT0410384	12 RAE PALMES ROAD - EAST HADDAM
CT1311074	1217 QUEEN ST
CT1311064	1226-1234 QUEEN ST - STRIP MALL
CT1670173	125-131 BRADLEY ROAD - WOODBRIDGE
CT1390144	1365 MOUNTAIN ROAD - SUFFIELD
CT0320294	1428 SOUTH SREET - COVENTRY
CT0769113	15 ORCHARD PARK INDUSTRIAL AREA
CT1600044	15 RIVER ROAD PLAZA
CT1050394	163 BOSTON POST ROAD, LLC - OLD LYME
CT0709234	163 ROUTE 81
CT0121051	166 & 180 BOSTON TURNPIKE
CT1420144	167 TOLLAND STAGE ROAD - TOLLAND
CT0787054	1768 STORRS ROAD
CT0709204	177 ROUTE 81
CT0230044	180 CHERRY BROOK ROAD - CANTON
CT0709174	183 ROUTE 81 LLC
CT0990324	1872 MIDDLETOWN AVENUE
CT0990054	1874 MIDDLETOWN AVENUE
CT0230024	192 ALBANY TURNPIKE - CANTON
CT0420554	197 EAST HIGH STREET
CT0781172	1ST BAPTIST CHURCH
CT0410494	2 NORWICH ROAD - E HADDAM
CT0400034	20 COPPER HILL ROAD
CT0614024	201 SAYBROOK ROAD
CT0700174	206 ROUTE 80
CT0331124	227 & 229 SHUNPIKE ROAD
CT0769203	227 HORSE POND ROAD - MADISON
CT0429154	227 WEST HIGH STREET - E HAMPTON
CT0600064	2311 BOSTON POST ROAD - GUILFORD
CT0081114	234 AMITY ROAD

CT0380144 238 MAIN STREET
CT0230294 250 ALBANY TURNPIKE
CT0440074 250 BRADLEY STREET
CT0700284 260 ROUTE 80 - KILLINGWORTH
CT0231011 298-302 ALBANY TURNPIKE
CT0121064 299 BOSTON TURNPIKE - PLAZA
CT0429143 3 SMITH STREET
CT0235074 306 ALBANY TURNPIKE
CT0230094 310 ALBANY TURNPIKE
CT0410774 32 MAIN STREET - EAST HADDAM
CT0380264 325 MAIN STREET
CT0300174 326 ROUTE 87 - COLUMBIA
CT1059244 34 LYME STREET
CT0420494 36 EAST HIGH STREET - EAST HAMPTON
CT0279033 36 KILLINGWORTH TNPK-LANTERN SQ-CLINTON
CT0420144 37 EAST HIGH STREET - E HAMPTON
CT0419214 374 TOWN STREET
CT0410354 381 TOWN STREET - EAST HADDAM
CT1600224 39 ADAMEC ROAD
CT0565063 4 WEST GRANBY ROAD
CT0610324 40 SAYBROOK ROAD
CT1429204 404 MERROW ROAD - TOLLAND
CT0780154 452 STAFFORD ROAD - THE DELI CLUB
CT0389164 459 MADISON RD
CT0389163 45R OZICK DRIVE - UNIT 18-R
CT0780244 466 STORRS RD
CT0560074 496 SALMON BROOK STREET
CT0990713 5 ARDSLEY AVENUE
CT1460104 500 EAST PLAZA
CT0309124 52 ROUTE 66
CT0990014 531 FOREST ROAD - N. BRANFORD
CT0560024 565 SALMON BROOK ST - GRANBY
CT0829084 6 WAY ROAD - MIDDLEFIELD
CT0120384 60 VILLA LOUISA - VILLA LOUISA/ROSSITTOS
CT0780464 603 MIDDLE TURNPIKE - MANSFIELD
CT0779094 622 MIDDLE TURNPIKE EAST
CT1340014 64 WEST STAFFORD ROAD (RT 190)
CT1429173 70 MERROW ROAD
CT1420134 71 HARTFORD TURNPIKE
CT0010084 7-ELEVEN #32523
CT0410664 7-ELEVEN #32526
CT0320044 7-ELEVEN COVENTRY
CT0770134 801A HARTFORD ROAD
CT0780334 847 STAFFORD ROAD
CT1050364 85 HALLS ROAD
CT1130114 860 PORTLAND COBALT ROAD
CT0787044 873 STAFFORD ROAD - MANSFIELD

CT0121081	890 BOSTON TURNPIKE
CT0614043	95 BRIDGE ROAD - HADDAM
CT0400024	95 SPOONVILLE ROAD - EAST GRANBY
CT0610484	986 KILLINGWORTH RD PLAZA
CT1100014	A. AIUDI & SONS, LLC
CT1059254	A. C. PETERSON'S DRIVE-IN
CT0261001	AARON MANOR NURSING & REHAB CENTER
CT0670021	ABBY WATER LLC
CT0120024	ABLE COIL
CT0400182	ACCELERON
CT0389174	ADAMS COMMONS, LLC.
CT1390014	AIRWAYS GOLF COURSE
CT0780014	ALTNAVEIGH INN & RESTAURANT, LLC.
CT0420024	AMERICAN DISTILLING & MANUFACTURING, INC
CT0410454	AMERICAN LEGION POST #156
CT0790014	AMERICAN LEGION POST 197
CT0080162	AMITY REGIONAL JUNIOR HIGH SCHOOL
CT0080024	AMITY VILLAGE - BETHANY 63 PLAZA
CT0010102	ANDOVER ELEMENTARY SCHOOL
CT0010044	ANDOVER PLAZA
CT0010024	ANDOVER TOWN HALL & FIRE DEPARTMENT
CT0420294	ANGELICOS LAKEHOUSE
CT0781253	ANNIE E. VINTON SCHOOL CO-OWNER
CT0600014	ANTHONYS OF GUILFORD
CT0120014	A-ONE FOOD STORE
CT1310031	APPLE VALLEY VILLAGE
CT0790051	AQUARION WATER CO OF CT-BIRCHWOOD ESTATE
CT0420011	AQUARION WATER CO OF CT-EAST HAMPTON DIV
CT1280021	AQUARION WATER CO OF CT-SIMSBURY SYSTEM
CT0780211	AQUARION WATER CO OF CT-VALLEY VIEW
CT1100054	ASIA DARBAR
CT0040011	AVON WATER CO
CT1130174	AXELROD TIRE AND SERVICE CENTER
CT1390112	BAKER NURSERIES
CT0309093	BAPTIST FELLOWSHIP CHURCH
CT0470052	BASSDALE PLAZA - WELL #1
CT1420021	BAXTER FARMS COMMUNITY WATER ASSOC
CT0309134	BECKISH SENIOR CENTER
CT1050014	BEE & THISTLE INN
CT0420031	BELLWOOD COURT
CT0070014	BERLIN BOWLING CENTER
CT0070021	BERLIN WATER CONTROL COMMISSION
CT0081134	BETHANY MART
CT0081011	BETHANY MOBILE HOME PARK
CT0080064	BETHANY TOWN CENTER
CT0081104	BETHANY VOLUNTEER FIRE DEPT HQ
CT0420064	BETHLEHEM LUTHERAN CHURCH

CT0780554 BICENTENNIAL PARK
CT1341263 BIG Y FOOD STORE
CT1341273 BIG Y SATELLITE STORES
CT0080084 BILLY'S ICE CREAM & MARKETPLACE
CT0779073 BIRCH MOUNTAIN DAY SCHOOL
CT0827081 BITTERSWEET RIDGE WATER ASSOCIATION
CT0609094 BITTNER PARK
CT1050024 BLACK HALL CLUB
CT0670024 BLACKLEDGE COUNTRY CLUB
CT0670364 BLACKLEDGE EAST LLC
CT1480014 BLUE TRAIL RIFLE RANGE
CT0990011 BLUE TRAILS WATER ASSOCIATION
CT0509123 BOLDERDASH
CT0120212 BOLTON CENTER SCHOOL (K-8)
CT0120054 BOLTON CONGREGATIONAL CHURCH
CT0120504 BOLTON GULF
CT0120202 BOLTON HIGH SCHOOL
CT0120064 BOLTON ICE PALACE
CT0120074 BOLTON MOBIL
CT0120084 BOLTON NOTCH PLAZA
CT0120094 BOLTON PIZZA
CT0120104 BOLTON PROFESSIONAL BLDG
CT0120114 BOLTON TOWN HALL
CT1051011 BOXWOOD CONDOMINIUM ASSOCIATION
CT0610054 BRAINARD MEMORIAL LIBRARY
CT0360034 BREWERS DEEP RIVER MARINA
CT0420644 BROOKS PLAZA
CT1341172 BROOKSIDE PROFESSIONAL CENTRE
CT0620074 BROOKSVALE PARK - FIELD HOUSE
CT0620044 BROOKSVALE PARK-VETERANS' MEMORIAL BLDG
CT0260114 BRUSHMILL BY THE WATERFALL
CT0610502 BURR DISTRICT ELEMENTARY SCHOOL
CT0560234 BUSHY HILL ORCHARD
CT0820014 CALVI BUILDING
CT0309114 CAMP ASTO WAMAH - HUNGERFORD
CT0309104 CAMP ASTO WAMAH - INFIRMARY
CT0300114 CAMP ASTO WAMAH - LODGE
CT0610074 CAMP BETHEL
CT0750014 CAMP CLAIRE, INC.
CT0380024 CAMP FARNAM
CT0260014 CAMP HAZEN YMCA WELL #1
CT0260034 CAMP HAZEN YMCA WELL #3
CT0670144 CAMP HEMLOCKS - EASTER SEALS (CORE WELL)
CT0780064 CAMP HOLIDAY HILL
CT0760014 CAMP LAURELWOOD
CT1460024 CAMP NEWHOCA
CT1460254 CAMP NEWHOCA PARK

CT0235033 CANTON PROFESSIONAL BUILDING
CT0990034 CAPWOOD ASSOCIATES (BROOKSIDE PLAZA)
CT1460493 CARLO REALTY (458 PLAZA)
CT0389184 CAROLYN ADAMS' COUNTRY BARN
CT0780181 CARRIAGE HOUSE APARTMENTS
CT0410504 CAVE HILL RESORT
CT1290034 CEDAR KNOB GOLF COURSE
CT1600081 CEDAR RIDGE APARTMENTS
CT1070024 CEDARWOOD PROFESSIONAL ASSOCIATES
CT1050011 CHADWICK HOMEOWNERS ASSN., INC.
CT0320034 CHANNEL 3 COUNTRY CAMP
CT0700054 CHATFIELD HOLLOW S.P./SHOP WELL
CT0424011 CHATHAM ACRES ELDERLY HOUSING
CT0420071 CHATHAM APARTMENTS
CT0429123 CHATHAM CORNER BUILDING
CT1340194 CHELLES 50S CAR HOP DINER, LLC
CT0408011 CHELSEA COMMON CONDOMINIUM ASSOCIATION
CT0230392 CHERRY BROOK SCHOOL
CT0411061 CHESTELM HEALTH & REHABILITATION CENTER
CT0470032 CHESTERS PLAZA
CT1130183 CHILDRENS LIGHTHOUSE CHILDCARE
CT0769153 CHRIST CHAPEL
CT0410514 CHRIST COMMUNITY CHURCH OF EAST HADDAM
CT0080144 CHRIST EPISCOPAL CHURCH
CT0840024 CHRIST REDEEMER CHURCH
CT1059203 CHURCH OF CHRIST THE KING
CT0769204 CHURCH OF LATTER DAY SAINTS, MADISON
CT1670114 CHURCH OF LATTER DAY SAINTS, WOODBRIDGE
CT0621014 CHURCH OF THE ASCENSION
CT0670334 CHURCH OF THE HOLY FAMILY
CT0760024 CIRCLE PIZZA
CT0380034 CITIZENS BANK - DURHAM
CT1549013 CLINTON NURSERIES - PRIMARY SYSTEM
CT1549023 CLINTON NURSERIES - SECONDARY SYSTEM
CT0780101 CLUB HOUSE APARTMENTS
CT0820024 COGINCHAUG MARKET
CT0490014 COLLINS CREAMERY
CT0300264 COLUMBIA BEACH HOUSE
CT0300064 COLUMBIA CONGREGATIONAL CHURCH
CT0300182 COLUMBIA FORD
CT0309013 COLUMBIA MANUFACTURING - WELL #1
CT0309073 COLUMBIA MANUFACTURING - WELL #2
CT0300104 COLUMBIA TOWN HALL
CT0120434 COMCAST CORPORATION
CT0380044 COMMERCE CIRCLE ASSOC
CT0787023 COMMUNITY CHILDRENS CENTER INC.
CT1284104 COMMUNITY FARM OF SIMSBURY

CT0490031 CONNECTICUT CORRECTIONAL INSTITUTE
CT0120111 COOK DRIVE ASSOCIATION
CT0820172 COOPER INSTRUMENT CORPORATION
CT0309144 CORNERSTONE OF COLUMBIA
CT0081084 COUNTRY CORNER DINER LLC
CT0700134 COUNTRY SQUIRE SHOPPES AND RESTAURANT
CT0320054 COVE PLAZA
CT1130074 COVE VIEW PLAZA
CT0320454 COVENTRY FOOD MART
CT0320302 COVENTRY GRAMMAR SCHOOL
CT0320292 COVENTRY HIGH & NATHAN HALE SCHOOLS
CT0320171 COVENTRY HOUSING AUTHORITY-LOWER SYSTEM
CT0320181 COVENTRY HOUSING AUTHORITY-UPPER SYSTEM
CT0321193 COVENTRY KIDS CENTER
CT0320094 COVENTRY PIZZA RESTAURANT
CT0321224 COVENTRY SENIOR CENTER
CT0830014 COYOTE BLUE RESTAURANT
CT0780134 COYOTE FLACO
CT1420034 CRANDALLS LODGE
CT1420044 CRANDALLS PARK
CT0330011 CROMWELL FIRE DISTRICT WATER DEPARTMENT
CT0480064 CRYSTAL LAKE COMMUNITY METHODIST CHURCH
CT0480233 CRYSTAL LAKE PLAZA
CT0480062 CRYSTAL LAKE SCHOOL
CT0670331 CTWC - AMSTON LAKE DIVISION
CT0429011 CTWC - BAKER HILL DIVISION
CT0410744 CTWC - BANNER VILLAGE
CT0780121 CTWC - BIRCHWOOD HEIGHTS
CT0670214 CTWC - CHRIST LUTHERAN CHURCH
CT0300011 CTWC - COLUMBIA HEIGHTS DIV.
CT0671001 CTWC - COUNTRY MANOR APARTMENTS
CT0320091 CTWC - COVENTRY HILLS DIV
CT0787011 CTWC - CRYSTAL SPRINGS DIV.
CT0791201 CTWC - FLORENCE LORD (MASH)
CT0320071 CTWC - GENERAL WATER DIVISION
CT0672031 CTWC - HEBRON CENTER DIVISION
CT0410792 CTWC - LAKE HAYWARD
CT0765101 CTWC - LEGEND HILL CONDOMINIUM ASSN, INC
CT0670011 CTWC - LONDON PARK DIVISION
CT0790031 CTWC - MARLBOROUGH GARDENS
CT0672011 CTWC - MILL AT STONECROFT DIV
CT0320021 CTWC - NORTHERN REGION-LAKEVIEW TERRACE
CT0320011 CTWC - NORTHERN REGION-LAKEWOOD
CT0120021 CTWC - NORTHERN REG-LLYNWOOD SYSTEM
CT0320031 CTWC - NORTHERN REG-NATHAN HALE SYSTEM
CT0473011 CTWC - NORTHERN REG-WESTERN SYSTEM
CT0320041 CTWC - PILGRIM HILLS DIVISION

CT0780081 CTWC - PINEWOODS LANE DIV
CT0770041 CTWC - REDWOOD FARMS DIVISION
CT1130021 CTWC - RIVERCREST DIVISION
CT0792011 CTWC - SACHEM VILLAGE CONDO
CT0261081 CTWC - SHORELINE REG-CHESTER VLLG WEST
CT0261031 CTWC - SHORELINE REGION-CHESTER SYSTEM
CT0608011 CTWC - SHORELINE REGION-GUILFORD SYSTEM
CT1050752 CTWC - SHORELINE REGION-POINT O WOODS
CT1050732 CTWC - SHORELINE REGION-SOUND VIEW
CT0428031 CTWC - SPICE HILL DIVISION
CT0520011 CTWC - UNIONVILLE SYSTEM
CT0672021 CTWC - WELLSWOOD VILLAGE DIV
CT0427021 CTWC - WESTCHESTER EAST
CT0790011 CTWC, FOREST HOMES DIVISION
CT0780164 CUMBERLAND FARMS
CT0430064 CUMBERLAND FARMS #4647
CT0321203 CVS PLAZA - COVENTRY
CT0309051 DARTMOUTH VILLAGE ELDERLY HOUSING
CT0420134 DB MART
CT0389153 DD DURHAM
CT0769003 DD MADISON
CT0473024 DEEP - FLAHERTY FIELD TRIAL AREA
CT0791213 DEEP EASTERN DISTRICT HEADQUARTERS
CT1059082 DEEP MARINE HEADQUARTERS
CT0709194 DEER LAKE SCOUT RES.-DINING HALL WELL 2
CT0700084 DEER LAKE SCOUT RESERVATION
CT0709224 DEER LAKE SCOUT RESERVATION - WELL 3
CT1600071 DEER PARK APARTMENTS
CT1420064 DEL-AIRE CAMPGROUND - NEW WELL
CT1420074 DEL-AIRE CAMPGROUND - SYSTEM #2, WELL#2
CT0380184 DHI ENTERPRISES, INC.
CT0320114 DIMITRIS PIZZA
CT0610424 DINOS PIZZA RESTAURANT
CT0791162 DISCOVERY LEARNING CENTER
CT0309133 DISCOVERY ZONE LEARNING CENTER
CT0549044 DONDERO ORCHARDS LLC
CT1650034 DONUT KETTLE
CT1340054 DRP PROPERTIES LLC
CT0321213 DUNKIN DONUTS
CT0380084 DUNKIN DONUTS
CT0380021 DURHAM CENTER DIVISION
CT0380094 DURHAM COMMONS
CT0380641 DURHAM ELDERLY HOUSING DIVISION
CT0380651 DURHAM LEXINGTON PLACE DIVISION
CT0380372 DURHAM MANUFACTURING COMPANY
CT0408024 EAST GRANBY FARMS
CT0419013 EAST HADDAM ELEMENTARY SCHOOL

CT0410254 EAST HADDAM PUBLIC LIBRARY
CT0419184 EAST HADDAM SENIOR CENTER
CT0420164 EAST HAMPTON COMMUNITY CENTER
CT0420184 EAST HAMPTON FIRE STATION #1
CT0420194 EAST HAMPTON FIRE STATION #2
CT0420902 EAST HAMPTON HIGH SCHOOL
CT0420214 EAST HAMPTON LANES
CT0420042 EAST HAMPTON MALL
CT0420912 EAST HAMPTON MIDDLE SCHOOL
CT0429121 EAST HAMPTON WPCA - ROYAL OAKS SYSTEM
CT0429031 EAST HAMPTON WPCA - VILLAGE CENTER
CT0450011 EAST LYME WATER & SEWER COMMISSION
CT0470071 EAST WINDSOR HOUSING AUTHORITY
CT0470054 EAST WINDSOR PARK SNACK BAR
CT0540024 EASTBURY POOL
CT0540202 EASTBURY SCHOOL
CT0301152 EASTCONN COLUMBIA
CT1059083 EASTPORT - WEST
CT1059193 EASTPORT - WEST 2
CT1059063 EASTPORT, LLC
CT1059093 EASTPORT-NORTH
CT1420081 EASTVIEW KOZLEY WATER ASSOCIATION
CT0420021 EDGEMERE CONDOMINIUM ASSN., INC.
CT1130034 EGGS UP GRILL
CT0480114 ELLINGTON RIDGE COUNTRY CLUB
CT1280051 ETHEL WALKER SCHOOL
CT0270041 EVERGREEN TRAILER PARK - SYSTEM #1
CT0270091 EVERGREEN TRAILER PARK - SYSTEM #2
CT0270101 EVERGREEN TRAILER PARK - SYSTEM #3
CT0270111 EVERGREEN TRAILER PARK - SYSTEM #4
CT0429023 EVERSOURCE ENERGY EAST HAMPTON SRVC CTR
CT1320124 FAIRWAY MINIATURE GOLF AND BATTING CAGES
CT0499002 FAITH BAPTIST CHURCH (WELL #1)
CT0499023 FAITH BAPTIST CHURCH (WELL #2)
CT0529053 FARMINGTON CLUB
CT0520064 FARMINGTON FIELD CLUB
CT0040493 FARMINGTON VALLEY ARC
CT0380064 FAS MART #313
CT1600523 FED EX GROUND
CT0790094 FELLOWSHIP COMMUNITY CHURCH
CT1429043 FIRST BAPTIST CHURCH OF TOLLAND
CT0080094 FIRST CHURCH OF CHRIST CONGREGATIONAL
CT0410284 FIRST CHURCH OF CHRIST CONGREGATIONAL
CT0780104 FIRST CHURCH OF CHRIST IN MANSFIELD
CT0010054 FIRST CONGREGATIONAL CHURCH
CT0230144 FIRST CONGREGATIONAL CHURCH OF CANTON CE
CT0470003 FIRST CONGREGATIONAL CHURCH OF E WINDSOR

CT0560132 FIRST CONGREGATIONAL CHURCH OF GRANBY
CT0610154 FIRST CONGREGATIONAL CHURCH OF HADDAM
CT1050114 FIRST CONGREGATIONAL CHURCH OF OLD LYME
CT0120154 FISH FAMILY FARM
CT1050124 FLORENCE GRISWOLD MUSEUM
CT0420274 FOOD BAG
CT0420264 FOOD BAG - EAST HIGH STREET
CT0410814 FOX HOPYARD GOLF CLUB - PRO SHOP WELL
CT0410804 FOX HOPYARD GOLF CLUB(CLUB HOUSE WELL)
CT0418011 FRANKLIN ACADEMY
CT0380482 FREDERICK BREWSTER SCHOOL
CT0400153 GALASSO MATERIALS, LLC-GARAGE WELL
CT0400144 GALASSO MATERIALS, LLC-MAIN OFFICE WELL
CT0400143 GALASSO MATERIALS, LLC-SALES WELL
CT0610304 GAS PLUS
CT0670054 GAY CITY STATE PARK/PICNIC AREA WELL
CT0320312 GEORGE HERSEY ROBERTSON SCHOOL
CT0120174 GEORGINAS PIZZA
CT0670074 GILEAD CONGREGATIONAL CHURCH
CT0670122 GILEAD HILL SCHOOL
CT0410304 GILLETTE CASTLE STATE PARK / CASTLE WELL
CT0410324 GILLETTE CASTLE STATE PARK / CONCESSION
CT0770014 GIRL SCOUTS OF CT - CAMP MERRIE-WOOD
CT1600204 GIRL SCOUTS OF CT, INC (DINING ROOM)
CT1600214 GIRL SCOUTS OF CT, INC. (STONE HOUSE)
CT0540034 GLASTONBURY ELKS CLUB
CT0540054 GLASTONBURY HILLS COUNTRY CLUB
CT0540122 GLASTONBURY VEHICLE MAINT. GARAGE
CT0429133 GLOBAL SELF STORAGE
CT0470064 GOLDEN IRENES RESTAURANT
CT0829074 GOLF CENTER AT LYMAN ORCHARDS
CT1310224 GOLF QUEST - SOUTHINGTON
CT1390094 GOOD SHEPHERD LUTHERAN CHURCH
CT0419211 GOODSPEED ACTOR HOUSING - THE VILLAGE
CT0410334 GOODSPEED OPERA HOUSE
CT0781212 GOODWIN ELEMENTARY SCHOOL
CT0940014 GOSPEL HALL
CT0400041 GQC WELL COMMISSION
CT0565033 GRANBY COMMONS
CT0560064 GRANBY MOTEL
CT0410174 GRANDVIEW CAMP RESORT & COTTAGES
CT0110011 GRANT HILL ASSOCIATES, INC.
CT0490114 GRASSMERE COUNTRY CLUB
CT1059224 GRAYBILL PROPERTIES, LLC
CT0760021 GREEN SPRINGS SUBDIVISION
CT0380294 GRIPPOS MOBIL SERVICE CENTER
CT1299033 GROWER DIRECT FARMS INC

CT0260084 GUEST HOUSE RETREAT & CONFERENCE CENTER
CT0820074 GUIDAS DRIVE-IN RESTAURANT
CT0609103 GUILFORD VETERINARY HOSPITAL
CT0614054 HADDAM COMMONS
CT0610512 HADDAM ELEMENTARY SCHOOL
CT0709153 HADDAM KILLINGWORTH INTER/MIDDLE SCHOOL
CT0610184 HADDAM MEADOWS S.P.
CT0610194 HADDAM NECK CONGREGATIONAL CHURCH
CT0420284 HADDAM NECK COVENANT CHURCH
CT0610214 HADDAM NECK FAIR HALL
CT0610394 HADDAM RESTAURANT
CT0610374 HADDAM SENIOR CENTER
CT0610514 HADDAM TOWN OFFICE BUILDING
CT0614064 HADDAM VOLUNTEER FIRE STATION #1
CT0610563 HADDAM-KILLINGWORTH HIGH SCHOOL
CT1050144 HAINS PARK
CT0120343 HANS CHRISTIAN ANDERSEN MONTESSORI
CT0400104 HARTFORD GUN CLUB - MAIN CLUB HOUSE
CT0490021 HAZARDVILLE WATER COMPANY
CT0670041 HEBRON ARMS APARTMENTS
CT0670094 HEBRON CHURCH OF HOPE
CT0670112 HEBRON ELEMENTARY SCHOOL
CT0500021 HEMLOCK APARTMENTS
CT0500011 HERITAGE COVE CONDOMINIUMS
CT0120184 HERRICK PARK
CT1310264 HIDDEN VALLEY MINI GOLF - BATTER UP
CT0610254 HIGGANUM CONGREGATIONAL CHURCH
CT0610294 HIGGIES FOOD AND ICE CREAM, LLC
CT0614021 HIGH MEADOW
CT0560094 HIGH MEADOW DAY CAMP LLC
CT0670051 HILLSIDE CONDOMINIUMS
CT0790021 HILLSIDE CORPORATION
CT0940024 HI-VIEW MOTEL
CT0389143 HOBSON MOTZER, INC.
CT0560244 HOLCOMB FARMS
CT0780034 HOLIDAY MALL
CT1310024 HOLLYWOOD LOUNGE
CT0012011 HOP RIVER HOMES
CT0300074 HOP RIVER MOTEL
CT0429164 HOPE CHURCH OF EAST HAMPTON
CT0300062 HORACE PORTER SCHOOL
CT0780091 HUNTING LODGE APARTMENTS
CT0420304 HURD S.P. /PAVILION WELL (HAND PUMP)
CT0309094 ICA DONUTS, LLC
CT0363023 INCARNATION CENTER, INC
CT0279044 INDIAN RIVER RECREATIONAL COMPLEX
CT0820084 INDIAN SPRING GOLF COURSE

CT0830034 ITALIAN AMERICAN CIVIC ORDER, INC
CT1460134 ITALIAN SOCIAL CLUB OF ROCKVILLE
CT1429201 IVY WOODS
CT0790044 J&S ENTERPRISE LLC
CT0110064 J. C. C. SWIM & TENNIS CLUB
CT0540074 J.B. WILLIAMS PARK
CT0560104 JEHOVAHS WITNESSES
CT0700011 JENSENS, INC. BEECHWOOD RESIDENTIAL
CT0780141 JENSENS, INC. ROLLING HILLS RESIDENTIAL
CT0798034 JESSICA'S GARDEN
CT0829013 JOHN LYMAN SCHOOL
CT0360022 JOHN WINTHROP JUNIOR HIGH SCHOOL
CT1340032 JOHNSON MEMORIAL HOSPITAL, INC
CT0230164 JONIS CHILD CARE
CT0990174 JOSEPH DIGLIO PROPERTIES
CT0110051 JUNIPER CLUB INC.
CT0560282 KELLY LANE INTERMEDIATE SCHOOL
CT0791253 KIDS CLUB CHILD CARE&NURSERY SCH CTR LLC
CT1609133 KIDS KINGDOM DAYCARE CENTER
CT0700104 KILLINGWORTH CAFE # 249
CT0700114 KILLINGWORTH CONGREGATIONAL CHURCH
CT0700124 KILLINGWORTH COUNTRY MARKET
CT0709003 KILLINGWORTH ELEMENTARY SCHOOL
CT0709143 KILLINGWORTH KIDS CENTER
CT0700144 KILLINGWORTH LIBRARY
CT0700204 KILLINGWORTH TOWN HALL
CT0700154 KILLINGWORTH VILLAGE CENTER
CT0419043 KINDERCARE LEARNING CORP OF MOODUS
CT0509063 KINDERCARE OF ESSEX
CT0490094 KINGDOM HALL OF JEHOVAHS WITNESS
CT1540074 KINGDOM HALL OF JEHOVAHS WITNESS
CT0470094 KINGDOM HALL OF JEHOVAHS WITNESSES
CT0760034 KLEINS GOLF RANGE
CT0780051 KNOLLWOOD ACRES APARTMENTS
CT0509073 L.C. DOANE CO.
CT0410734 LA VITA GUSTOSA
CT0609084 LAKE QUONNIPAUG
CT0429083 LAKESHORE, LLC
CT0820094 LAKESIDE DELI & MINI MARKET
CT0429103 LAKEVIEW COURT, LLC
CT0081053 LATICRETE INTERNATIONAL
CT1056231 LAUREL HEIGHTS ASSOCIATION, INC.
CT0790041 LAUREL HILL WATER ASSOCIATION
CT1050174 LAYSVILLE CENTER STORES
CT1059073 LEARN
CT1320243 LEARNING CENTER, LLC.
CT0820104 LEVI COE LIBRARY

CT0790174 LIBERTY BANK
CT0560084 LIFE CHURCH
CT0380204 LINOS MARKET
CT0787024 LIONS PARK
CT0610192 LITTLE CITY CAMPGROUND
CT1460174 LITTLE MARKS BIG BARBECUE
CT0410803 LITTLE NOISES DAY CARE, LLC
CT1320014 LITTLE TASTE OF TEXAS
CT0420354 LOCO PERRO
CT0565064 LOST ACRES ORCHARDS
CT0780204 LUCKY STRIKE LANES, INC.
CT0829023 LYMAN ORCHARD COUNTRY FARMS COMPLEX
CT0829073 LYMAN ORCHARDS - LABOR CAMP
CT1059251 LYME ACADEMY APARTMENTS,LLC
CT1059043 LYME ACADEMY OF FINE ARTS
CT1050184 LYME ART ASSOCIATION
CT0750062 LYME CONSOLIDATED SCHOOL
CT1050141 LYME REGIS, INC.
CT1059234 LYMES' SENIOR CTR/TOWN WOODS PARK
CT1056221 LYMEWOOD ELDERLY HOUSING
CT0081063 M & M PROPERTIES
CT0769133 MADISON COMMONS
CT0427011 MALLARD COVE CONDOMINIUM ASSN.
CT0779074 MANCHESTER CONG. OF JEHOVAHS WITNESSES
CT0779023 MANCHESTER PACKING COMPANY, INC.
CT0770021 MANCHESTER WATER DEPARTMENT
CT0780234 MANSFIELD DRIVE-IN
CT0780274 MANSFIELD LIBRARY BUCHANAN CENTER
CT0780434 MANSFIELD MARKETPLACE
CT0781243 MANSFIELD MIDDLE SCHOOL
CT0780752 MANSFIELD PROFESSIONAL PARK
CT0781202 MANSFIELD SHOPPING CENTER
CT0780251 MANSFIELD VILLAGE, LLC
CT0780384 MANSFIELD X-TRA MART
CT0780161 MAPLEWOOD APARTMENTS
CT0421041 MARKHAM MEADOWS CAMPGROUND-WELL #2
CT0470044 MARKOWSKI FARMS
CT0790142 MARLBOROUGH CONGREGATIONAL CHURCH
CT0790454 MARLBOROUGH COUNTRY BARN# 1
CT0798024 MARLBOROUGH COUNTRY BARN# 2
CT0791001 MARLBOROUGH HEALTH CARE CENTER, INC
CT0798013 MARLBOROUGH MUNICIPAL WATER SYSTEM
CT0790204 MARLBOROUGH PIZZA RESTAURANT
CT0790374 MARLBOROUGH PROFESSIONAL CENTER
CT0790312 MARLBOROUGH TAVERN GREEN
CT0790234 MARLBOROUGH TOWN HALL
CT0790244 MARLBOROUGH VILLAGE GREEN

CT0670154 MARY & ALLIES RESTAURANT
CT0429113 MASONIC TEMPLE ASSN OF EAST HAMPTON
CT0420374 MCDONALDS OF EAST HAMPTON
CT1340302 MCDONALDS RESTAURANT
CT0480081 MEADOWBROOK APARTMENTS, LLC
CT0501001 MEADOWBROOK MANOR LLC
CT0321172 MEADOWBROOK SHOPPING CENTER
CT0609073 MELISSA JONES SCHOOL
CT0820392 MEMORIAL MIDDLE SCHOOL
CT0800011 MERIDEN WATER DIVISION
CT1320024 MESSIAH LUTHERAN CHURCH
CT0400061 METACOMET HOMES-WELL 1
CT0408021 METACOMET HOMES-WELL 2
CT1051021 MIAMI BEACH WATER COMPANY
CT0820134 MIDDLEFIELD ADMINISTRATION BLDG
CT0820144 MIDDLEFIELD COMMUNITY CENTER & FIREHOUSE
CT0820362 MIDDLEFIELD FEDERATED CHURCH
CT0820031 MIDDLEFIELD HOUSING AUTHORITY
CT0410424 MIDDLESEX 4-H CAMP
CT0610334 MIDDLESEX EXTENSION SERVICES
CT0798023 MIDDLESEX HOSP. MARLBOROUGH MEDICAL CTR.
CT0419203 MIDDLESEX HOSPITAL MEDICAL FACILITY
CT0509033 MIDDLESEX MEDICAL CENTER (ESSEX)
CT0830044 MIDDLETOWN DOT REST AREA (I-91 NORTH)
CT0830011 MIDDLETOWN WATER DEPARTMENT
CT1050131 MILE CREEK APARTMENTS
CT1340074 MINERAL SPRINGS CAMPGROUND-SYSTEM #1
CT1340084 MINERAL SPRINGS CAMPGROUND-SYSTEM #2
CT0309023 MIRJAF, INC.
CT1420012 MISS MERRY MAC'S DAYCARE
CT1320042 MITCHELL ASSOCIATES
CT0990094 MOBIL STATION/NORTHFORD FOODMART
CT0565013 MONROVIA NURSERIES (FLOYDVILLE)
CT0565043 MONROVIA NURSERIES (SALMON BROOK)
CT1600064 MOOSE MEADOW CAMPGROUND
CT0389103 MORGAN AM&T - BUILDING #1
CT0300194 MOTTAS PASTRY & BAKE SHOP
CT0780122 MOUNT HOPE MONTESSORI SCHOOL
CT0363011 MOUNT SAINT JOHN SCHOOL
CT0470124 MULNITE FARMS
CT0121023 MUNSONS CANDY KITCHEN
CT0410014 MY FATHERS HOUSE
CT0320184 NATHAN HALE HOMESTEAD
CT0410214 NATHAN HALE PLAZA, LLC
CT0419073 NATHAN HALE-RAY HIGH SCHOOL
CT0419193 NATHAN HALE-RAY MIDDLE SCHOOL
CT1600101 NATURAL PARK APARTMENTS, LLC

CT0420412 NELSONS CAMPGROUND - AREA G
CT0420394 NELSONS CAMPGROUND- AREA H
CT0121073 NETSOURCE, INC.
CT0011103 NETWORK, INC.
CT0380224 NEW HAVEN RACOON CLUB
CT0609114 NEW HAVEN SPORTSMAN'S CLUB INC.
CT0800024 NEW LIFE CHURCH, INC.
CT0270051 NOD HILL APARTMENTS
CT0230234 NORTH CANTON UNITED METHODIST CHURCH
CT0609053 NORTH GUILFORD CONGREGATIONAL CHURCH
CT0769143 NORTH MADISON CONGREGATIONAL CHURCH
CT0769053 NORTH MADISON SHOPPING CENTER
CT1310134 NORTH RIDGE GOLF CLUB LLC
CT1600061 NORTH WILLINGTON VILLAGE CONDO ASSOC.
CT1291152 NORTHFIELD COMMONS ASSOCIATION
CT0990254 NORTHFORD CONGREGATIONAL CHURCH
CT0990031 NORTHFORD GLEN CONDOMINIUM ASSOCIATION
CT0990284 NORTHFORD PLAZA REALTY GROUP
CT0990264 NORTHFORD SHOPPING CENTER
CT1420091 NORWEGIAN WOODS APARTMENTS
CT0839023 NRG MIDDLETOWN OPERATIONS
CT0781263 OAK GROVE MONTESSORI SCHOOL
CT0413011 OAK GROVE SENIOR HOUSING CORP
CT0790034 OFSHAY PROPERTIES, LLC
CT0820501 OLD INDIAN TRAIL
CT1059103 OLD LYME CHILDRENS LEARNING CENTER, INC
CT1050224 OLD LYME COUNTRY CLUB HOUSE
CT1059214 OLD LYME COUNTRY CLUB- POOL CABANA
CT1059204 OLD LYME COUNTRY CLUB- TENNIS COURT
CT1050404 OLD LYME FIRE DEPT - BOSTON POST RD
CT1050244 OLD LYME INN
CT1050254 OLD LYME LIBRARY
CT1059013 OLD LYME MARKETPLACE
CT1050264 OLD LYME PIZZA PALACE INC.
CT1059023 OLD LYME SHOPPING CENTER
CT0560124 OLD MILL POND VILLAGE
CT0400051 OLD NEWGATE RIDGE WATER COMPANY INC
CT1060064 OLD SAYBROOK VFW
CT0791242 OLDE MARLBOROUGH VILLAGE-WELL #2
CT0780061 ORCHARD ACRES ASSOCIATION
CT0110041 ORCHARD HILL ASSOCIATION
CT0769123 ORCHARD PARK IND. AREA - 50 MUNGERTOWN
CT1311044 PANTHORN PARK UPPER RESTROOM
CT0670184 PARADISE FARMS PLAZA
CT0709214 PARMELEE FARMS
CT0321214 PATRIOTS PARK - COMMUNITY CENTER
CT0420104 PATS MARKET COBALT, LLC

CT0820164 PECKHAM PARK
CT0110114 PENWOOD STATE PARK/MAIN PARK WELL
CT0781192 PERKINS CORNER
CT1600503 PHELPS CROSSING COMMERCIAL
CT0840054 PICKLES COUNTRY STORE & DELI
CT0560134 PILGRIM COVENANT CHURCH
CT0670352 PLAZA SHOPPING CENTER
CT1290084 PLEASANT VIEW GOLF CTR.
CT1010094 POND HILL BAPTIST CHURCH
CT1130144 PORTLAND CITGO
CT1130011 PORTLAND WATER DEPARTMENT
CT0820051 POWDER RIDGE SKI LODGE-MAIN BLDG
CT0830032 PRATT & WHITNEY
CT0320104 PRESBYTERIAN CHURCH OF COVENTRY
CT0320154 PRINCE OF PEACE LUTHERAN CHURCH
CT0780424 PUBLIC AMERICA/MANSFIELD AQUASITION
CT1549003 PUMPKIN PATCH DAYCARE
CT0540172 QUALITY NAME PLATE
CT0600041 QUONNIPAUG HILLS - MAIN SYSTEM
CT0606011 QUONNIPAUG HILLS - SECTION I
CT0410654 RATHBUN FREE MEMORIAL LIBRARY
CT0300254 RECREATION PARK
CT1341192 RED BALLOON DAYCARE
CT0820204 RED DOG SALOON
CT1050492 REGION 18 SCHOOLS - LYME STREET
CT0380472 REGIONAL SCHOOL DIST #13 CONSOLIDATION
CT0930011 REGIONAL WATER AUTHORITY
CT0821001 REJA - RAINBOW SPRING WATER COMPANY
CT0780171 RENWOOD APARTMENTS
CT0363064 RICHCAT, LLC
CT1340244 RIC'S CAFE
CT1600051 RIDGEVIEW HEIGHTS
CT0361011 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #1
CT0363031 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #2
CT0363041 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #3
CT0363051 RIDGEWOOD HILLS ASSOCIATION, SYSTEM #4
CT0990604 RITE AID
CT1310154 RIVER BEND PLAZA
CT1130064 RIVERDALE PROPERTIES, INC.
CT0520084 RIVERFRONT MINIATURE GOLF, INC.
CT1341324 ROARING BROOK CAMPGND COOP/POOL/REST/REC
CT1340104 ROARING BROOK CAMPGROUND
CT0230264 ROARING BROOK NATURE CENTER
CT0781131 ROCKRIDGE CONDOMINIUMS
CT1310164 ROGERS ORCHARDS
CT0480144 ROLLING MEADOWS COUNTRY CLUB
CT0830024 RON MCCUTCHEON PARK

CT0999064 ROSABIANCA VINEYARDS
CT0540104 ROSES BERRY FARM
CT0420424 ROSSINIS
CT0261053 ROTO FRANK OF AMERICA
CT0820461 ROVERS LODGE
CT1056241 RYE FIELD MANOR ELDERLY HOUSING
CT0780271 S & P PROPERTIES LLC
CT0070204 SAFARI GOLF
CT1548011 SAFE HARBOR, INC.
CT1059113 SAINT ANNS CHURCH
CT0300214 SAINT COLUMBA CHURCH
CT0320214 SAINT MARYS CHURCH
CT0121044 SAINT MAURICE CHURCH WELL# 1
CT0120294 SAINT MAURICE CHURCH WELL# 2
CT0990514 SAINT MONICA CHURCH
CT1310174 SAINTS DRIVE-IN RESTAURANT
CT0560011 SALMON BROOK DISTRICT WATER DEPT
CT0560144 SALMON BROOK PARK
CT0280164 SALMON RIVER STATE PARK
CT0410094 SANIBEL FARMS STORE
CT0614031 SAYBROOK AT HADDAM
CT0614074 SAYBROOK ROAD LLC
CT0790134 SCHNEIDER ELECTRIC MOTION USA
CT1609134 SCHOFIELD SPRING
CT0470021 SCHOOL HILL ASSOCIATION, INC.
CT0010094 SCOTT ELECTROKRAFTS
CT0420454 SEARS PARK
CT1420184 SEVENTH DAY ADVENTIST CHURCH
CT0770072 SHADY GLEN RESTAURANT
CT0540094 SHAH PROPERTIES LLC.
CT0490041 SHAKER HEIGHTS WATER COMPANY
CT0110031 SHARON HEIGHTS WATER ASSOCIATION
CT0709154 SHELDON FIELD
CT1280114 SHEPHERD OF THE HILLS LUTHERAN CHURCH
CT0509113 SHORELINE PROFESSIONAL CENTER
CT0120302 SIMONIZ USA
CT0480154 SJ RANCH, INC. (WELL #1 - KITCHEN)
CT0480164 SJ RANCH, INC. (WELL #2 - OVERLOOK)
CT0480174 SJ RANCH, INC. (WELL #3 - RANCH HOUSE)
CT0320224 SKUNGAMAUG RIVER GOLF COURSE
CT0473023 SOPHIAS PLAZA II/III
CT0320051 SOUTH COVENTRY WATER SUPPLY COMPANY
CT1050344 SOUTH SHORE LANDING
CT0781233 SOUTHEAST SCHOOL
CT1311024 SOUTHINGTON SPORTSMAN ASSN., INC.
CT1310011 SOUTHINGTON WATER DEPARTMENT
CT0120031 SOUTHRIDGE PARK APARTMENTS

CT0420474 SPENCERS FUNERAL HOME
CT0410124 ST BRIDGETS OF KILDARE CHURCH
CT0790354 ST JOHN FISHER CHURCH
CT0600124 ST JOHNS EPISCOPAL CHURCH
CT0700184 ST LAWRENCE CHURCH (WELL 2)
CT0420484 ST PATRICK CHURCH
CT0610444 ST PETERS CHURCH
CT0410144 ST STEPHENS EPISCOPAL CHURCH
CT0769173 ST. ANDREWS EPISCOPAL CHURCH
CT1130194 ST. CLEMENTS ESTATE- BANQUET HALL SYSTEM
CT1130084 ST. CLEMENTS ESTATE- CASTLE SYSTEM
CT0820234 ST. COLMAN CHURCH
CT0120304 ST. GEORGE EPISCOPAL CHURCH
CT0700214 ST. LAWRENCE CHURCH (REC HALL) WELL 1
CT0429184 ST. PATRICK CHURCH - PARISH CENTER
CT0670224 ST. PETERS EPISCOPAL CHURCH
CT0560174 ST. THERESE ROMAN CATHOLIC CHURCH CORP.
CT1341303 STAFFORD HOLLOW WATER ASSOCIATION
CT1340282 STAFFORD PROFESSIONAL SUITES
CT1341293 STAFFORDVILLE SCHOOL
CT1429163 STATE POLICE BARRACKS TROOP C
CT0080052 STATE POLICE BARRACKS TROOP I
CT0235063 STEPPING STONES EDUCATIONAL CENTER
CT0081094 STEVES DELI
CT1426011 STONE POND CONDOMINIUMS
CT0380041 STONEGATE SPRINGS
CT0321234 STORRS COMMUNITY CHURCH
CT1340184 SUBWAY OF STAFFORD
CT0760104 SUMMER HILL NURSERIES
CT1340164 SUN VALLEY BEACH CLUB
CT1340212 SUN VALLEY CAMPGROUND-SYSTEM #1:WELL194
CT1340124 SUN VALLEY CAMPGROUND-SYSTEM #2:WELL 56
CT1340134 SUN VALLEY CAMPGROUND-SYSTEM #3:WELL 40
CT1340154 SUN VALLEY CAMPGROUND-SYSTEM #4:WELL 214
CT0070573 SUNNY BORDER NURSERY
CT1390154 SUNRISE PARK - PAVILION
CT1390114 SUNRISE PARK - SUPERINTENDENTS HOUSE
CT0120041 SUNSET APARTMENTS LLC
CT0070154 SVEA SOCIAL CLUB
CT0826061 SYLVAN RIDGE CONDOMINIUMS
CT1600513 TA TRAVEL PLAZA
CT1280134 TALCOTT MOUNTAIN S.P.
CT0040442 TALCOTT MOUNTAIN SCIENCE CENTER #1
CT0040483 TALCOTT MOUNTAIN SCIENCE CENTER #2
CT0670234 TALLWOOD COUNTRY CLUB
CT1280011 TARIFFVILLE FIRE DISTRICT WATER DEPT
CT0080204 TEDDY BS

CT0769073 TEMPLE BETH TIKVAH
CT1670194 TENNIS CENTRAL
CT1590024 THE 798 SILAS DEANE HIGHWAY, LLC
CT0610344 THE BLUE OAR
CT0560044 THE CAMBRIDGE HOUSE
CT0120424 THE CARLYLE JOHNSON MACHINE COMPANY
CT0620183 THE CARROT PATCH
CT0709164 THE COOKING COMPANY - KILLINGWORTH
CT0769093 THE COUNTRY SCHOOL, INC.
CT0791152 THE DIVERSIFIED GROUP
CT0614084 THE HADDAM NECK FAIR ASSOCIATION, INC.
CT0820382 THE INDEPENDENT DAY SCHOOL
CT0760064 THE LEARNING TREE OF MADISON, LLC
CT0769193 THE LEARNING VILLAGE, INC.
CT0300164 THE LIGHTHOUSE RESTAURANT
CT0609074 THE LITTLE STORE
CT0380054 THE LNJS REALTY FAMILY LTD PARTNERSHIP
CT1280212 THE MASTERS SCHOOL
CT0800044 THE MERIDEN YMCA OUTDOOR CENTER
CT0807014 THE MERIDEN YMCA OUTDOOR CENTER - WELL 3
CT1019024 THE ONLY GAME IN TOWN
CT0614034 THE RIVERHOUSE AT GOODSPEED STATION
CT0820072 THE ROGERS MANUFACTURING COMPANY
CT0380254 THE UNITED CHURCHES OF DURHAM - CHURCH
CT0429153 THEATER SQUARE
CT0780354 THOMPSONS GENERAL STORE
CT0120354 THREE JS CAFE
CT0610494 THREE OAKS PLAZA
CT0999043 TILCON CONNECTICUT INC. - NORTH BRANFORD
CT1489013 TILCON CONNECTICUT INC. - WALLINGFORD
CT0380244 TIME OUT TAVERNE
CT0780394 TOAST FOUR CORNERS
CT0600044 TODAYS PLAZA, LLC
CT1420234 TOLLAND CITGO
CT1429183 TOLLAND PROFESSIONAL CENTER
CT1423011 TOLLAND WATER DEPARTMENT
CT1280144 TOWER RIDGE COUNTRY CLUB
CT0420562 TOWN OF EAST HAMPTON
CT0672044 TOWN OF HEBRON EAST STREET PARK
CT0670244 TOWN OFFICE BUILDINGS
CT0410264 TOWN OFFICE COMPLEX
CT1600124 TRACK 9 DINER
CT1670044 TRADITION GOLF CLUB AT OAK LANE
CT0309083 TRI COUNTY ARC, INC.
CT1341243 TTM PRINTED CIRCUIT GROUP-STAFFORD SPRNG
CT0400031 TURKEY HILL OF EAST GRANBY, LLC
CT0261043 TWELVE INSPIRATION LANE, LLC

CT0320234 TWIN HILLS COUNTRY CLUB
CT0320061 TWIN HILLS WATER DISTRICT
CT0670284 TWIN LAKES CAFE
CT0381011 TWIN MAPLES NURSING HOME
CT1341253 TYCO PRINTED CIRCUIT GROUP-STAFFORDVILLE
CT0614053 TYLERVILLE VILLAGE 1
CT0610534 TYLERVILLE VILLAGE 2
CT1429133 U.S. DEPARTMENT OF AGRICULTURE - TOLLAND
CT0770124 UNITARIAN UNIVERSALIST CHURCH
CT0389133 UNITED CHURCHES CORPORATION
CT0120374 UNITED METHODIST CHURCH
CT0300124 UNITED SERVICES
CT0780021 UNIVERSITY OF CONNECTICUT - MAIN CAMPUS
CT0360012 VALLEY REGIONAL HIGH SCHOOL
CT1100011 VALLEY WATER SYSTEMS, INC.
CT1463011 VERNON VILLAGE INC.
CT0610094 VESELAK LLC
CT0081124 VETERANS MEMORIAL PARK PAVILLION
CT0420534 VFW #5095
CT1390124 VFW POST 9544
CT0820254 VICTORY TABERNACLE CHURCH
CT1429171 VILLAGE AT CRYSTAL SPRINGS
CT0610564 VILLAGE SHOPPING CENTER
CT0990044 WACHOVIA BANK
CT0820264 WADSWORTH FALLS/BATHROOM WELL
CT1600041 WALDEN APARTMENTS
CT0321244 WALGREEN'S PHARMACY-COVENTRY
CT1480011 WALLINGFORD WATER DEPARTMENT
CT0869083 WATERVIEW BUSINESS PARK
CT0560372 WELLS ROAD INTERMEDIATE SCHOOL
CT0671021 WELLSWOOD ESTATES FOUNDATION, INC.
CT1390021 WEST SERVICE CORPORATION
CT1340222 WEST STAFFORD SCHOOL
CT0610633 WEST WIND PARTNERSHIP
CT0421001 WESTSIDE MANOR
CT0261063 WHELEN ENGINEERING CO
CT0010011 WHISPERING HILLS, LLC - WELL A SYSTEM
CT0010111 WHISPERING HILLS, LLC - WELL D SYSTEM
CT0780041 WHITE OAK CONDOMINIUMS
CT1600074 WILDERNESS LAKE CAMPGROUND & RESORT
CT1631152 WILE MOTORS
CT1600094 WILLINGTON MOBIL
CT1341313 WILLINGTON NAMEPLATE, INC.
CT1600021 WILLINGTON OAKS APARTMENTS
CT1600164 WILLINGTON PIZZA HOUSE
CT1609124 WILLINGTON PUBLIC LIBRARY
CT1600134 WILLINGTON REST AREA (I-84 E&W)

CT1606111	WILLINGTON RIDGE CONDOS - SYSTEM #1
CT1606211	WILLINGTON RIDGE CONDOS - SYSTEM #2
CT1609141	WILLINGTON SENIOR CENTER & HOUSING
CT1600234	WILLINGTON XTRA MART
CT1130094	WINCHESTER CAFE
CT0529044	WINDING TRAILS RECREATION ASSN - LOWER
CT0520024	WINDING TRAILS RECREATION ASSN - UPPER
CT0410224	WOLFS DEN CAMPGROUND-SYSTEM #2:MAIN
CT0419172	WOLFS DEN CAMPGROUND-SYSTEM #3:BACKUP
CT1670064	WOODBRIDGE CLUB
CT1600031	WOODHAVEN APARTMENTS
CT0080214	WOODHAVEN COUNTRY CLUB
CT1420041	WOODLAND SUMMIT COMMUNITY WATER ASSN
CT0300071	WOODLAND TERRACE
CT0780131	WOODS EDGE APARTMENTS, LLC
CT1299034	WORTHINGTON POND FARM
CT1130184	XTRA MART
CT0010124	XTRA MART WATER SUPPLY
CT0620064	YMCA - CAMP MOUNTAIN LAUREL
CT0990064	YOGURT N MORE LLC
CT0610593	YOUNG HORIZONS DAYCARE
CT0780374	YUKON JACK'S
CT0421011	Z, INC.

Central Corridor WUCC

RCSA Sec. 25-33h-1(b)(6)(A)(ii): Membership as a result of a public water system has the authority to provide such service as determined by legal rights such as legislative franchises, municipal charters, or interlocal agreements for the sale of water.

PWS_ID	PWS_NAME
CT0040011	Avon Water Company
CT0070021	Berlin Water Control Commission
CT0150011	Bridgeport Hydraulic Company
CT0170011	Bristol Water Department
CT0261081	Chester Water Supply Company
CT0608011	Clinton Water Company
CT0280011	Colchester Sewer & Water Commission
CT0490031	Connecticut Correctional Institute
CT0830021	Connecticut Valley Hospital
CT0000000	Connecticut Water Company
CT0261081	Deep River Water Supply Company
CT0429121	East Hampton WPCA- Royal Oaks System
CT0429031	East Hampton WPCA- Village Center
CT0450011	East Lyme Water and Sewer Commission
CT0608011	Guilford Water Company
CT0490021	Hazardville Water Company
CT0608011	Madison Water Company
CT0770021	Manchester Water Department
CT0800011	Meriden Water Division
CT0640011	Metropolitan District Commission
CT0830011	Middletown Water Department
CT0880011	Naugatuck Water Company
CT0890011	New Britain Water Department
CT0920011	New Hartford Water Department
CT0950011	New London Dept. of Public Utilities
CT1130011	Portland Water Department
CT0560011	Salmon Brook District Water Department
CT0930011	SCRWA
CT0720011	SCWA, Barrett Division
CT0869011	SCWA, Birchwood Division
CT1020011	SCWA, Cedar Ridge Division
CT0860081	SCWA, Chesterfield Division
CT0727031	SCWA, Chriswood Division
CT0720081	SCWA, Gray Farms Division
CT0860131	SCWA, Hillcrest Division
CT1370021	SCWA, Lantern Hill Division
CT0720313	SCWA, Ledyard Center Division
CT0860021	SCWA, Mohegan Division
CT0860021	SCWA, Montville Division

CT1020021	SCWA, North Stonington Division
CT0867101	SCWA, Robin Hill Division
CT0869121	SCWA, Seven Oaks
CT0720041	SCWA, Tower-Ferry View Division
CT1240011	Seymour Water Company
CT1310011	Southington Water Department
CT1340011	Stafford Springs Aqueduct Company
CT1280011	Tariffville Fire District Water Department
CT1423011	Tolland Water Department
CT0520011	Unionville Water Company
CT0780021	University of Connecticut- Main Campus
CT1100011	Valley Water Systems, Inc.
CT1480011	Wallingford Water Department
CT1510011	Waterbury Water Department
CT1630011	Windham Water Works

Central Corridor WUCC

RCSA Sec. 25-33h-1(b)(6)(B): One representative of each regional planning agency serving at least one municipality within the management area as elected by majority vote of the chief elected officials of the municipalities that are members of such regional planning agency.

Councils of Governments
South Central Connecticut
Lower Connecticut River Valley
Capitol Region

APPENDIX C

SUMMARY OF SYSTEM CAPABILITIES AND MAJOR FACILITIES FOR COMMUNITY SYSTEMS SERVING < 1,000 PEOPLE

Appendix C
Summary of System Capabilities and Major Facilities for Community Water Systems Serving < 1,000 People

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
HOP RIVER HOMES	ANDOVER	NONE	NONE	NONE	NONE	YES	YES	NONE
WHISPERING HILLS, LLC - WELL A SYSTEM	ANDOVER	YES	NONE	NONE	NONE	YES	NONE	NONE
WHISPERING HILLS, LLC - WELL D SYSTEM	ANDOVER	NONE	NONE	NONE	NONE	YES	NONE	NONE
BETHANY MOBILE HOME PARK	BETHANY	NONE	NONE	YES	NONE	YES	NONE	NONE
GRANT HILL ASSOCIATES, INC.	BLOOMFIELD	NONE	NONE	NONE	NONE	YES	NONE	NONE
JUNIPER CLUB INC.	BLOOMFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
ORCHARD HILL ASSOCIATION	BLOOMFIELD	NONE	NONE	NONE	NONE	YES	NONE	NONE
SHARON HEIGHTS WATER ASSOCIATION	BLOOMFIELD	NONE	NONE	NONE	NONE	YES	NONE	NONE
166 & 180 BOSTON TURNPIKE	BOLTON	NONE	NONE	NONE	NONE	YES	NONE	NONE
890 BOSTON TURNPIKE	BOLTON	NONE	NONE	NONE	NONE	YES	NONE	NONE
COOK DRIVE ASSOCIATION	BOLTON	NONE	NONE	NONE	NONE	NONE	YES	NONE
CWC – LLYNWOOD SYSTEM	BOLTON	YES	NONE	YES	YES	YES	YES	NONE
SOUTHRIDGE PARK APARTMENTS	BOLTON	YES	NONE	NONE	NONE	YES	YES	NONE
SUNSET APARTMENTS LLC	BOLTON	NONE	NONE	NONE	NONE	YES	NONE	NONE
298-302 ALBANY TURNPIKE	CANTON	YES	NONE	NONE	NONE	YES	NONE	NONE
AARON MANOR NURSING & REHAB CENTER	CHESTER	YES	NONE	YES	NONE	YES	NONE	NONE
CWC – CHESTER VILLAGE WEST	CHESTER	YES	NONE	YES	YES	YES	YES	NONE
EVERGREEN TRAILER PARK - SYSTEM #1	CLINTON	NONE	RECEIVE	YES	NONE	YES	NONE	NONE
EVERGREEN TRAILER PARK - SYSTEM #2	CLINTON	NONE	SUPPLY	NONE	NONE	YES	NONE	NONE
EVERGREEN TRAILER PARK - SYSTEM #3	CLINTON	NONE	NONE	NONE	NONE	YES	NONE	NONE
EVERGREEN TRAILER PARK - SYSTEM #4	CLINTON	YES	NONE	NONE	NONE	YES	NONE	NONE
NOD HILL APARTMENTS	CLINTON	NONE	NONE	NONE	NONE	YES	YES	NONE

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
CWC – COLUMBIA HEIGHTS DIVISION	COLUMBIA	YES	NONE	YES	NONE	YES	YES	NONE
DARTMOUTH VILLAGE ELDERLY HOUSING	COLUMBIA	YES	NONE	NONE	NONE	YES	NONE	NONE
WOODLAND TERRACE	COLUMBIA	YES	NONE	NONE	NONE	YES	NONE	NONE
COVENTRY HOUSING AUTHORITY-LOWER SYSTEM	COVENTRY	YES	NONE	NONE	NONE	YES	NONE	NONE
COVENTRY HOUSING AUTHORITY-UPPER SYSTEM	COVENTRY	NONE	NONE	NONE	NONE	YES	NONE	NONE
CWC - COVENTRY HILLS DIV	COVENTRY	YES	NONE	YES	YES	YES	YES	NONE
CWC - GENERAL WATER DIVISION	COVENTRY	YES	NONE	YES	YES	YES	YES	NONE
CWC - LAKEVIEW TERRACE	COVENTRY	YES	NONE	YES	YES	YES	YES	NONE
CWC - LAKEWOOD	COVENTRY	YES	NONE	YES	YES	YES	YES	NONE
CWC - NATHAN HALE SYSTEM	COVENTRY	YES	NONE	YES	NONE	YES	YES	NONE
CWC - PILGRIM HILLS DIVISION	COVENTRY	YES	NONE	YES	YES	YES	YES	NONE
SOUTH COVENTRY WATER SUPPLY COMPANY	COVENTRY	YES	NONE	YES	YES	YES	YES	NONE
TWIN HILLS WATER DISTRICT	COVENTRY	YES	NONE	NONE	NONE	YES	NONE	NONE
MOUNT SAINT JOHN SCHOOL	DEEP RIVER	NONE	RECEIVE	YES	NONE	YES	NONE	NONE
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #1	DEEP RIVER	YES	SUPPLY	YES	NONE	NONE	NONE	NONE
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #2	DEEP RIVER	YES	BOTH	YES	NONE	NONE	NONE	NONE
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #3	DEEP RIVER	YES	BOTH	YES	NONE	NONE	NONE	NONE
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #4	DEEP RIVER	YES	RECEIVE	YES	NONE	NONE	NONE	NONE
CWC – STAGECOACH FARMS	DURHAM	NONE	NONE	NONE	NONE	NONE	YES	NONE
DURHAM CENTER DIVISION	DURHAM	YES	NONE	YES	NONE	YES	YES	NONE
DURHAM ELDERLY HOUSING DIVISION	DURHAM	YES	NONE	NONE	NONE	NONE	YES	NONE
DURHAM LEXINGTON PLACE DIVISION	DURHAM	YES	NONE	YES	NONE	NONE	NONE	NONE

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
TWIN MAPLES NURSING HOME	DURHAM	YES	NONE	YES	NONE	YES	YES	NONE
CHELSEA COMMON CONDOMINIUM ASSOCIATION	EAST GRANBY	YES	NONE	NONE	NONE	YES	NONE	NONE
GQC WELL COMMISSION	EAST GRANBY	YES	NONE	NONE	NONE	YES	YES	NONE
METACOMET HOMES - WELL 1	EAST GRANBY	YES	SUPPLY	YES	NONE	YES	NONE	NONE
METACOMET HOMES - WELL 2	EAST GRANBY	YES	RECEIVE	YES	NONE	YES	NONE	NONE
OLD NEWGATE RIDGE WATER COMPANY	EAST GRANBY	NONE	NONE	NONE	NONE	YES	NONE	NONE
TURKEY HILL OF EAST GRANBY, LLC	EAST GRANBY	YES	NONE	YES	YES	YES	YES	NONE
31 GRIST MILL RD	EAST HADDAM	YES	NONE	NONE	NONE	YES	NONE	NONE
CHESTELM HEALTH & REHABILITATION CENTER	EAST HADDAM	YES	NONE	YES	YES	YES	YES	NONE
CWC - BANNER VILLAGE	EAST HADDAM	YES	NONE	YES	NONE	YES	YES	NONE
CWC - LAKE HAYWARD	EAST HADDAM	YES	NONE	YES	YES	YES	YES	NONE
FRANKLIN ACADEMY	EAST HADDAM	YES	NONE	NONE	YES	YES	NONE	NONE
GOODSPEED ACTOR HOUSING - THE VILLAGE	EAST HADDAM	YES	NONE	YES	YES	YES	NONE	NONE
OAK GROVE SENIOR HOUSING CORP	EAST HADDAM	YES	NONE	YES	NONE	NONE	NONE	NONE
AQUARION WATER COMPANY – EAST HAMPTON DIVISION	EAST HAMPTON	YES	NONE	YES	YES	YES	YES	NONE
BELLWOOD COURT	EAST HAMPTON	YES	NONE	YES	NONE	YES	NONE	NONE
CHATHAM ACRES ELDERLY HOUSING	EAST HAMPTON	NONE	NONE	YES	NONE	YES	NONE	NONE
CHATHAM APARTMENTS	EAST HAMPTON	NONE	NONE	YES	YES	YES	NONE	NONE
CWC - BAKER HILL DIVISION	EAST HAMPTON	YES	NONE	YES	YES	YES	YES	NONE
CWC - SPICE HILL DIVISION	EAST HAMPTON	YES	NONE	YES	YES	YES	YES	NONE
CWC - WESTCHESTER EAST	EAST HAMPTON	YES	NONE	YES	YES	YES	YES	NONE
EAST HAMPTON WPCA - ROYAL OAKS SYSTEM	EAST HAMPTON	YES	NONE	YES	NONE	YES	YES	YES
EAST HAMPTON WPCA - VILLAGE CENTER	EAST HAMPTON	YES	NONE	YES	NONE	YES	YES	YES

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
EDGEMERE CONDOMINIUM ASSN., INC.	EAST HAMPTON	YES	NONE	YES	YES	YES	NONE	NONE
MALLARD COVE CONDOMINIUM ASSN.	EAST HAMPTON	YES	NONE	YES	YES	YES	NONE	NONE
WESTSIDE MANOR	EAST HAMPTON	NONE	NONE	YES	NONE	YES	NONE	NONE
Z, INC.	EAST HAMPTON	YES	NONE	NONE	NONE	YES	YES	NONE
EAST WINDSOR HOUSING AUTHORITY	EAST WINDSOR	YES	NONE	NONE	NONE	YES	NONE	NONE
MARKOWSKI FARMS	EAST WINDSOR	YES	NONE	YES	NONE	YES	NONE	NONE
SCHOOL HILL ASSOCIATION, INC.	EAST WINDSOR	NONE	NONE	YES	NONE	YES	NONE	NONE
MEADOWBROOK APARTMENTS, LLC	ELLINGTON	NONE	NONE	NONE	NONE	YES	NONE	NONE
SHAKER HEIGHTS WATER COMPANY	ENFIELD	NONE	NONE	NONE	NONE	YES	NONE	NONE
HEMLOCK APARTMENTS	ESSEX	NONE	NONE	NONE	NONE	YES	YES	NONE
HERITAGE COVE CONDOMINIUMS	ESSEX	YES	NONE	YES	NONE	YES	NONE	NONE
MEADOWBROOK MANOR LLC	ESSEX	NONE	NONE	YES	NONE	YES	YES	NONE
CWC – CHIMNEY HILL	FARMINGTON	NONE	RECEIVE	NONE	NONE	NONE	*	NONE
QUONNIPAUG HILLS - MAIN SYSTEM	GUILFORD	YES	NONE	YES	YES	YES	NONE	NONE
QUONNIPAUG HILLS - SECTION I	GUILFORD	NONE	NONE	NONE	NONE	YES	NONE	NONE
HIGH MEADOW	HADDAM	YES	NONE	YES	NONE	YES	NONE	NONE
SAYBROOK AT HADDAM	HADDAM	YES	NONE	NONE	YES	YES	NONE	NONE
ABBY WATER LLC	HEBRON	NONE	NONE	NONE	YES	YES	NONE	NONE
CWC - AMSTON LAKE DIVISION	HEBRON	YES	NONE	YES	YES	YES	YES	NONE
CWC - COUNTRY MANOR APTS.	HEBRON	NONE	NONE	NONE	NONE	YES	YES	NONE
CWC - LONDON PARK DIVISION	HEBRON	YES	NONE	YES	YES	YES	YES	NONE
CWC - MILL AT STONECROFT DIV.	HEBRON	YES	NONE	YES	YES	YES	YES	NONE
CWC - WELLSWOOD VILLAGE DIV.	HEBRON	YES	NONE	NONE	YES	YES	YES	NONE
HEBRON ARMS APARTMENTS	HEBRON	NONE	NONE	NONE	NONE	YES	NONE	NONE
HILLSIDE CONDOMINIUMS	HEBRON	NONE	NONE	YES	YES	YES	NONE	NONE
WELLSWOOD ESTATES FOUNDATION, INC.	HEBRON	YES	NONE	NONE	YES	YES	NONE	NONE

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
CWC - JENSENS, INC. BEECHWOOD RESIDENTIAL	KILLINGWORTH	YES	NONE	YES	NONE	YES	YES	NONE
CWC – LEGEND HILL	MADISON	YES	NONE	YES	YES	YES	YES	NONE
CWC - GREEN SPRINGS	MADISON	NONE	NONE	YES	NONE	YES	YES	NONE
CWC – REDWOOD FARMS DIVISION	MANCHESTER	YES	NONE	YES	YES	YES	YES	NONE
AQUARION WATER COMPANY – VALLEY VIEW	MANSFIELD	YES	NONE	YES	YES	YES	YES	NONE
CARRIAGE HOUSE APARTMENTS	MANSFIELD	YES	NONE	YES	NONE	YES	NONE	NONE
CLUB HOUSE APARTMENTS	MANSFIELD	YES	NONE	YES	NONE	YES	NONE	NONE
CWC - BIRCHWOOD HEIGHTS	MANSFIELD	YES	NONE	NONE	YES	YES	YES	NONE
CWC - CRYSTAL SPRINGS DIV.	MANSFIELD	YES	NONE	NONE	YES	YES	YES	NONE
CWC - JENSENS, INC. ROLLING HILLS RESIDENTIAL	MANSFIELD	YES	NONE	YES	NONE	YES	YES	NONE
CWC - PINEWOODS LANE DIV	MANSFIELD	NONE	NONE	NONE	NONE	YES	YES	NONE
HUNTING LODGE APARTMENTS	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
KNOLLWOOD ACRES APARTMENTS	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
MANSFIELD VILLAGE, LLC	MANSFIELD	NONE	NONE	YES	NONE	YES	NONE	NONE
MAPLEWOOD APARTMENTS	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
ORCHARD ACRES ASSOCIATION	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
RENWOOD APARTMENTS	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
ROCKRIDGE CONDOMINIUMS	MANSFIELD	NONE	NONE	YES	NONE	YES	NONE	NONE
S & P PROPERTIES LLC	MANSFIELD	YES	NONE	YES	NONE	YES	NONE	NONE
WHITE OAK CONDOMINIUMS	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
WOODS EDGE APARTMENTS, LLC	MANSFIELD	YES	NONE	NONE	NONE	YES	NONE	NONE
AQUARION WATER COMPANY – BIRCHWOOD ESTATES	MARLBOROUGH	YES	NONE	YES	NONE	YES	YES	NONE
CWC - FLORENCE LORD (MASH)	MARLBOROUGH	YES	NONE	NONE	YES	YES	YES	NONE
CWC - MARLBOROUGH GARDENS	MARLBOROUGH	YES	NONE	YES	YES	YES	YES	NONE
CWC - SACHEM VILLAGE CONDO	MARLBOROUGH	YES	NONE	YES	YES	YES	YES	NONE
CWC - FOREST HOMES DIVISION	MARLBOROUGH	YES	NONE	YES	YES	YES	YES	NONE
HILLSIDE CORPORATION	MARLBOROUGH	YES	NONE	YES	NONE	YES	NONE	NONE

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
LAUREL HILL WATER ASSOCIATION	MARLBOROUGH	YES	NONE	NONE	NONE	YES	YES	NONE
MARLBOROUGH HEALTH CARE CENTER, INC	MARLBOROUGH	YES	NONE	YES	NONE	YES	NONE	NONE
BITTERSWEET RIDGE WATER ASSOCIATION	MIDDLEFIELD	YES	NONE	NONE	YES	YES	YES	NONE
MIDDLEFIELD HOUSING AUTHORITY	MIDDLEFIELD	YES	NONE	NONE	NONE	YES	YES	NONE
OLD INDIAN TRAIL	MIDDLEFIELD	NONE	NONE	NONE	NONE	YES	NONE	NONE
REJA - RAINBOW SPRING WATER COMPANY	MIDDLEFIELD	NONE	NONE	NONE	NONE	YES	NONE	NONE
SYLVAN RIDGE CONDOMINIUMS	MIDDLEFIELD	YES	NONE	YES	NONE	YES	NONE	NONE
BLUE TRAILS WATER ASSOCIATION	NORTH BRANFORD	NONE	NONE	NONE	YES	YES	NONE	NONE
NORTHFORD GLEN CONDOMINIUM ASSOCIATION	NORTH BRANFORD	YES	NONE	YES	YES	YES	NONE	NONE
BOXWOOD CONDOMINIUM ASSOCIATION	OLD LYME	NONE	NONE	YES	NONE	YES	NONE	NONE
CHADWICK HOMEOWNERS ASSN., INC.	OLD LYME	YES	NONE	YES	NONE	YES	NONE	NONE
LAUREL HEIGHTS ASSOCIATION, INC.	OLD LYME	NONE	NONE	YES	NONE	YES	YES	NONE
LYME ACADEMY APARTMENTS,LLC	OLD LYME	YES	NONE	YES	NONE	NONE	NONE	NONE
LYME REGIS, INC.	OLD LYME	NONE	NONE	YES	NONE	YES	NONE	NONE
LYMEWOOD ELDERLY HOUSING	OLD LYME	NONE	NONE	YES	NONE	YES	NONE	NONE
MIAMI BEACH WATER COMPANY	OLD LYME	YES	NONE	YES	NONE	YES	YES	NONE
MILE CREEK APARTMENTS	OLD LYME	YES	NONE	YES	NONE	YES	NONE	NONE
RYE FIELD MANOR ELDERLY HOUSING	OLD LYME	YES	NONE	YES	NONE	YES	NONE	NONE
CWC – RIVERCREST DIVISION	PORTLAND	YES	NONE	YES	YES	YES	YES	NONE
ETHEL WALKER SCHOOL	SIMSBURY	YES	RECEIVE	YES	YES	YES	NONE	NONE
TOWN OF SOMERS - RYE HILL SYSTEM	SOMERS	NONE	RECEIVE	NONE	NONE	NONE	*	NONE
APPLE VALLEY VILLAGE	SOUTHINGTON	NONE	NONE	NONE	NONE	YES	NONE	NONE

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
JOHNSON MEMORIAL HOSPITAL, INC	STAFFORD	YES	NONE	YES	NONE	YES	NONE	NONE
STAFFORD HOLLOW WATER ASSOCIATION	STAFFORD	YES	NONE	YES	NONE	YES	NONE	NONE
AQUARION WATER COMPANY – WEST SUFFIELD (WEST SERVICE CORPORATION)	SUFFIELD	YES	NONE	NONE	NONE	YES	YES	YES
BAXTER FARMS COMMUNITY WATER ASSOCIATION	TOLLAND	YES	NONE	NONE	NONE	YES	NONE	NONE
EASTVIEW KOZLEY WATER ASSOCIATION	TOLLAND	YES	NONE	YES	NONE	YES	NONE	NONE
IVY WOODS	TOLLAND	YES	NONE	YES	YES	YES	NONE	NONE
NORWEGIAN WOODS APARTMENTS	TOLLAND	YES	NONE	NONE	NONE	YES	NONE	NONE
STONE POND CONDOMINIUMS	TOLLAND	NONE	NONE	YES	YES	YES	NONE	NONE
TOLLAND WATER DEPARTMENT – TORRY ROAD	TOLLAND	YES	RECEIVE	NONE	NONE	NONE	*	YES
VILLAGE AT CRYSTAL SPRINGS	TOLLAND	YES	NONE	YES	NONE	YES	NONE	NONE
WOODLAND SUMMIT COMMUNITY WATER ASSOCIATION	TOLLAND	YES	NONE	YES	YES	YES	YES	NONE
CWC – RESERVOIR HEIGHTS	VERNON	NONE	RECEIVE	NONE	NONE	NONE	*	NONE
VERNON VILLAGE INC.	VERNON	YES	NONE	YES	NONE	YES	YES	NONE
SAFE HARBOR, INC.	WESTBROOK	YES	NONE	NONE	YES	YES	NONE	NONE
CEDAR RIDGE APARTMENTS	WILLINGTON	YES	NONE	YES	NONE	YES	NONE	NONE
CWC – RIVERSEDGE DIVISION	WILLINGTON	YES	RECEIVE	YES	YES	YES	*	YES
DEER PARK APARTMENTS	WILLINGTON	YES	NONE	YES	YES	YES	NONE	NONE
NATURAL PARK APARTMENTS, LLC	WILLINGTON	YES	NONE	YES	YES	YES	NONE	NONE
NORTH WILLINGTON VILLAGE CONDO ASSOCIATION	WILLINGTON	YES	NONE	YES	NONE	NONE	NONE	NONE
RIDGEVIEW HEIGHTS	WILLINGTON	YES	NONE	NONE	NONE	YES	NONE	NONE
WALDEN APARTMENTS	WILLINGTON	YES	NONE	YES	YES	YES	NONE	NONE
WILLINGTON OAKS APARTMENTS	WILLINGTON	YES	NONE	YES	NONE	YES	NONE	NONE

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Treatment	Distribution Pumping Facilities	Storage	Emergency Power Availability	Firefighting Capabilities
WILLINGTON RIDGE CONDOS - SYSTEM #1	WILLINGTON	YES	RECEIVE	NONE	NONE	YES	NONE	NONE
WILLINGTON RIDGE CONDOS - SYSTEM #2	WILLINGTON	NONE	SUPPLY	NONE	YES	YES	NONE	NONE
WILLINGTON SENIOR CENTER & HOUSING	WILLINGTON	YES	NONE	YES	YES	YES	YES	NONE
WOODHAVEN APARTMENTS	WILLINGTON	YES	NONE	NONE	NONE	YES	NONE	NONE

Note: If no information was available, it was assumed that the public water system did not have the service/capability.
*Emergency Power provided by source utility.

APPENDIX D

SUMMARY OF MARGIN OF SAFETY FOR COMMUNITY SYSTEMS SERVING < 1,000 PEOPLE

Appendix D
Summary of Margin of Safety for Public Water Systems Serving < 1,000 People

Community Water System	Primary Location Served	Estimated Population Served	Average Day Demand (gpd)[1]	Available Yield (gpd)[2]	Margin of Safety	Peak Hourly Demand (gal)[3]	Per-Capita Demand (gpcd)[4]
HOP RIVER HOMES	ANDOVER	26	1,950	37,800	19.38	650	-
WHISPERING HILLS, LLC - WELL A SYSTEM	ANDOVER	16	1,200	9,720	8.10	400	-
WHISPERING HILLS, LLC - WELL D SYSTEM	ANDOVER	48	3,600	51,840	14.40	1,200	-
BETHANY MOBILE HOME PARK	BETHANY	138	10,350	NR	NR	3,450	-
GRANT HILL ASSOCIATES, INC.	BLOOMFIELD	97	7,275	45,360	6.24	2,425	-
JUNIPER CLUB INC.	BLOOMFIELD	104	7,800	27,000	3.46	2,600	-
ORCHARD HILL ASSOCIATION	BLOOMFIELD	30	2,000	NR	NR	667	67
SHARON HEIGHTS WATER ASSOCIATION	BLOOMFIELD	51	3,825	32,400	8.47	1,275	-
166 & 180 BOSTON TURNPIKE	BOLTON	31	500	NR	NR	167	16
890 BOSTON TURNPIKE	BOLTON	60	4,500	32,400	7.20	1,500	-
COOK DRIVE ASSOCIATION	BOLTON	76	5,700	10,800	1.89	1,900	-
CWC – LLYNWOOD SYSTEM	BOLTON	192	6,885	20,412	2.96	2,295	34
SOUTHRIDGE PARK APARTMENTS	BOLTON	50	3,750	NR	NR	1,250	-
SUNSET APARTMENTS LLC	BOLTON	46	3,450	NR	NR	1,150	-
298-302 ALBANY TURNPIKE	CANTON	28	2,100	6,480	3.09	700	-
AARON MANOR NURSING & REHAB CENTER	CHESTER	81	6,075	17,280	2.84	2,025	-
CWC – CHESTER VILLAGE WEST	CHESTER	216	7,014	14,904	2.12	2,338	27
EVERGREEN TRAILER PARK - SYSTEM #1	CLINTON	45	2,052	19,440	9.47	684	46
EVERGREEN TRAILER PARK - SYSTEM #2	CLINTON	35	1,353	15,120	11.18	451	39
EVERGREEN TRAILER PARK - SYSTEM #3	CLINTON	68	3,361	29,160	8.68	1,120	49
EVERGREEN TRAILER PARK - SYSTEM #4	CLINTON	110	8,250	20,520	2.49	2,750	-
NOD HILL APARTMENTS	CLINTON	48	3,600	7,560	2.10	1,200	-
CWC – COLUMBIA HEIGHTS DIVISION	COLUMBIA	32	5,115	NR	NR	1,705	160
DARTMOUTH VILLAGE ELDERLY HOUSING	COLUMBIA	25	1,875	216,000	115.20	625	-
WOODLAND TERRACE	COLUMBIA	27	2,025	19,440	9.60	675	-
COVENTRY HOUSING AUTHORITY-LOWER SYSTEM	COVENTRY	80	2,124	43,200	20.34	708	27
COVENTRY HOUSING AUTHORITY-UPPER SYSTEM	COVENTRY	80	1,459	17,280	11.84	486	18
CWC - COVENTRY HILLS DIV	COVENTRY	700	40,715	81,540	2.00	13,572	58
CWC - GENERAL WATER DIVISION	COVENTRY	306	16,841	43,200	2.57	5,614	55

Community Water System	Primary Location Served	Estimated Population Served	Average Day Demand (gpd)[1]	Available Yield (gpd)[2]	Margin of Safety	Peak Hourly Demand (gal)[3]	Per-Capita Demand (gpcd)[4]
CWC - LAKEVIEW TERRACE	COVENTRY	472	15,271	22,356	1.46	5,090	32
CWC - LAKEWOOD	COVENTRY	256	6,266	8,748	1.40	2,089	24
CWC - NATHAN HALE SYSTEM	COVENTRY	160	4,553	15,876	3.49	1,518	28
CWC - PILGRIM HILLS DIVISION	COVENTRY	229	12,874	50,760	3.94	4,291	56
SOUTH COVENTRY WATER SUPPLY COMPANY	COVENTRY	501	34,447	NR	NR	11,482	49
TWIN HILLS WATER DISTRICT	COVENTRY	156	6,600	42,120	6.38	2,200	42
MOUNT SAINT JOHN SCHOOL	DEEP RIVER	144	10,800	27,000	2.50	3,600	-
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #1	DEEP RIVER	18	1,350	19,440	14.40	450	-
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #2	DEEP RIVER	18	1,350	19,440	14.40	450	-
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #3	DEEP RIVER	18	1,350	19,440	14.40	450	-
RIDGEWOOD HILLS ASSOCIATION, SYSTEM #4	DEEP RIVER	18	1,350	19,440	14.40	450	-
CWC – STAGECOACH FARMS	DURHAM	NR	414	NR	NR	138	-
DURHAM CENTER DIVISION	DURHAM	140	10,500	151,200	14.40	3,500	-
DURHAM ELDERLY HOUSING DIVISION	DURHAM	50	3,750	NR	NR	1,250	-
DURHAM LEXINGTON PLACE DIVISION	DURHAM	45	3,375	NR	NR	1,125	-
TWIN MAPLES NURSING HOME	DURHAM	100	7,500	22,680	3.02	2,500	-
CHELSEA COMMON CONDOMINIUM ASSOCIATION	EAST GRANBY	126	4,007	30,240	7.55	1,336	32
GQC WELL COMMISSION	EAST GRANBY	208	15,600	69,120	4.43	5,200	-
METACOMET HOMES - WELL 1	EAST GRANBY	27	2,025	8,640	4.27	675	-
METACOMET HOMES - WELL 2	EAST GRANBY	36	2,700	8,640	3.20	900	-
OLD NEWGATE RIDGE WATER COMPANY	EAST GRANBY	208	15,600	135,000	8.65	5,200	-
TURKEY HILL OF EAST GRANBY, LLC	EAST GRANBY	360	24,600	363,960	14.80	8,200	68
31 GRIST MILL RD	EAST HADDAM	30	2,250	31,320	13.92	750	-
CHESTELM HEALTH & REHABILITATION CENTER	EAST HADDAM	120	7,000	19,440	2.78	2,333	58
CWC - BANNER VILLAGE	EAST HADDAM	265	6,899	NR	NR	2,300	26
CWC - LAKE HAYWARD	EAST HADDAM	650	9,373	64,800	6.91	3,124	14
FRANKLIN ACADEMY	EAST HADDAM	81	6,075	30,240	4.98	2,025	-
GOODSPEED ACTOR HOUSING - THE VILLAGE	EAST HADDAM	40	3,000	21,600	7.20	1,000	-
OAK GROVE SENIOR HOUSING CORP	EAST HADDAM	72	5,400	12,960	2.40	1,800	-
AQUARION WATER COMPANY – EAST HAMPTON DIVISION	EAST HAMPTON	196	7,718	7,920	1.03	2,573	39
BELLWOOD COURT	EAST HAMPTON	31	2,325	7,560	3.25	775	-

Community Water System	Primary Location Served	Estimated Population Served	Average Day Demand (gpd)[1]	Available Yield (gpd)[2]	Margin of Safety	Peak Hourly Demand (gal)[3]	Per-Capita Demand (gpcd)[4]
CHATHAM ACRES ELDERLY HOUSING	EAST HAMPTON	50	3,750	NR	NR	1,250	-
CHATHAM APARTMENTS	EAST HAMPTON	40	3,000	43,200	14.40	1,000	-
CWC - BAKER HILL DIVISION	EAST HAMPTON	203	19,581	NR	NR	6,527	80
CWC - SPICE HILL DIVISION	EAST HAMPTON	712	30,526	NR	NR	10,175	40
CWC - WESTCHESTER EAST	EAST HAMPTON	153	4,244	38,800	9.16	1,415	25
EAST HAMPTON WPCA - ROYAL OAKS SYSTEM	EAST HAMPTON	926	13,235	39,852	3.02	4,412	14
EAST HAMPTON WPCA - VILLAGE CENTER	EAST HAMPTON	451	9,853	21,384	2.17	3,284	22
EDGEMERE CONDOMINIUM ASSN., INC.	EAST HAMPTON	540	40,500	583,200	14.40	13,500	-
MALLARD COVE CONDOMINIUM ASSN.	EAST HAMPTON	177	8,000	NR	NR	2,667	45
WESTSIDE MANOR	EAST HAMPTON	30	2,250	9,720	4.32	750	-
Z, INC.	EAST HAMPTON	130	4,300	140,400	32.65	1,433	33
EAST WINDSOR HOUSING AUTHORITY	EAST WINDSOR	94	7,050	21,600	3.06	2,350	-
MARKOWSKI FARMS	EAST WINDSOR	155	11,625	37,800	3.25	3,875	-
SCHOOL HILL ASSOCIATION, INC.	EAST WINDSOR	77	6,700	12,960	1.93	2,233	87
MEADOWBROOK APARTMENTS, LLC	ELLINGTON	60	4,500	64,800	14.40	1,500	-
SHAKER HEIGHTS WATER COMPANY	ENFIELD	172	14,222	54,000	3.80	4,741	83
HEMLOCK APARTMENTS	ESSEX	72	2,053	25,920	12.63	684	29
HERITAGE COVE CONDOMINIUMS	ESSEX	208	15,600	NR	NR	5,200	-
MEADOWBROOK MANOR LLC	ESSEX	30	2,250	10,260	4.56	750	-
CWC – CHIMNEY HILL	FARMINGTON	227	39,482	NR	NR	13,161	108
QUONNIPAUG HILLS - MAIN SYSTEM	GUILFORD	564	42,300	47,520	1.12	14,100	-
QUONNIPAUG HILLS - SECTION I	GUILFORD	27	2,025	9,720	4.80	675	-
HIGH MEADOW	HADDAM	38	2,850	11,340	3.98	950	-
SAYBROOK AT HADDAM	HADDAM	155	11,625	19,440	1.67	3,875	-
ABBY WATER LLC	HEBRON	100	7,500	27,000	3.60	2,500	-
CWC - AMSTON LAKE DIVISION	HEBRON	910	28,896	44,280	1.53	9,632	25
CWC - COUNTRY MANOR APTS.	HEBRON	72	3,263	27,000	8.27	1,088	44
CWC - LONDON PARK DIVISION	HEBRON	221	10,301	54,000	5.24	3,434	37
CWC - MILL AT STONECROFT DIV.	HEBRON	127	11,071	35,640	3.22	3,690	87
CWC - WELLSWOOD VILLAGE DIV.	HEBRON	60	3,145	15,984	5.08	1,048	52
HEBRON ARMS APARTMENTS	HEBRON	39	960	19,440	20.25	320	25
HILLSIDE CONDOMINIUMS	HEBRON	96	3,400	NR	NR	2,400	35

Community Water System	Primary Location Served	Estimated Population Served	Average Day Demand (gpd)[1]	Available Yield (gpd)[2]	Margin of Safety	Peak Hourly Demand (gal)[3]	Per-Capita Demand (gpcd)[4]
WELLSWOOD ESTATES FOUNDATION, INC.	HEBRON	112	8,400	21,600	2.57	2,800	-
CWC - JENSENS, INC. BEECHWOOD RESIDENTIAL	KILLINGWORTH	750	35,000	64,800	1.85	11,667	47
CWC – LEGEND HILL	MADISON	1368	13,586	67,392	4.96	4,529	10
CWC - GREEN SPRINGS	MADISON	104	6,041	28,080	6.35	1,473	38
CWC – REDWOOD FARMS DIVISION	MANCHESTER	424	17,540	NR	NR	5,847	34
AQUARION WATER COMPANY – VALLEY VIEW	MANSFIELD	137	4,474	12,975	2.90	1,491	33
CARRIAGE HOUSE APARTMENTS	MANSFIELD	196	14,700	54,000	3.67	4,900	-
CLUB HOUSE APARTMENTS	MANSFIELD	115	8,625	13,500	1.57	2,875	-
CWC - BIRCHWOOD HEIGHTS	MANSFIELD	76	2,332	15,120	6.48	777	31
CWC - CRYSTAL SPRINGS DIV.	MANSFIELD	169	5,274	NR	NR	1,758	31
CWC - JENSENS, INC. ROLLING HILLS RESIDENTIAL	MANSFIELD	300	27,655	NR	NR	9,218	92
CWC - PINEWOODS LANE DIV	MANSFIELD	68	1,307	19,224	14.71	436	19
HUNTING LODGE APARTMENTS	MANSFIELD	155	8,625	34,560	4.01	2,875	-
KNOLLWOOD ACRES APARTMENTS	MANSFIELD	312	23,400	54,000	2.31	7,800	-
MANSFIELD VILLAGE, LLC	MANSFIELD	40	1,550	10,152	6.55	517	39
MAPLEWOOD APARTMENTS	MANSFIELD	153	11,475	24,840	2.16	3,825	-
ORCHARD ACRES ASSOCIATION	MANSFIELD	176	13,200	32,400	2.45	4,400	-
RENWOOD APARTMENTS	MANSFIELD	190	14,250	NR	NR	4,750	-
ROCKRIDGE CONDOMINIUMS	MANSFIELD	144	10,800	NR	NR	3,600	-
S & P PROPERTIES LLC	MANSFIELD	42	3,150	5,400	1.71	1,050	-
WHITE OAK CONDOMINIUMS	MANSFIELD	192	14,400	36,720	2.55	4,800	75
WOODS EDGE APARTMENTS, LLC	MANSFIELD	60	3,607	19,440	5.39	1,202	60
AQUARION WATER COMPANY – BIRCHWOOD ESTATES	MARLBOROUGH	250	25,139	9,720	0.39	8,380	101
CWC - FLORENCE LORD (MASH)	MARLBOROUGH	30	1,036	NR	NR	345	35
CWC - MARLBOROUGH GARDENS	MARLBOROUGH	110	3,929	23,652	6.02	1,310	31
CWC - SACHEM VILLAGE CONDO	MARLBOROUGH	166	5,838	51,840	8.88	1,946	20
CWC - FOREST HOMES DIVISION	MARLBOROUGH	100	4,751	NR	NR	1,584	44
HILLSIDE CORPORATION	MARLBOROUGH	136	10,200	18,360	1.80	3,400	-
LAUREL HILL WATER ASSOCIATION	MARLBOROUGH	86	6,450	23,760	3.68	2,150	-
MARLBOROUGH HEALTH CARE CENTER, INC	MARLBOROUGH	165	12,375	28,080	2.27	4,125	-
BITTERSWEET RIDGE WATER ASSOCIATION	MIDDLEFIELD	40	3,000	9,720	3.24	1,000	-
MIDDLEFIELD HOUSING AUTHORITY	MIDDLEFIELD	62	4,650	8,640	1.86	1,550	-

Community Water System	Primary Location Served	Estimated Population Served	Average Day Demand (gpd)[1]	Available Yield (gpd)[2]	Margin of Safety	Peak Hourly Demand (gal)[3]	Per-Capita Demand (gpcd)[4]
OLD INDIAN TRAIL	MIDDLEFIELD	32	2,400	12,960	5.40	800	-
REJA - RAINBOW SPRING WATER COMPANY	MIDDLEFIELD	36	2,700	NR	NR	900	-
SYLVAN RIDGE CONDOMINIUMS	MIDDLEFIELD	84	6,300	38,880	6.17	2,100	-
BLUE TRAILS WATER ASSOCIATION	NORTH BRANFORD	228	17,100	41,040	2.40	5,700	-
NORTHFORD GLEN CONDOMINIUM ASSOCIATION	NORTH BRANFORD	84	6,300	NR	NR	2,100	-
BOXWOOD CONDOMINIUM ASSOCIATION	OLD LYME	28	2,100	10,800	5.14	700	-
CHADWICK HOMEOWNERS ASSN., INC.	OLD LYME	292	21,900	51,840	2.37	7,300	-
LAUREL HEIGHTS ASSOCIATION, INC.	OLD LYME	45	3,375	8,640	2.56	1,125	-
LYME ACADEMY APARTMENTS,LLC	OLD LYME	48	3,600	NR	NR	1,200	-
LYME REGIS, INC.	OLD LYME	32	1,600	8,640	5.40	533	50
LYMEWOOD ELDERLY HOUSING	OLD LYME	50	3,750	NR	NR	1,250	-
MIAMI BEACH WATER COMPANY	OLD LYME	440	33,000	NR	NR	11,000	-
MILE CREEK APARTMENTS	OLD LYME	60	4,500	14,040	3.12	1,500	-
RYE FIELD MANOR ELDERLY HOUSING	OLD LYME	78	5,850	16,200	2.77	1,950	-
CWC – RIVERCREST DIVISION	PORTLAND	88	2,600	49,680	19.11	867	24
ETHEL WALKER SCHOOL	SIMSBURY	325	24,375	58,320	2.39	8,125	-
TOWN OF SOMERS - RYE HILL SYSTEM	SOMERS	352	26,400	NR	NR	8,800	-
APPLE VALLEY VILLAGE	SOUTHINGTON	70	6,500	112,320	17.28	2,167	93
JOHNSON MEMORIAL HOSPITAL, INC	STAFFORD	250	18,750	NR	NR	6,250	-
STAFFORD HOLLOW WATER ASSOCIATION	STAFFORD	429	32,175	NR	NR	10,725	-
AQUARION WATER COMPANY – WEST SUFFIELD (WEST SERVICE CORPORATION)	SUFFIELD	546	45,201	250,000*	5.53	15,067	83
BAXTER FARMS COMMUNITY WATER ASSOCIATION	TOLLAND	175	13,125	31,320	2.39	4,375	-
EASTVIEW KOZLEY WATER ASSOCIATION	TOLLAND	60	4,500	18,360	4.08	1,500	-
IVY WOODS	TOLLAND	207	6,000	50,220	8.37	2,000	29
NORWEGIAN WOODS APARTMENTS	TOLLAND	252	18,900	43,200	2.29	6,300	-
STONE POND CONDOMINIUMS	TOLLAND	141	10,575	NR	NR	3,525	-
TOLLAND WATER DEPARTMENT – TORRY ROAD	TOLLAND	204	14,400	NR	NR	4,800	71
VILLAGE AT CRYSTAL SPRINGS	TOLLAND	25	1,875	29,160	15.55	625	-

Community Water System	Primary Location Served	Estimated Population Served	Average Day Demand (gpd)[1]	Available Yield (gpd)[2]	Margin of Safety	Peak Hourly Demand (gal)[3]	Per-Capita Demand (gpcd)[4]
WOODLAND SUMMIT COMMUNITY WATER ASSOCIATION	TOLLAND	216	16,200	23,220	1.43	5,400	-
CWC – RESERVOIR HEIGHTS	VERNON	62	4,915	NR	NR	1,638	79
VERNON VILLAGE INC.	VERNON	430	32,250	51,840	1.61	10,750	-
SAFE HARBOR, INC.	WESTBROOK	50	3,750	NR	NR	1,250	-
CEDAR RIDGE APARTMENTS	WILLINGTON	300	22,500	17,280	0.77	7,500	-
CWC – RIVERSEDGE DIVISION	WILLINGTON	179	15,238	45,000	2.95	5,079	85
DEER PARK APARTMENTS	WILLINGTON	125	9,375	NR	NR	3,125	-
NATURAL PARK APARTMENTS, LLC	WILLINGTON	60	4,500	43,200	9.60	1,500	-
NORTH WILLINGTON VILLAGE CONDO ASSOCIATION	WILLINGTON	66	4,950	29,160	5.89	1,650	-
RIDGEVIEW HEIGHTS	WILLINGTON	96	7,200	NR	NR	2,400	-
WALDEN APARTMENTS	WILLINGTON	276	20,700	81,000	3.91	6,900	-
WILLINGTON OAKS APARTMENTS	WILLINGTON	400	30,000	138,240	4.61	10,000	-
WILLINGTON RIDGE CONDOS - SYSTEM #1	WILLINGTON	102	7,650	17,280	2.26	2,550	-
WILLINGTON RIDGE CONDOS - SYSTEM #2	WILLINGTON	102	7,650	15,120	1.98	2,550	-
WILLINGTON SENIOR CENTER & HOUSING	WILLINGTON	32	2,400	38,880	16.20	800	-
WOODHAVEN APARTMENTS	WILLINGTON	489	36,675	30,240	0.82	12,225	-

Note: NR indicates that data is not available.

1. Based on actual system demands or estimated at 75 gallons per person per day.
2. Based on pumping capacity multiplied by an 18-hour pumping day, or actual safe yield if reported.
3. Estimated as equal to 1/3 of average day demand.
4. GPCD = Gallons per capita per day. Only reported for systems where actual average day demand is known, not estimated.

*Diversion permit pending