

**COORDINATED WATER SYSTEM PLAN**  
**PART I: FINAL WATER SUPPLY ASSESSMENT**

**Southeastern Connecticut  
Public Water Supply Management Area**

**April 1999**

***Prepared for:***

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and  
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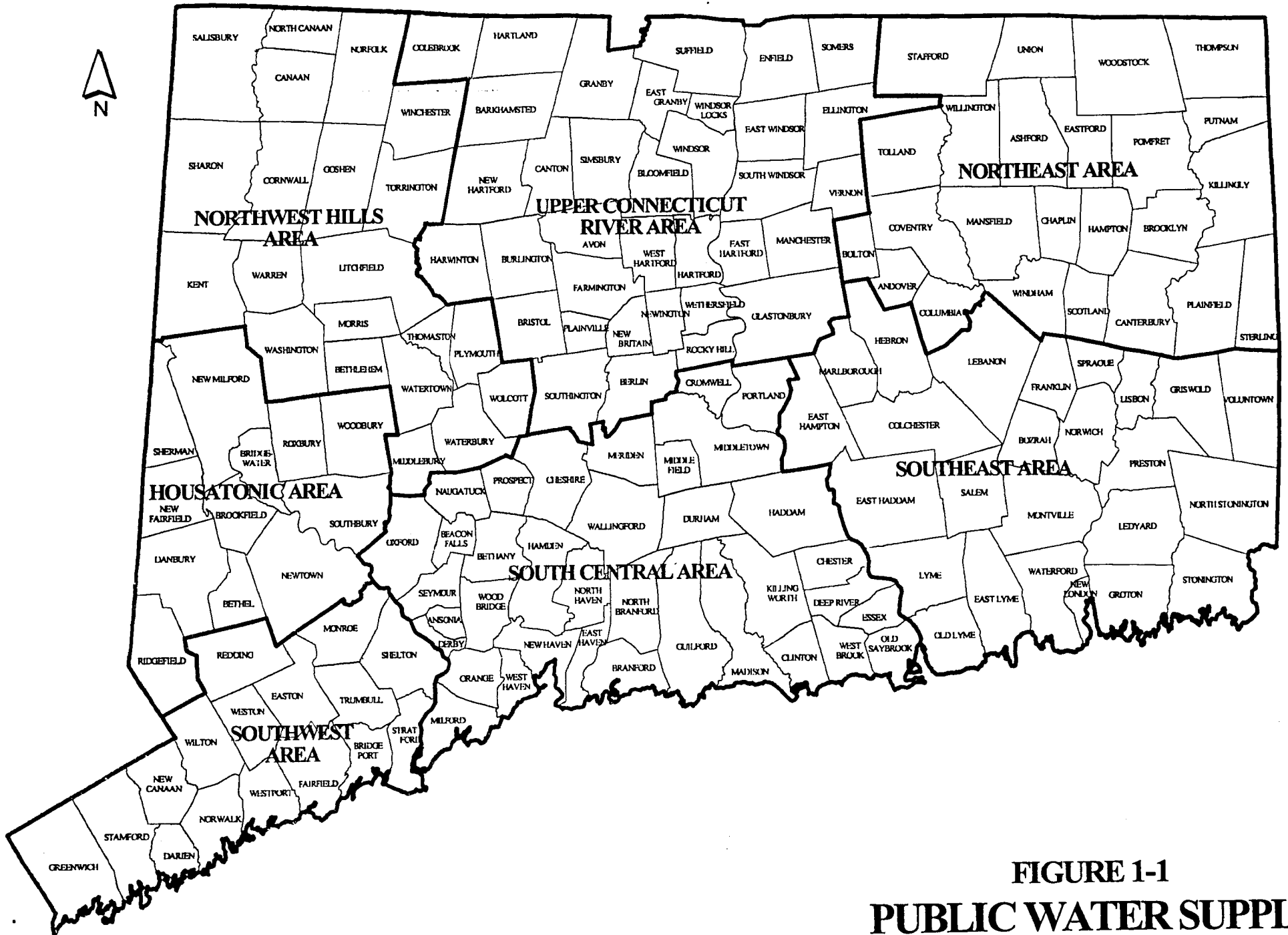
## **1.0 INTRODUCTION**

### **1.1 The Coordinated Water System Planning Process**

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 Department of Public Health (DPH) in consultation with the Department of Public Utility Control (DPUC), Department of Environmental Protection (DEP), and Office of Policy and Management (OPM) was given the charge of developing a coordinated approach to long-range water supply planning to assure future supplies.

The legislative finding, as reflected in Section 25-33c of the Connecticut General Statutes, 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 Department of Public Health 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 Connecticut General Statutes, the boundaries of public water supply management areas have been delineated based upon 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 State is divided into seven public water supply management areas as indicated in Figure 1-1.



**FIGURE 1-1  
PUBLIC WATER SUPPLY  
MANAGEMENT AREAS**

The Connecticut General Statutes require that the Commissioner of Public Health convene a water utility coordinating committee (WUCC) for each public water supply management area to implement the areawide water supply planning process. A water utility coordinating committee consists of one representative from each public water system with a source of water supply or service area within the public water supply management area, and one representative from each regional planning agency within such area, elected by majority vote of the chief elected officials of the municipalities that are members of such regional planning agency.

The southeastern Connecticut WUCC is the fourth committee to be convened (convened August 5, 1998). It was preceded by the Housatonic Area (convened in June 1986), the Upper Connecticut River Area (convened in March 1987), and the South Central Area (convened in November 1987).

A coordinated water system plan is comprised of the individual water supply plans of the public water systems within the public water supply management area which serve over 1,000 people or have 250 or more service connections and an areawide supplement which includes a water supply assessment, delineation of exclusive service area boundaries, an integrated report, and an executive summary.

The purpose of the coordinated water system plan is to:

- (1) identify the present and future water system concerns;
- (2) analyze alternatives; and
- (3) set forth a means for meeting the identified needs.

The coordinated water system plan components and schedule for completion are shown in Table 1-1.



**TABLE 1-1**  
**Coordinated Water System Plan Components and Schedule**

Coordinated Water System Plan Components	Schedule from Convening of WUCC
A. Individual Water Supply Plans	Not Applicable
B. Areawide Supplement	
1. Water Supply Assessment	6 months
2. Exclusive Service Area Declaration	12 months
3. Integrated Report	24 months
4. Executive Summary	24 months

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

***Individual Water Supply Plans*** – Each community water system which 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 Connecticut General Statutes and Section 25-32d of the Regulations of Connecticut State Agencies. The principal goals of individual water system planning as defined by the Department of Public Health are to: (1) ensure an adequate quantity of pure drinking water, now and in the future; (2) ensure orderly growth of the individual water systems; and (3) make efficient use of available resources. The individual water supply plans in the southeastern Connecticut region are in various stages of development and DPH approval. The status of each plan is described in greater detail in Section 6.0 of this document.

***Water Supply Assessment*** – The subject document represents the Water Supply Assessment, the first of the four components of the areawide supplement. The purpose of the Water Supply Assessment is to evaluate existing conditions and deficiencies within the southeastern Connecticut public water supply management area. By statute, the Final Water Supply Assessment and associated mapping must be completed within six months of the convening of the WUCC, which took place on August 5, 1998. A 60-day extension of this schedule was requested by the WUCC and subsequently granted by DPH, extending the completion date from February 5, 1999 to April 5, 1999.

Documentation of proper notification of the convening of the WUCC and initiation of the Water Supply Assessment as well as correspondence relating to the schedule extension 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.

***Integrated Report*** – The Integrated Report is a long-term planning tool for the region. Various issues are 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 proposed stratified drift wells.

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

## 1.2 Southeastern Connecticut Public Water Supply Management Area

The southeastern region of Connecticut falls into two geological areas, the eastern uplands and the coastal slope. Bedrock, composed of mainly metamorphic rocks like schist and gneiss, make up the eastern uplands. Hills rise out of the eastern side of the Central Valley, running mostly north and south, reaching 1,000 feet at the northernmost reach, while the southernmost part reaches only 500 to 700 feet in height, creating a slope of 10 to 20 feet per mile. The slope steepens to 50 feet per mile near the coast.

The eastern uplands are composed of the Bolton Range, Mohegan Range, and the Windham Hills. This hilly area, aptly named the uplands, is covered with rich soil that is generally good for farming. Yet another aspect of the eastern uplands is the minerals and metals found beneath the rich soil.

The coastal area of southeastern Connecticut is unique. Unlike the smooth shores of Rhode Island and the southern side of Long Island, Connecticut's shore is rocky and irregular. Made up of salt marshes, freshwater meadows, and beaches, its many notches are well suited for harbors and are largely responsible for the important role maritime industries have played.

Figure 1-2 graphically shows the southeastern Connecticut public water supply management area. It is defined to the north by the towns of East Hampton, Marlborough, Hebron, Lebanon, Franklin, Sprague, Lisbon, Griswold, and Voluntown; to the east adjacent to the State of Rhode Island by the towns of Voluntown, North Stonington, and Stonington; to the south adjacent to Long Island Sound by the towns of Stonington, Groton, New London, Waterford, East Lyme, and Old Lyme; and to the west by the towns of Old Lyme, Lyme, East Haddam, and East Hampton. Other municipalities, which lie in the interior of the southeastern Connecticut public water supply management area, include the towns of Colchester, Salem, Bozrah, Montville, Norwich, Preston, and Ledyard. In total, the Southeastern Connecticut WUCC area comprises 25 municipalities.

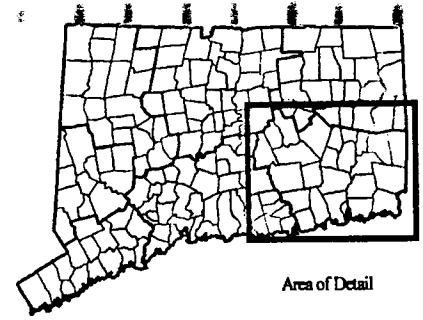
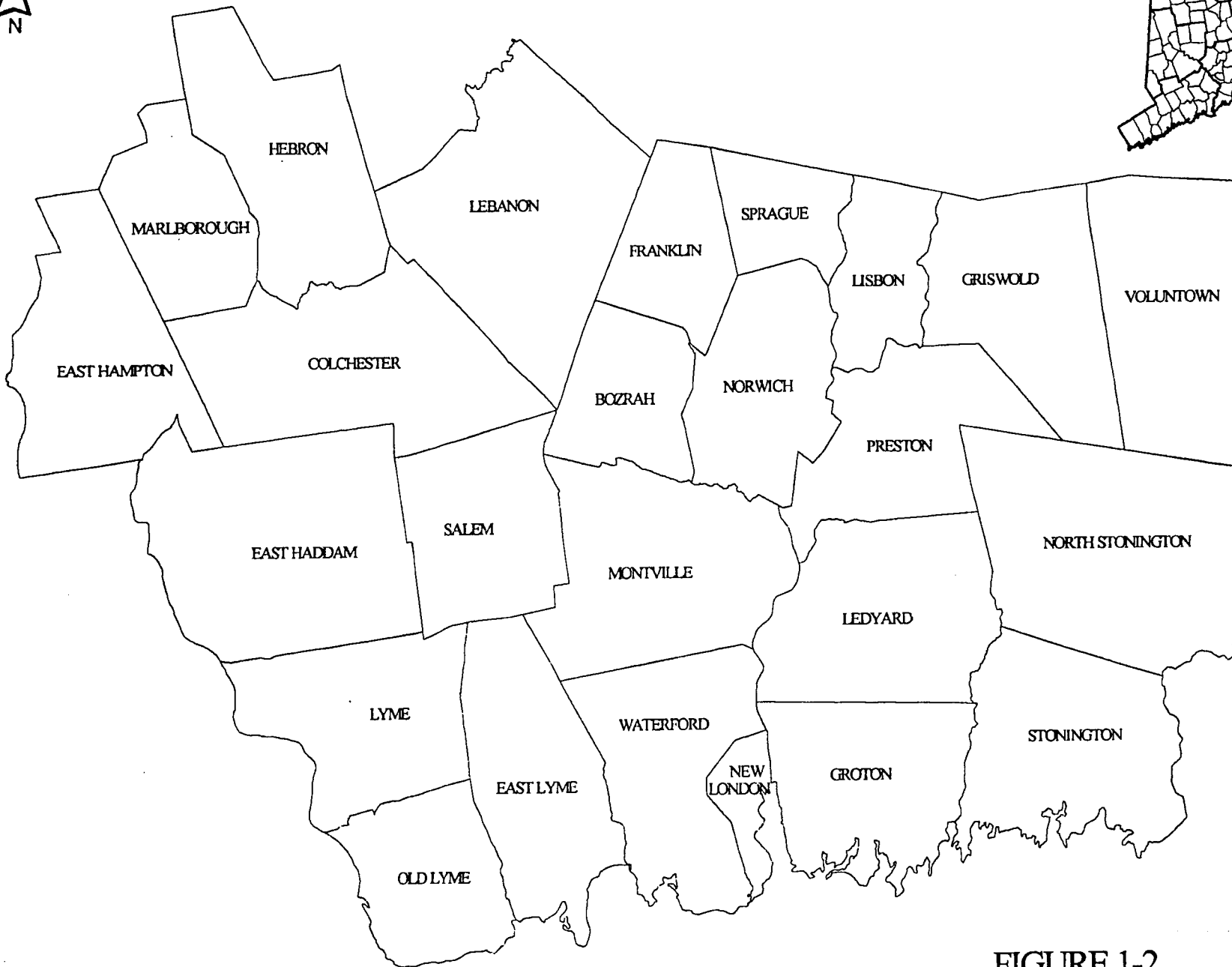


FIGURE 1-2  
SOUTHEAST REGION  
PUBLIC WATER SUPPLY MANAGEMENT AREA

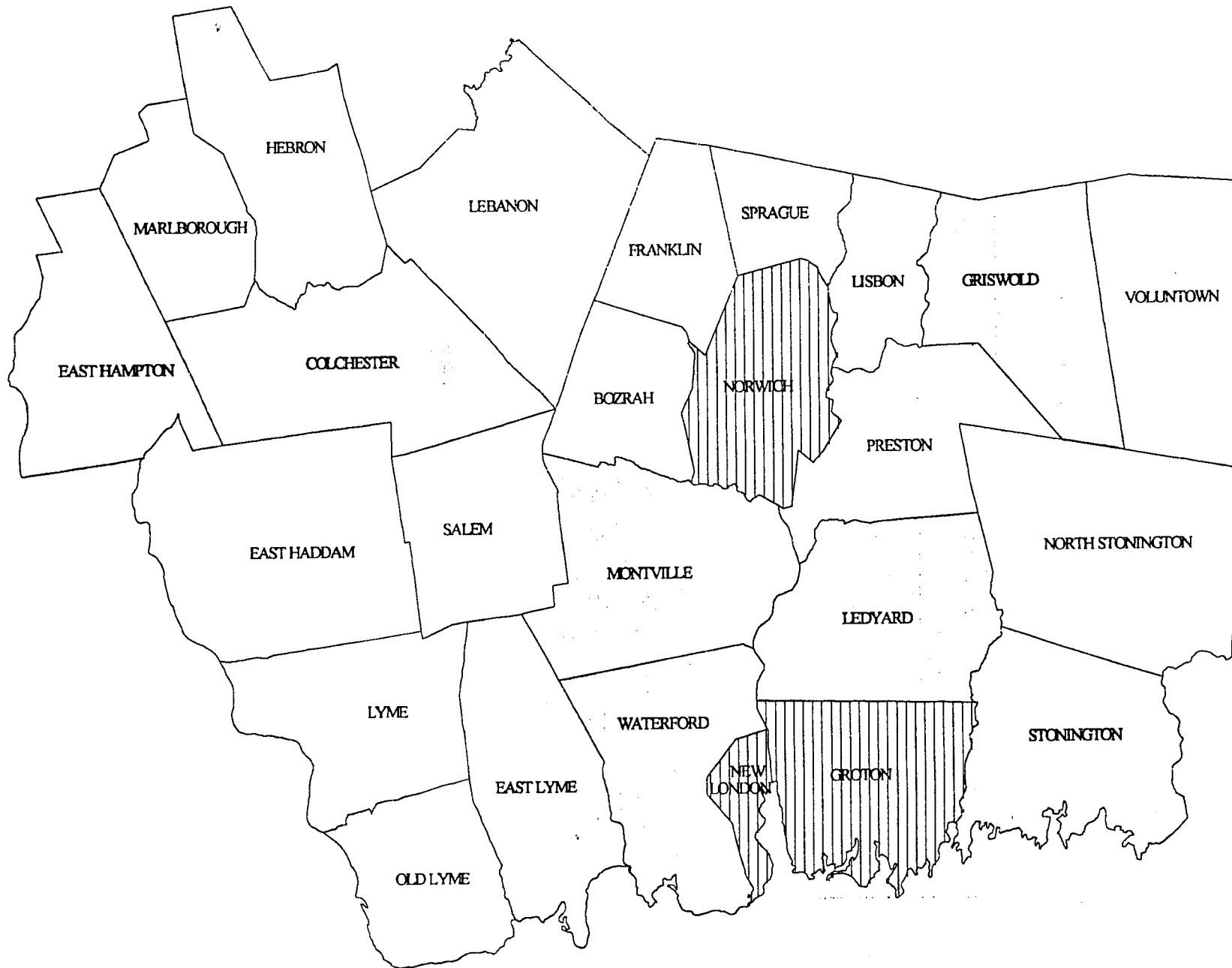
Population varies widely in the region. Based upon the most recent census data, the smallest municipality is the Town of Franklin, with a 1990 population of 1,810. The largest is the City of Groton, with a 1990 census population of 45,144. Figure 1-3 shows the distribution of population in the region.

The southeastern Connecticut public water supply management area (WSMA) consists of 160 community water systems serving 25 municipalities in southeastern Connecticut. The distribution of community water system size is shown in Table 1-2. Of these, only 20 are considered "major" community water systems, serving greater than 1,000 people. Community water system size ranges from relatively small systems that serve apartment complexes and rest homes with 25 to 50 people to large systems such as Groton Utilities, which serves approximately 50,000 people.

**TABLE 1-2**  
**Summary of Public Water Supply Management Area Make-up**

Range of Population Served	Number of Community Water Systems
25-49	22
50 – 99	42
100 - 249	44
250 – 499	24
500 – 999	8
1,000+	20
<b>TOTAL</b>	<b>160</b>

Two additional community water systems, not included in the 160, do not serve customers in the region but are eligible WUCC members due to the location of a portion of their public water supply watersheds in the region. These are the Metropolitan District Commission and the Town of Portland.






-  Towns with Population Less Than 10,000
  -  Towns with Population Between 10,000 and 20,000
  -  Towns with population greater than 20,000
- (1990 census)

FIGURE 1-3

POPULATION DISTRIBUTION IN THE SOUTHEAST REGION  
PUBLIC WATER SUPPLY MANAGEMENT AREA

Eligible WUCC members include:

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

1. A source of supply within the management area which is a source of potable water approved by the Department of Public Health, including reservoirs, wells, other waterbodies, and associated watershed land; or
2. 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 of vote of the chief elected officials of the municipalities that are members of such regional planning agency.

There are 121 eligible WUCC members in the southeastern Connecticut public water supply management area, comprised of representatives from 116 community water systems and five (5) regional planning agencies. It should be noted that many WUCC members own and/or operate more than one system, accounting for the difference in the number of systems and members.

Based upon the work plan developed by the southeastern Connecticut WUCC, each eligible WUCC member (not each system) will have one vote for those issues requiring votes. The eligible member may designate any individual within their organization as a representative. This individual may change at any time during the WUCC process.

### 1.3 Information Sources

Given the diverse composition of community water systems and issues in the southeastern Connecticut region, the approach to developing the areawide supplement and the water supply assessment was structured to be equally diverse and flexible. A single approach to data collection and analysis would not work for the varied community water systems in the management area. Understanding and evaluating the differences and limitations of each is essential.

Data has been gathered from regulatory agencies, public water supply representatives, municipalities, and regional planning organizations. Individual water supply plans, municipal plans of development, regional planning documents, and population data published by the Office of Policy and Management (OPM) 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, was also a critical component of data collection.

Following extensive file reviews, each community water system in the southeastern Connecticut public water supply management area was contacted by telephone, fax, and/or mail with a request for additional or verified 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. 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. This is reflected in the text and tables throughout this document.



*Section 2*

## 2.0 EXISTING COMMUNITY WATER SYSTEMS

### 2.1 Composition of the Region

Table 2-1 indicates the number and type of community water systems serving each municipality within the southeastern Connecticut region. The following discussion provides a breakdown of existing community water systems in each municipality. It should be noted that more than one system may be owned by the same entity. For example, SCWA owns and operates numerous separate community water systems in several municipalities, even though they are a single WUCC member and a single organization.

Bozrah - There is currently no public water service in Bozrah, except for the small area of Fitchville which is served by the Norwich Water Department. Individual dwellings and businesses are served by on-site water supply wells.

Colchester – The major community water system in Colchester is the municipal system (Colchester Water and Sewer Commission) that serves several thousand Colchester residents and businesses in and surrounding the area formerly known as the Colchester Borough. Eastern Connecticut Regional Water Company (ECRWC) operates its Ponemah Village system in Colchester, which serves an elderly housing complex. Five smaller community systems supply residential condominiums. The remainder of the Colchester population is supplied by individual water supply wells.

East Haddam – Most of the residents and businesses in East Haddam utilize individual water supply wells as their source of supply. There are no large community water systems located in East Haddam serving greater than 1,000 people. ECRWC recently acquired the Lake Hayward Water Company and provides water service to the lake community in the northern part of East Haddam. Additionally, three small community

water systems (all serving less than 200 people) supply water to a health care facility, an elderly housing development, and a school.

**TABLE 2-1**  
**Summary of Community Water System Service by Municipality**

Municipality	Total Number of Community Water Systems	Number of Municipally Owned Systems	Number of Systems Serving <500	Number of Systems Serving >500 but <1,000	Number of Systems Serving >1,000
Bozrah <sup>1</sup>	0	0	0	0	0
Colchester	7	1	6	0	1
East Haddam	4	0	4	0	0
East Hampton	12	1	11	1	0
East Lyme	1	1	0	0	1
Franklin <sup>1</sup>	0	0	0	0	0
Griswold	7	0	6	0	1
Groton <sup>2</sup>	6	1	3	0	3
Hebron	9	0	8	1	0
Lebanon <sup>1</sup>	5	0	5	0	0
Ledyard <sup>3</sup>	18	3	15	0	3
Lisbon <sup>1</sup>	4	0	4	0	0
Lyme	0	0	0	0	0
Marlborough	8	0	8	0	0
Montville <sup>1</sup>	31	1	25	3	3
New London	1	1	0	0	1
No. Stonington	3	0	2	1	0
Norwich	7	1	6	0	1
Old Lyme	14	0	11	1	2
Preston <sup>1</sup>	3	0	3	0	0
Salem	6	0	6	0	0
Sprague	2	1	1	0	1
Stonington <sup>4</sup>	8	2	5	1	2
Voluntown	1	0	1	0	0
Waterford	3	1	2	0	1
<b>TOTALS</b>	<b>160</b>	<b>14</b>	<b>132</b>	<b>8</b>	<b>20</b>

<sup>1</sup>Norwich serves small portions of Bozrah (Fitchville), Franklin, Lebanon, Lisbon, Montville, and Preston.

<sup>2</sup>The Connecticut-American Water Company's Mystic Valley District System serves a portion of Stonington and a portion of Groton along the Mystic River. For accounting purposes, this system is included under Stonington.

<sup>3</sup>The Town of Ledyard owns and operates three separate municipal systems.

<sup>4</sup>Portions of the Town of Stonington are served by the Westerly, Rhode Island municipal water utility, while other portions are served by the Stonington municipal Lord's Point system.

East Hampton – Twelve community water systems are in operation in the Town of East Hampton. All serve less than 1,000 people, and most serve less than 250 people. The East Hampton Water & Sewer Authority operates one of these small systems. The

largest community water system is the Edgmere Condominium Association, which serves approximately 520 people. ECRWC operates its Spice Hill and Baker Hill Divisions in the Town of East Hampton. Connecticut-American Water Company operates its East Hampton District.

East Lyme – The only community water system in the Town of East Lyme is the municipal Water Department, which provides service to the majority of East Lyme's population.

Franklin – There is currently no public water service in Franklin, except for a single industrial park served by the Norwich Water Department. Individual dwellings and businesses are served by on-site water supply wells.

Griswold – Griswold has seven community water systems. Only one, the Jewett City Water Company, is considered a large community water system, serving approximately 6,500 individuals or approximately 60% of the municipal population. The remaining six water systems serve less than 500 people in mobile home parks and residential areas. Connecticut Water Company operates one of these systems.

Groton – Three major water systems serve the majority of Groton's residents. These are Groton Utilities, Groton Long Point Association, and the Noank Fire District. The latter two purchase water from Groton Utilities. Three small systems provide service to an apartment complex and two mobile home parks in Groton. The Connecticut-American Water Company's Mystic Valley District System serves a portion of Groton and a portion of Stonington along the Mystic River. For accounting purposes, this system has been designated as a Stonington community water system in Table 2-1.

Hebron – There are nine community water systems in Hebron. Only one system, the ECRWC Amston Lake Division, serves greater than 500 people. This system supplies approximately 265 single-family homes located in Hebron and Lebanon. This is one of

four systems operated by ECRWC in Hebron. The remaining five systems serve small residential apartments and condominiums of less than 250 people.

Lebanon – Lebanon has five community water systems, all serving less than 300 people. Connecticut-American Water Company and ECRWC each operate one system in Lebanon. The Norwich Water Department also serves a small area in Lebanon.

Ledyard – Ledyard has a total of 18 community water systems. Of these, only three serve greater than 1,000 people. The Ledyard WPCA serves approximately 3,200 people in their Highlands system and 1,200 people by their Gales Ferry System. The Southeastern Connecticut Water Authority's (SCWA) Tower Division serves approximately 2,200 people. The Tower Division is one of five community systems in Ledyard operated by SCWA. The Mashantucket Pequot Tribal Nation also operates a small community system in Ledyard. The remaining systems serve condominiums, subdivisions, mobile homes, and apartments.

Lisbon – Lisbon has four small community water systems, all serving less than 200 people at mobile home parks, residential apartments, and single-family homes. The remainder of individual dwellings and businesses in Lisbon are served by on-site water supply wells. The Norwich Water Department also serves a small area in Lisbon.

Lyme – There is currently no public water service in the Town of Lyme. Individual dwellings and businesses are served by on-site water supply wells.

Marlborough – Marlborough has eight community water systems, which serve residential dwellings, condominiums, and health care facilities. All serve less than 250 people. ECRWC operates three systems in Marlborough.

Montville – At 31 community water systems, Montville is served by the largest number of community water systems in the region. Only three of these systems supply greater than 1,000 people. These are the Montville municipal system, which serves approximately 1,300 people, the Montville Correctional Complex, serving approximately 1,500 people, and SCWA's Montville Division that serves approximately 2,200 people. Three systems serve greater than 500 people but less than 1,000. The remaining 25 systems serve less than 500 people, many of which serve less than 100 people, at mobile home parks, apartment complexes, health care facilities, schools, and the like. SCWA operates six systems in Montville. The Norwich Water Department also serves a small area in Montville.

New London – The New London Water Division municipal system is the only community water system in the City of New London. It serves the New London community and provides a substantial portion of the Town of Waterford through the sale of water to the Waterford WPCA.

North Stonington – Three community water systems provide water to approximately 1,200 of the 5,000 residents of North Stonington. Each system serves less than 1,000 people. The largest is the SCWA's North Stonington Division, which supplies approximately 700 people as well as Wheeler High School and Middle School, North Stonington Elementary School, and the North Stonington Gymnatorium Complex.

Norwich – There are seven community water systems in Norwich. The Norwich Water Department is a municipal water system that serves approximately 86% of the City of Norwich as well as portions of Bozrah, Montville, Lisbon, Lebanon, and Preston, and an industrial park in the Town of Franklin. The remaining six systems serve a condominium complex and numerous mobile home parks.

Old Lyme – Old Lyme is supplied by 14 community water systems. Two of these systems, both owned and operated by Connecticut Water Company, serve greater than

1,000 people. These are the Point O' Woods and Sound View systems. The remaining 12 systems serve apartment complexes, condominiums, elderly housing facilities, and residential homes. Most of these systems serve less than 200 people.

Preston – Preston is supplied by three community water systems, all serving less than 500 people. The Preston Plains Water Company is owned and operated by the Mashantucket Pequot Tribal Nation. The majority of Preston residents are supplied by individual water supply wells. The Norwich Water Department also serves a small area in Preston.

Salem – Salem is served by six small community systems, five of which are separate systems serving individual condominium buildings at the same complex. The sixth system serves a second small condominium complex.

Sprague – Sprague is served by two community water systems. The Sprague Water & Sewer Authority municipal system supplies approximately 1,700 people, primarily in the Village of Baltic. The second system serves less than 50 people. The remainder of residents are served by individual water supply wells.

Stonington – Eight community water systems provide water in the Town of Stonington. The two principal water systems are the Westerly Water Department, which serves approximately 6,000 people in Connecticut, and the Connecticut American Water Company's Mystic Valley District, which serves approximately 11,500 people in Stonington and Groton. Connecticut American Water Company is also under contract to operate and maintain the Lord's Point System for the Town of Stonington. The Connecticut Water Company owns and operates their Masons Island System in Stonington, which is supplied by an interconnection with Connecticut American Water Company. Additionally, SCWA operates one system in Stonington. Several mobile home parks are also supplied by small community systems.

Voluntown – Voluntown is served by one community water system, Connecticut Water Company's SDC system, which supplies residential homes. The majority of Voluntown is supplied by individual water supply wells.

Waterford – The majority of Waterford residents and businesses are supplied by the Waterford WPCA municipal system. Two small community systems supply a school and a mobile home park in Waterford.

## **2.2 Assessment of Water Quality**

DPH files and databases of recent water quality enforcement actions in the region have been compiled and evaluated. These are summarized Table 2-2. Most violations are due to lack of testing and/or reporting of water quality data, and almost all actions have been taken against small community systems. Eight community water systems have not met the requirement of employing a certified water supply treatment plant operator, and one has not complied with the Surface Water Treatment Rule for groundwater potentially under the influence of surface water.

Table 2-3 summarizes overall water quality of the larger water systems in the region based on a review of water supply plans. As illustrated by Table 2-3, elevated iron, manganese, copper, and lead levels are common throughout the southeastern Connecticut region. The elevated copper and lead levels may be attributable to leaching of copper plumbing, brass fittings, and old lead solder. The elevated levels of these two metals as well as iron and manganese may also be due, in part, to the acidity in the soils in the southeastern region, combined with large mineral and metal deposits. Additionally, the bedrock geology for the southeast region 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 2-2**  
**Summary of Recent Water Quality Enforcement Actions (1996-1998)**

Water Utility	Primary Location Served	Type of Action	Date of Action	Type of Violation
Abby Estates	Hebron	Consent Order	31-Dec-97	Failure to submit annual lead and copper test results.
Arlington Acres Mobile Home Park	Stonington	Consent Order	21-Mar-97	Failure to submit treatment recommendation for a copper exceedance.
Avery Hill Water Association	Ledyard	Consent Order	03-Feb-98	Failure to have a certified water supply treatment plant operator.
Bellwood Court	East Hampton	Consent Order	03-Mar-97	Failure to submit radiological parameter test results.
Boxwood Condominium Association	Old Lyme	Stipulated Agreement	10-Mar-97	Failure to have a certified water supply treatment plant operator.
Carefree Homeowners Association	Lebanon	Consent Order	17-Sept-98	Failure to submit test results.
Cedar Ridge Water Association	No. Stonington	Consent Order	07-Mar-97	Failure to submit a treatment recommendation for a copper exceedance.
Chatham Apartments	East Hampton	Consent Order	03-Oct-96	Failure to submit bacteriological and physical parameter test results.
Chatham Apartments	East Hampton	NOV/Final Order	06-Jan-97	Failure to submit annual lead and copper test results.
Chatham Apartments	East Hampton	NOV/Final Order	10-Feb-97	Failure to submit quarterly bacteriological and physical parameter test results.
Christy Hill Condominiums	Ledyard	NOV/Final Order	05-Dec-97	Failure to submit bacteriological and physical parameter test results.
Cobalt Lodge Convalescent Home	East Hampton	Consent Order	12-Dec-96	Failure to submit annual lead and copper test results.
Connolly's Trailer Park	Griswold	Consent Order	22-Nov-96	Failure to submit biannual lead and copper test results.
Fair Acres Mobile Home Park	Stonington	NOV/Final Order	12-Dec-96	Failure to submit annual lead and copper test results.
Forest Homes Water Association	Marlborough	Order	19-Dec-97	Failure to submit corrosion control treatment recommendation for a lead exceedance.
Forest Homes Water Association	Marlborough	Order	27-Feb-97	Failure to have a certified water supply treatment plant operator.
Forest Homes Water Association	Marlborough	Order	28-Jan-98	Failure to submit corrosion control treatment recommendation for lead exceedance.
Lebanon Pines	Lebanon	Consent Order	26-Oct-98	Failure to have a certified water supply treatment plant operator.
Ledyard Village Homeowners Assoc.	Ledyard	Consent Order	11-Mar-97	Failure to submit a treatment recommendation for a lead and copper exceedance.
Ledyard Village Homeowners Assoc.	Ledyard	Consent Order	13-Mar-98	Failure to submit radiological parameter test results.
Ledyard WPCA	Ledyard	Consent Order	03-April-97	Failure to submit biannual lead and copper test results.
Lyme Regis, Inc.	Old Lyme	Consent Order	13-Nov-96	Multiple violations. Failure to have a certified water supply treatment plant operator. Failure to submit a treatment recommendation. Daily pH and chlorine exceedance.
Mallard Cove Condominiums	East Hampton	Consent Order	24-Oct-96	Failure to submit a lead and copper treatment recommendation.
Meadows Apartments	Montville	Consent Order	25-Feb-97	Failure to submit quarterly bacteriological and physical parameter test results.

**TABLE 2-2 (Cont.)  
Summary of Recent Water Quality Enforcement Actions Taken (1996-1998)**

Water Utility	Primary Location Served	Type of Action	Date of Action	Type of Violation
Miami Beach Water Company	Old Lyme	Consent Order	05-Dec-96	Multiple violations. Failure to have a certified water supply treatment plant operator. Failure to submit a treatment recommendation. Daily pH and chlorine exceedance.
Mile Creek Apartments	Old Lyme	NOV/Final Order	10-Feb-97	Failure to submit quarterly bacteriological and physical parameter test results.
Montville WWPCA	Montville	Consent Order	06-Jan-97	Failure to submit annual lead and copper test results.
North Stonington Elementary School	No. Stonington	Consent Order	10-Jan-97	Bacteriological maximum contaminant level exceedance.
Oak Grove Senior Housing Corp.	East Haddam	Consent Order	05-Mar-97	Failure to submit radiological parameter test results.
Round Hill Apartments	Lisbon	Consent Order	20-Mar-97	Failure to submit radiological parameter test results.
Sleepy Hollow Mobile Home Park	Ledyard	Order	01-May-97	Failure to comply with the Surface Water Treatment Rule (GW under the influence).
St. Thomas More School	Montville	Consent Order	10-April-97	Failure to have a certified water supply treatment plant operator
Village Apartments	Montville	Consent Order	03-Mar-97	Failure to submit radiological parameter test results.
Waterford Country School	Waterford	Consent Order	03-April-97	Failure to submit treatment recommendation for copper exceedance and provide public education.
Wellswood Estates Foundation, Inc.	Hebron	Consent Order	23-Jan-97	Failure to submit annual lead and copper test results.
Westchester East	East Hampton	Consent Order	14-April-97	Failure to submit quarterly bacteriological and physical parameter test results.
Westchester Hill Condo. Assoc.	Colchester	Consent Order	23-Oct-96	Failure to submit biannual lead and copper test results.
Wheeler High School	No. Stonington	Consent Order	10-Jan-97	Bacteriological maximum contaminant level exceedance.
Wildwood Water Company	Old Lyme	Consent Order	08-Jan-97	Failure to submit annual lead and copper test results.
Wildwood Water Company	Old Lyme	NOV/Final Order	10-Feb-97	Failure to submit quarterly bacteriological and physical parameter test results.
Wildwood Water Company	Old Lyme	Consent Order	12-May-97	Failure to have a certified water supply treatment plant operator.
Wildwood Water Company	Old Lyme	NOV/Final Order	14-Aug-97	Failure to submit quarterly bacteriological and physical parameter test results.
Williamsburg Apartments	Ledyard	NOV/Final Order	06-Nov-96	Failure to submit organic chemical test results.
Williamsburg Apartments	Ledyard	NOV/Final Order	06-Nov-96	Failure to submit inorganic chemical test results.
Woodland Mobile Home Park	Waterford	Consent Order	17-Mar-98	Failure to submit biannual lead and copper test results.

**TABLE 2-3**  
**Summary of Water Quality for Community Water Systems**  
**Serving >1,000 People**

Community Water System	Primary Location Served	Summary of Water Quality Issues
Colchester Sewer & Water Commission	Colchester	Historic VOC contamination addressed via air stripping.
CT-AM Water Co., Mystic Valley District	Stonington/Groton	No reported problems.
CWC, Shoreline Region, Point O' Woods	Old Lyme	Sodium levels above desirable levels have been addressed via potassium based pH adjustment. Past iron levels above desirable levels; recent testing shows levels below federal secondary standards. Packed tower aeration for radon removal anticipated for construction in 1999.
CWC, Shoreline Region, Sound View	Old Lyme	Iron and manganese levels above desirable levels in Well #94-3; treatment for iron and manganese is provided for this well. Disinfection and shallow tray aeration provided for radon removal.
East Lyme Water Department	East Lyme	Iron and manganese levels above desirable levels.
Groton Long Point Association	Groton	All water purchased from Groton Utilities. Iron concentrations in samples exceeded 0.3 milligrams.
Groton Utilities	Groton	Iron and manganese historically above desirable levels. Historic VOC contamination has been addressed via remediation efforts.
Jewett City Water Company	Griswold	No reported problems.
Ledyard WPCA Gales Ferry	Ledyard	All water purchased from Groton Utilities.
Ledyard WPCA Highlands	Ledyard	High levels of iron and manganese. Highlands water is found to be very aggressive and requires corrosion control. Possible petroleum contamination of Highlands water.
Montville Correctional Complex	Montville	Occasional low pH level in the raw water and an exceedance of the copper action level. Occasional reports of elevated coliform counts.
Montville Water and Water Pollution Control Authority	Montville	All water purchased from New London Water Division. No reported problems.
New London Water Division	New London	No reported problems.
Noank Fire District	Groton	All water purchased from Groton Utilities. No reported problems.
Norwich Water Department	Norwich	No reported problems.
SCWA, Montville Division	Montville	Chlorine treatment has corrected past coliform problems. Aggressive water as evidenced by lead and copper levels has been addressed with treatment for pH adjustment.
SCWA, Tower Division	Ledyard	Chlorine treatment has corrected past coliform problems. Aggressive water as evidenced by lead and copper levels has been addressed with treatment for pH adjustment.
Sprague Water and Sewer Authority	Sprague	Historic violations of lead and copper have been addressed via an update to the distribution system.
Waterford WPCA	Waterford	All water purchased from New London Water Department. No reported problems.
Westerly Water Department	Stonington	Possible influence of surface water, additional testing being conducted. Occasional reports of elevated coliform counts.

Iron and manganese sequestering has been implemented by many community water systems to reduce metals and turbidity levels. Adjustment for pH has also been added to many treatment operations for the larger community water systems to correct for the low pH levels often reported. Many smaller systems are finding it necessary to provide the same measure of treatment. Bacteria contamination has been detected in several community water systems in the region, with exceedances ranging from chronic problems to sporadic outbreaks. However, it should be noted that many systems, both large and small, have remained without water quality degradation and/or problems for many years.

### **2.3 System Reliability, Service, and Supply Adequacy**

Table 2-4 presents information on current water demands, the availability of back-up or emergency supply sources, interconnections, and the existence of emergency power for the community water systems 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. Approximately one half of these larger systems are interconnected with another system, and most have emergency power capabilities. However, many of the larger systems, and some of the smaller ones, are within close proximity of one another with no interconnection.

Appendix B presents information on system reliability, service and supply adequacy for the community water systems serving less than 1,000 people. Based on available information, 68 of the small systems rely on a single source of supply and 72 systems have more than one source of supply. Four systems receive 100% of their supply through interconnections. These are Latimer Point Fire District, Lord's Point, CWC Shoreline Division Mason's Island System, and Pleasure Valley M.H.P – System 3.

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

Community Water System	Primary Location Served	Back-up/ Emergency Supply	Inter-connections	Emergency Power Availability
Colchester Sewer & Water Commission	Colchester	M, E	N	Y
CT-AM Water Co., Mystic Valley District	Stonington/Groton	M, E	Y	Y
CWC, Shoreline Region, Point O' Woods	Old Lyme	M	N	Y
CWC, Shoreline Region, Sound View	Old Lyme	M	N	Y
East Lyme Water Department	East Lyme	M	N	Y
Groton Long Point Association *	Groton	N	Y	Y
Groton Utilities	Groton	M	Y	Y
Jewett City Water Company	Griswold	M	N	Y
Ledyard WPCA Gales Ferry	Ledyard	M	Y	Y
Ledyard WPCA Highlands	Ledyard	M	Y	Y
Montville Correctional Complex	Montville	M	N	Y
Montville WWPCA *	Montville	N	Y	Y
New London Water Division	New London	M	Y	Y
Noank Fire District *	Groton	N	Y	Y
Norwich Water Department	Norwich	M	Y	Y
SCWA, Montville Division	Montville	M	N	Y
SCWA, Tower Division	Ledyard	M	N	Y
Sprague Water and Sewer Authority	Sprague	M	N	Y
Waterford WPCA	Waterford	N	Y	Y
Westerly Water Department	Stonington	M	N	Y

M: Multiple sources of supply.      E: Emergency source of supply.      N: None.      Y: Yes.

\* Emergency power capabilities provided by source community water system.

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

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 safe yield.

A margin of safety of at least 15% (1.15) relative to a 99% safe yield is recommended by the Department of Public Utility Control (DPUC). Margin of safety is typically evaluated for average day, maximum month, and maximum day conditions. 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 demand, yield, and margin of safety for the average day, maximum month, and peak day for community water systems serving greater than 1,000 people, based on information contained in the individual water supply plans and input from system representatives.

The available data indicates that most of the larger systems are meeting average demands with a 15% or more margin of safety. Four systems do not have an average day margin of safety of 15% or greater. These are Connecticut-American Water Company Mystic Valley District, East Lyme Water Department, Montville WWPCA, and Sprague Water and Sewer Authority. All other large systems operate with an average day margin of safety greater than 15%.

Peak day demand margin of safety is near or less than 1.0 for six systems. These are Connecticut-American Water Company Mystic Valley District, East Lyme Water Department, Jewett City Water Company, Montville Correctional Complex, Sprague Water and Sewer Authority, and Westerly Water Department.

Demand, yield, and margin of safety data, as well as ability to meet peak hourly demands for systems serving less than 1,000 people is presented in Appendix C. Greater than 75% of the smaller systems have margins of safety in excess of 15%. Thirty-one (31) systems are capable of supplying peak hourly demands without storage. Many of these systems (109) must rely on storage to meet their peak hourly demands.

## **2.4 Assessment of Firefighting Capabilities**

Firefighting capabilities were determined from a review of water supply plans and municipal plans of development, supplemented by personal communications with municipal and systems representatives. Table 2-6 presents a summary of firefighting capabilities by municipality.

All of the towns and cities in the southeastern region of Connecticut maintain some form of fire protection for residents and businesses. Approximately one-half of these municipalities rely in part on community water systems in the area.

Table 2-7 presents information concerning firefighting capabilities for the community water systems serving greater than 1,000 people, based on information contained in the individual water supply plans as well as from personal communications. This information is included in Appendix B for the systems serving less than 1,000 people. It should be noted that there are no DPH regulatory requirements for a community water system to maintain firefighting capabilities.

**TABLE 2-6  
Firefighting Capabilities by Municipality**

Municipality	Source(s) of Supply						Associated Community Water System
	Established Fire Department	Storage Tanks/Tanker Trucks	Fire Ponds	Surface Waters (streams, rivers, and/or lakes)	Community Water System Hydrants	Other	
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



*Report*

**TABLE 2-5**  
**System Demand, Available Yield, and Margin of Safety for Community Water Systems S**

Community Water System	Reference Year	Average Day Demand (gpd)	Average Day Available Yield <sup>2</sup> (gpd)	Average Day Margin of Safety	Maximum Month Demand (gpd)	Maximum Month Available Yield <sup>2</sup> (gpd)	Maximum Month Margin of Safety	Peak Day Demand (gpd)	Peak Day Available Yield <sup>2</sup> (gpd)	Peak Day Margin of Safety
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Spr...	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
W...	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED SECTION]

day demand, ...



**TABLE 2-7**

**Firefighting Capabilities of Community Water Systems Serving >1,000 People**

Community Water System	Primary Location Served	Firefighting Capabilities
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

N: No Y: Yes

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 DPUC in coordination with DPH. A letter from the town where the project is located must be submitted with the application to DPUC, indicating whether or not fire protection facilities are required to be included in the design of the water system. However, there is no explicit requirement imposed by DPUC 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 community systems provide little or no fire protection, as indicated in Appendix B.

## 2.5 Assessment of Major Facilities

Table 2-8 presents data on major facilities for community water systems serving greater than 1,000 people. This information is included as Appendix D for systems serving less than 1,000 people. Table 2-9 presents information on identified facility improvements for the larger community water systems.

**TABLE 2-8**  
**Major Facilities of Community Water Systems Serving >1,000 People**

Community Water System	Primary Location Served	Ground-water Supplies	Surface Water Supplies	Treatment	Distribution Pumping	Storage
Colchester Sewer & Water Commission	Colchester	X		X		X
CT-AM, Mystic Valley District	Stonington /Groton	X	X	X	X	X
CWC, Shoreline Region, Point O' Woods	Old Lyme	X		X	X	X
CWC, Shoreline Region, Sound View	Old Lyme	X		X	X	X
East Lyme Water Department	East Lyme	X		X	X	X
Groton Long Point Association <sup>1</sup>	Groton					
Groton Utilities	Groton	X	X	X	X	X
Jewett City Water Company	Griswold	X	X	X		X
Ledyard WPCA Gales Ferry <sup>1</sup>	Ledyard					
Ledyard WPCA Highlands	Ledyard	X		X		X
Montville Correctional Complex	Montville	X			X	X
Montville WWPCA <sup>1</sup>	Montville					
New London Water Division	New London		X	X	X	X
Noank Fire District <sup>1</sup>	Groton					X
Norwich Water Department	Norwich	X	X	X	X	X
SCWA, Montville Division	Montville	X		X	X	X
SCWA, Tower Division	Ledyard	X		X	X	X
Sprague Water and Sewer Authority <sup>2</sup>	Sprague	X		X	X	X
Waterford WPCA <sup>1</sup>	Waterford				X	X
Westerly Water Department	Stonington	X		X		X

<sup>1</sup>This system receives 100% of its supply through interconnection(s).

<sup>2</sup>Sprague also maintains an inactive reservoir.

**TABLE 2-9  
Planned and/or Identified Future Modifications of Community Water Systems Serving >1,000 People \***

Community Water System	Planned or Identified Expansions/Alterations to Water Supply Facilities
Colchester Sewer & Water Commission	Future sources of supply are needed. A future potential interconnection with Norwich would require 23,000 feet of water main and a new pumping station.
CT-AM, Mystic Valley District	No major system modifications have been identified.
CWC, Shoreline Region, Point O' Woods	Pump station reconstruction, including 70,000-gallons storage, booster pumping, and two 4,000-gallon hydropneumatic tanks to be completed by Spring 1999.
CWC, Shoreline Region, Sound View	No major system modifications have been identified.
East Lyme Water Department	Additional supply is needed. Renewal of permits for Well #3a and 5 being sought. Well #6 being installed to replace Well #4.
Groton Long Point Association	No major system modifications have been identified.
Groton Utilities	Water main extensions and improvements. Construction of a satellite treatment plant with a capacity of 4-8 MGD with provision for future expansion. Treatment improvements at main plant are also being considered.
Jewett City Water Company	Additional supply sources are necessary. Alternate treatment process is also needed. Possible future interconnection with Gallup Water Service has been identified.
Ledyard WPCA	Water currently supplied to Gales Ferry at Route 12 from Groton Utilities (60,000 gpd); anticipated interconnection at Route 117 with City of Groton. Longer term anticipated interconnection with Highlands system.
Montville Correctional Complex	Storage capacity will be increased by 50,000 gallons when the Montville Correctional Facility comes on-line.
Montville Water and Water Pollution Control Authority	No major system modifications have been identified.
New London Water Division	Additional supply sources necessary. Permits being sought for options to improve safe yield.
Noank Fire District	Planned 2.5 MG tower to be built at top of Fort Hill to address storage needs. Seeking alternatives to meet anticipated long-term needs, including possible permanent interconnection with CT-American Water Company.
Norwich Water Department	Additional supply or storage needed. Although not all services are being used at level of current agreement, without construction of new service extensions, the City is committed to providing nearly all available water.
SCWA, Montville Division	The estimated peak hour water demand exceeds the quantity of water that is available from storage facilities. Larger transfer pumps and/or additional hydropneumatic storage may be needed. An interconnection between the Montville, Robin, Chesterfield, and Hillcrest divisions is planned between the 20- and 50-year planning periods to form the Western Montville Division.
SCWA, Tower Division	Merger with Ferry View Heights division to form the Gales Ferry Division.
Sprague Water & Sewer Authority	Water treatment plant study and upgrade being evaluated.
Waterford WPCA	Construction of a 1.0 MGD groundwater well and pump station anticipated to be completed by 2005. Seeking alternatives to meet anticipated long-term needs, including sources in addition to and independent from New London sources.
Westerly Water Department	Additional supply sources and storage necessary. Emergency generators to be installed at Bradford pumping stations between 1999 and 2000.

\* Individual systems managed by a water purveyor are not specifically identified.

Most water community water systems in the region utilize groundwater sources as their primary means of supply. However, several of the larger community water systems maintain reservoirs for primary or emergency supply. New London and Norwich are the only large community water systems that rely solely on surface water for drinking water supply. All of the systems serving less than 1,000 people utilize well water as their source of supply.

Several community water systems have identified future potential interconnections. 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
<b>Serving &gt;1,000 People</b>	
Colchester Sewer and Water Commission	Possible future emergency interconnection with Norwich.
CWC, Shoreline Region	CWC has a mutual agreement with the Mashantucket Pequot Tribal Nation for provision of water between their systems. This agreement allows for potential interconnections along Route 2 in Ledyard and North Stonington, along Route 164 in Preston and Route 165 in Preston and Griswold.
CWC, Shoreline Region, Sound View	An existing 2-inch connection to Miami Beach Water Company has not been activated during CWC's ownership and its status in Miami Beach is unknown.
Groton Utilities	Anticipated future sale of water to Ledyard WPCA. Anticipated sale of water east to Stonington, CT and north to potential customers.
Ledyard WPCA	Water currently supplied to Gales Ferry at Route 12 from Groton Utilities (60,000 gpd); anticipated interconnection at Route 117. Longer term anticipated interconnection with Highlands system.
Montville Correctional Complex	Montville system is nearest, however, contractual agreements for their maximum purchase of water from New London are met.
SCWA, Montville Division (MTV)	To be combined with SCWA's Robin, Chesterfield, and Hillcrest Divisions to form the Western Montville Division.
SCWA, Tower Division (TWR)	To be combined with the SCWA Ferry View Heights Division to form the SCWA Gales Ferry Division.
Sprague Water & Sewer Authority	Norwich is the nearest community water system.
Westerly Water Department, Pawcatuck Sec.	CT-AM, Mystic Valley District is only viable interconnection in the future.
<b>Serving &lt;1,000 People</b>	
CWC, Shoreline Region, Bay Mountain	Possible interconnection with Norwich on Route 165 at the Norwich city border could extend to system.
Ledyard WPCA, Pfizer	Planned connection to Town of Ledyard system (November 1998).
SCWA, Barrett Division (BAR)	Norwich and Groton are the closest supplies.
SCWA, Birchwood Division (BWD)	Possible future connection to Norwich, New London and/or SCWA Mohegan Division.
SCWA, Gray Farms Division (GRF)	Future interconnection with SCWA, Ledyard Division (LYD), which has an available yield of 38,880 gpd and associated margin of safety of 25.92.
SCWA, Ferry View Heights Division (FVH)	Potential interconnection to SCWA, Tower Division.
SCWA, Mohegan Division (MGN)	Possible interconnection to Norwich, New London and/or SCWA Birchwood Division.

*Section 3*



### 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 agency, regional planning agencies, and community water systems.

Table 3-1 identifies systems serving greater than 1,000 people that have identified future supply source exploration. A discussion of each system follows.

**TABLE 3-1  
Future Source 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
Colchester Sewer & Water Commission			X
CT-AM Water Co., Mystic Valley District		X	
CWC, Shoreline Region	X		
East Lyme Water Department		X	
Groton Long Point Association	X		
Groton Utilities			X
Jewett City Water Company			X
Ledyard WPCA		X	
Montville Correctional Complex	X		
Montville WWPCA		X	
New London Water Division			X
Noank Fire District	X		
Norwich Water Department			X
SCWA	X		
Sprague Water and Sewer Authority		X	
Waterford WPCA			X
Westerly Water Department		X	

### 3.1 Colchester Sewer & Water Commission

Colchester is currently meeting average day, maximum month, and peak day demands with a sufficient margin of safety. Future projections indicate that additional supply will be needed prior to 2010. Accordingly, the Colchester Sewer and Water Commission has initiated supply source exploration.

Several sites in Colchester have shown potential for developing additional groundwater sources as indicated in Table 3-2. The primary areas of study known as Savin Farm, Sullivan Farm, and the Mikulski property are all being considered for development of groundwater supply wells. The existing Cabin Road wellfield is also being considered for additional withdrawal as well as a bedrock well along Norwich Avenue.

**TABLE 3-2**  
**Identified Future Potential Water Supply Sources -**  
**Colchester Sewer & Water Commission**

Type of Supply Source	Watershed or Aquifer Reference	Anticipated or Estimated Yield

Source: 1995 Water Supply Plan and personal communication (October 1998).

The Savin Farm property is located on Norwich Avenue on the Colchester-Lebanon town line. Exploration conducted in 1983 revealed that a properly constructed gravel well at the two pump test locations could produce between 100 and 200 gpm. Further testing indicates a possible combined supply between 500 and 800 gpm. However, permitted draw may be limited to somewhere on the order of 120 gpm.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] tion

[REDACTED]

[REDACTED]

Scenario 2 contemplates additional treatment at Cabin Road coming on line in the year 2001 to treat the total safe yield of Wells 3 and 5 for an additional 122,000 gpd. This would provide adequate capacity through the year 2006. At that time the bedrock well at Norwich Avenue would come on line to provide an additional 50 gpm. This would provide adequate capacity to the year 2009. The Mikulski source would be needed to supply an additional 400 gpm. The Sullivan/Savin supply would come on line in the year 2022 for an additional flow of 750 gpm to provide adequate supplies through the 50-year planning period.

The Colchester Sewer and Water Commission is also evaluating a potential interconnection with the Norwich water supply system. However, for planning purposes, Colchester has assumed that such an interconnection would only be used for emergency purposes.

The Colchester Department of Public Works is currently (1999) preparing diversion permit applications for both existing and future potential supply sources. As part of this process, they will be further evaluating alternative supply sources.

### **3.2 Connecticut-American Water Company**

The Connecticut-American Water Company (Connecticut-American) supplies water to portions of Stonington and Groton. They utilize both surface water and groundwater supply sources.

Using average demand data as reported in Connecticut-American Water Company's individual water supply plan and reported safe yield, the existing average day margin of safety is calculated to be 1.15. With future projected increases in demand, Connecticut-

American will need additional sources. Table 3-3 summarizes future water supply sources that have been identified by the Connecticut-American Water Company. These sources, anticipated to be necessary by the year 2005, include the Whitford Brook and Cops Brook aquifers, and additional aquifers located in North Stonington.

**TABLE 3-3**  
**Identified Future Potential Water Supply Sources -**  
**Connecticut-American Water Company**

Type of Supply Source	Watershed or Aquifer Reference	Anticipated or Estimated Yield
GW well	Whitford Brook Aquifer	4.2 mgd
GW well	Cops Brook Aquifer	1.1 mgd
GW well	Aquifers w/in No. Stonington	Unknown

Source: 1994 Water Supply Plan, September 1996 amendments, and personal communication (October 1998).

The Whitford Brook aquifer encompasses an area along Whitford Brook which extends approximately 8,000 feet to the south and 9,000 feet to the north of Connecticut-American's Lantern Hill well. It was found to have a potential yield of 4.2 mgd.

The Cops Brook aquifer extends approximately 1,500 feet south and 4,000 feet north of Connecticut-American Water Company's Cops Brook well. The potential yield of this aquifer is 1.1 mgd. As a well in this aquifer would draw water from stratified drift in the watershed of the Palmer/Dean's Mill Reservoirs, the yield from the wellfield may be partially offset by a decrease in the safe yield of the reservoir system. Connecticut-American has also identified investigation of aquifers within its projected future service area in North Stonington.

### 3.3 East Lyme Water Department

The East Lyme Water Department's individual water supply plan indicates that this system will experience average day, maximum month, and peak day deficits during drought conditions, based upon current demands and available safe yield estimates. The system is able to operate with its existing supplies under non-drought conditions but does not have an adequate margin of safety. The relatively low margin of safety for supply is most critical during the peak summer months for this shoreline community. Table 3-4 summarizes future water supply sources that have been identified by the East Lyme Water Department.

**TABLE 3-4**  
**Identified Future Potential Water Supply Sources - East Lyme Water Department**

Type of Supply Source	Watershed or Aquifer Reference	Anticipated or Estimated Yield
GW Well	Reactivation of Well 4	340 gpm
GW Well	Renewal of diversion permits #3a and 5	1,000 gpm
GW Well	L.B. Haynes well (Well 6)	600-700 gpm

Source: 1994 Water Supply Plan, April 1998 amendments, and personal communication (October 1998).

Several short- and long-term alternatives have been developed to address the issue of future water supply sources in East Lyme. These options include reactivating Well 4, repermitting Wells 3a and 5, and obtaining permits for and constructing Well 6.

Well 4 presently remains inactive, however, a replacement well is currently under construction and is anticipated to be completed in May of 1999. Water diversion applications are being prepared for Wells 3a and 5, and it is anticipated that these will be fully permitted in 1999.

The L. B. Haynes well would be a new source that is estimated to produce between 600 and 700 gpm. The Town presently owns the land surrounding the supply, however, permit requirements may limit the value of this supply during long-term drought conditions. This source has been assigned priority rating by the Town since it viewed by East Lyme as is the easiest and least costly option and is a short-term or near-term supply option. Completion of permitting and construction is estimated to span several years.

The long-term plan for East Lyme Water Department originally included the development of Powers Lake as a surface water supply. However, this alternative has since been dropped as it was deemed too complex and costly and, as such, would be infeasible.

### 3.4 Groton Utilities

[REDACTED]

The City's plans for future water supply development include diversion of water from Haleys Brook, which flows through the southeasterly section of Ledyard and northeasterly section of Groton to the Mystic River. Water diverted from Haleys Brook

would be stored in Morgan Pond reservoir. Diversion works would include a dam across the brook, with provision for releasing minimum streamflow, a pumping station, and a transmission main to Morgan Pond reservoir. There are two potential diversion sites on Haleys Brook, the [REDACTED] and the Quaker Farm Road site.

Table 3-5 summarizes future water supply sources identified by Groton Utilities to address anticipated long-term needs. Preliminary engineering work has been completed and extensive water quality analysis has been performed.

**TABLE 3-5**  
**Identified Future Water Supply Sources - Groton Utilities**

Type of Supply Source	Watershed or Aquifer Reference	Anticipated or Estimated Yield
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Source: 1992 Water Supply Plan and personal communication (October 1998).

The Saffomilla site is located 2,500 feet east of Burnetts Corner on the south side of Route 184. Test well exploration in 1981 showed the presence of sand and gravel deposits adjacent to a pond on the Saffomilla property. Construction of diversion works, together with installation of wells, is expected to provide an additional dependable yield of 3.4 mgd for a total systemwide dependable yield of 16.0 mgd.

The Quaker Farm Road diversion site is located 1,000 feet north of the Quaker Farm Road-Lambstown Road intersection and 100 feet south of the Ledyard-Groton municipal border. Construction of diversion works at this site is expected to provide an additional dependable yield of 1.4 mgd for a total systemwide dependable yield of 14.0 mgd.



### 3.5 Jewett City Water Company

The Jewett City Water Company serves a portion of the Town of Griswold. Although current demands are being met with a sufficient margin of safety, additional source needs have been identified to accommodate future anticipated growth. Table 3-6 summarizes future water supply sources that have been identified by Jewett City for addressing anticipated needs extrapolated for 2010.

**TABLE 3-6**  
**Identified Potential Future Water Supply Sources - Jewett City Water Company**

Type of Supply Source	Watershed or Aquifer Reference	Anticipated or Estimated Yield
Wells	Addition of new well to the Hopeville Wellfield	Unknown
Wells	Quinebaug & Pachaug River Aquifers	Unknown

Source: 1993 Water Supply Plan and personal communication (October 1998).

With the planned update of the individual water supply plan over the next year, the need and feasibility of developing new sources of supply will be investigated by the Jewett City Water Company. Two alternatives are being reviewed for their potential to provide additional source supply. These options include addition of a well to the Hopeville wellfield and the development of the Quinebaug and Pachaug River aquifers.

### 3.6 Ledyard WPCA

The Ledyard WPCA Highlands System has adequate supply for existing and future average and peak day demands. However, it is considered by Ledyard to be unreliable due to possible contamination problems. Effects of hydrocarbon contamination in the area of the Highlands wellfield has prompted investigation of new sources of supply.

Previously identified as a [REDACTED]  
[REDACTED]  
[REDACTED]

The Town of Ledyard provided funds for the installation of the wells and the owner of the subdivision provided funds for the distribution system. The WPCA will operate this system when completed.

The Loftus wellfield has been identified as a major potential water supply source for Ledyard. This system would eliminate the Highlands system, whose life cycle is reported to be surpassed and which is suspected to be contaminated by petroleum. The Loftus wellfield has been drilled but is presently inactive. Ledyard plans to place this system on-line once written notification is received.

Another system, referenced as the Pfizer system, has been turned over to the Town of Ledyard. This system has been interconnected and is now considered part of the Ledyard WPCA Gales Ferry system. The wells at the Pfizer site will act as back-up to the service area.

### **3.7 Montville Water and Water Pollution Control Authority**

The Montville municipal system is located in the southern portion of the Town and is supplied by water that is purchased from the City of New London. The northern section of Montville is supplied directly by the City of Norwich and is not considered part of the WWPCA system. Development of groundwater supply within the Town of Montville has been identified as high priority for addressing deficiencies and anticipated future water supply needs. A potential site for such water supply is within the Stony Brook watershed. It is estimated that this particular site has the potential to supply between 1 and 2 mgd of groundwater.

Montville is seeking additional supply via their current interconnections with the cities of New London and Norwich. Acquisition of the State-owned community water system for the Montville Correctional Complex has also been identified as a potential source.

A service extension has been identified to the north of Montville. However, there is an ownership conflict that is unresolved at this time between the Town of Montville's municipal system and SCWA.

### 3.8 New London Water Division

Future projections provided in New London's individual water supply plan forecast the population of the New London service area to be relatively stable. However, the adjacent Town of Waterford service population and consumption is growing steadily and is projected to increase. Therefore, system improvements have been identified to increase New London's available water supply in the future. Although the safe yield of the water system meets the current average demands, a water deficit is projected for the 50-year planning period. A revised water supply plan due late September 1999 is anticipated to reevaluate New London's safe yield. Table 3-7 summarizes future water supply sources identified by New London to address anticipated water supply needs over the next 20 years.

**TABLE 3-7  
Identified Future Potential Water Supply Sources - New London Water Division**

Type of Supply Source	Watershed or Aquifer Reference	Anticipated or Estimated Yield
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Source: 1998 Water Supply Plan and personal communication (October 1998).

The Hunts Brook Pond has a tributary watershed area of 4.60 square miles, exclusive of the Great Swamp watershed. The diversion would require the construction of approximately 13,700 feet of 24-inch pipeline. This diversion would be utilized during high stream flows. The additional safe yield obtained from this source is estimated to be 3.3 mgd.

[REDACTED]

The Polly Brook well has been considered previously. Gravel test wells were constructed and test pumping was performed. However, a yield test has never been completed, and it is uncertain whether this is a viable source when considering current land uses within the watershed.

The Great Swamp diversion is not a new source, but the pump station has been out of service due to vandalism. An upgrade of the station, including new wet wells and installation of two new pumps, has been proposed.

[REDACTED]

margin of safety for the 50-year planning period from 0.93 to 1.25. New London is not recommending development of the Polly Brook and Miller Pond options at this time.

### **3.9 Norwich Water Department**

Although the Norwich Water Department is currently meeting average and peak demands, they have indicated a need for future supply sources within the 50-year planning period. Norwich is currently exploring sources of supply that can be developed at an economical rate. These options include a second aquifer and a diversion from the Yantic River.

### **3.10 Sprague Water & Sewer Authority**

The Sprague system is currently meeting average and peak demands with an adequate margin of safety. The Baltic Reservoir dam is currently being repaired. During this time, three groundwater wells are Sprague's only source of supply. The reservoir has not been reactivated to date and is designated for emergency use only. When fully reactivated, it will serve as a backup source with a potential yield of 0.211 mgd. It is anticipated, however, that a new groundwater well will also be installed near the reservoir in conjunction with a 150,000-gallon storage tank to provide an additional on-line source and storage. If these new groundwater supplies are adequate, reactivation of the reservoir may not be necessary.

### **3.11 Waterford WPCA**

Waterford currently receives 100% of its supply from the City of New London. Future projections provided in New London's individual water supply plan forecast the population of the New London service area to be relatively stable. However, the Town of Waterford service population and consumption is growing steadily and is projected to continue to increase. Although the safe yield of the New London water system meets the

current average demands (including Waterford), a water deficit is projected for the 50-year planning period. A revised water supply plan due late September 1999 is anticipated to reevaluate New London's safe yield.

The Town of Waterford has identified numerous future potential supply sources to augment its supply from the City of New London, including installation of a groundwater well and pump station. This would provide opportunity for a high quality source independent of the New London system. In conjunction with New London's plans for provision of additional source supply via the Great Swamp and Hunts Brook diversion projects, Waterford anticipates that it will have adequate supply for meeting projected demands over the 50-year planning period.

Land (27.8 acres) has been purchased near the confluence of Nevins and Jordan Brooks at the Tirrell and Perkins sites as well as a portion of the Jordan Cemetery site for development of a groundwater supply. Testing has been completed for the new well and the WPCA is presently acquiring additional stream flow data. The WPCA anticipates submitting a diversion permit application in the near future.

### **3.12 Westerly Water Department**

At the present time, the Town of Westerly has abandoned all efforts to develop a well site in Connecticut due to the expense and uncertainty of the Connecticut diversion permit process. The need to develop additional sources in Connecticut to serve the Pawcatuck section and balance the system continues to be a priority. To date, no viable location has been identified. Current efforts to locate additional supply sources are focused in Rhode Island.

*Section 4*

## 4.0 EXISTING SERVICE AREAS

Appended Figure I delineates existing service areas within the region. These boundaries were determined based upon individual water supply plan mapping, legal documents, and information from community water systems. Table 4-1 identifies the enabling legislation for each community water system in the region serving greater than 1,000 people. For the municipally run systems, as 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	Primary Location Served	Enabling Legislation Reference
Colchester Sewer & Water Commission	Colchester	Town Charter
CT-AM Water Co., Mystic Valley District	Stonington/ Groton	An Act of the General Assembly No. 187
CWC	Old Lyme	An Act of the General Assembly No. 342
East Lyme Water Department	East Lyme	An Act of the General Assembly of 1941
Groton Long Point Association	Groton	An Act of the General Assembly No. 280
Groton Utilities	Groton	City Charter
Jewett City Water Company	Griswold	An Act of the General Assembly No. 201
Ledyard WPCA	Ledyard	Special Act No. 284 of 1959
Montville Correctional Complex	Montville	Certificate of Public Convenience & Necessity pursuant to C.G.S. 16-262m
Montville WWPCA	Montville	Town Charter
New London Water Division	New London	City Charter
Noank Fire District	Groton	Special Act No. 288 of 1961, City Charter
Norwich Water Department	Norwich	An Act of the General Assembly of 1866, City Charter
SCWA	Montville / Ledyard	Special Act No. 381 of 1967
Sprague Water and Sewer Authority	Sprague	Special Act No. 354 of 1967
Waterford WPCA	Waterford	Special Act No. 172 of 1963, Town Charter
Westerly Water Department	Stonington N. Stonington	Special Act of 1887 Public Act 92-14

Source: Individual enabling legislation, local documents, and/or personal communications.

Note: Generally, the various acts and subsequent charters provide a public water system with the ability to purchase, sell, and distribute water; this often includes the right the ability to purchase and sell systems. As such, public water systems in the region have historically been involved in mergers, sales, and purchases with other public water systems. This has in many cases, altered the specific geographic area that a system may service through the combination of areas under one public water system name.

\* Individual systems managed by a water purveyor are not specifically identified.

The majority of the enabling legislation for the larger water systems falls under a special act, some of which date to the 1800's. The Jewett City Water Company, for example, has

been authorized to service portions of Griswold since 1893, while the Town of Waterford received its authority more recently in 1963 by Special Act.

City and Town charters are also commonly used for establishing water servicing rights for municipalities. However, such as in the case of Colchester, one or more organizations may have superceded the charter. For example, prior to Town Charter, governing entities for provision of water in Colchester were the Utilities Commission (established under the Consolidation Ordinance of Colchester) and the Water Board (established under a House Bill in 1937).

The 20 community water systems serving greater than 1,000 people have a customer base that spans 14 municipalities, three 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 serviced are either in close proximity to an urban center or Interstate 95, except for the municipalities of Colchester and East Haddam.

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 to 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 community water systems, including the requirement to obtain a certificate of public convenience and necessity from the Departments of Public Utility Control 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. The majority of community water systems were created prior to 1984 and have been grandfathered under this act. The Montville Correctional Complex is enabled to provide water via this certificate process as well as several of the smaller systems in the region.

## 5.0 POPULATION AND PROJECTED GROWTH

### 5.1 Municipal Classifications and Community Water System Population

In order to clarify the analysis presented herein, the municipalities of the southeastern region have been grouped into three classifications: urban, suburban, and rural as presented in Table 5-1. These classifications were originally determined based on population density within the municipalities of the Southeastern Connecticut Council of Governments jurisdiction. The general rule of thumb 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 5-1  
Municipal Classification for the Southeast Region**

Municipal Classification		
Urban	Suburban	Rural
Groton	Colchester	Bozrah
New London	East Haddam	Franklin
Norwich	East Hampton	Lebanon
	East Lyme	No. Stonington
	Griswold	Salem
	Hebron	Voluntown
	Ledyard	
	Lisbon	
	Lyme	
	Marlborough	
	Montville	
	Old Lyme	
	Preston	
	Sprague	
	Stonington	
	Waterford	

Source: Southeastern Connecticut Council of Governments and HMA, Inc.

## 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 5-2. This data is summarized graphically in Figure 5-1. The historical population trends show consistent growth throughout the region until the 1980's and 1990's. At that time, the urban areas began to lose population, while the suburban and rural municipalities, for the most part, kept increasing.

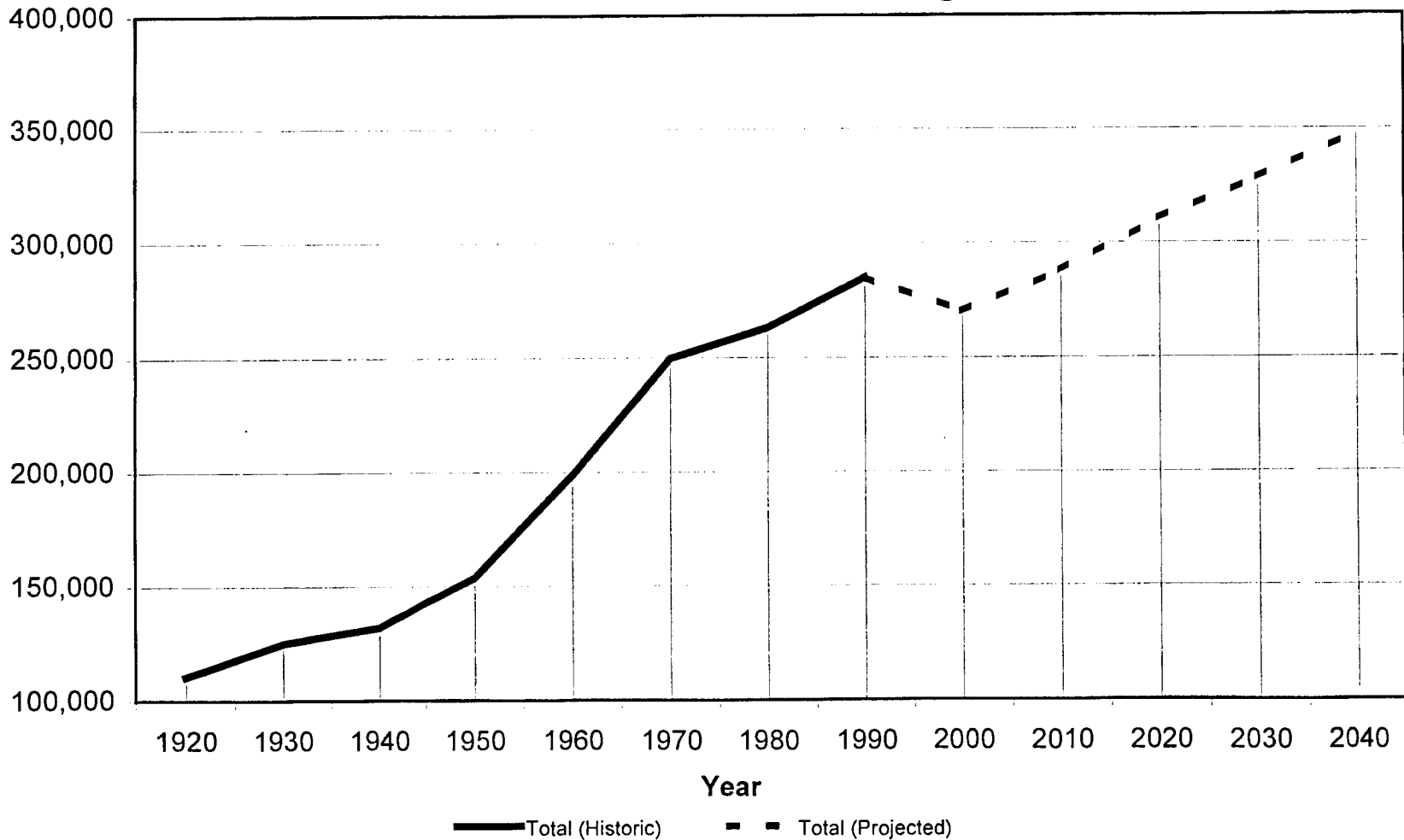
**TABLE 5-2**  
**Historical Population by Municipality for the Southeast Region**

Municipality	Population									
	1920	1930	1940	1950	1960	1970	1980	1990	1996	1997
Bozrah	858	859	904	1,154	1,590	2,036	2,135	2,297	2,337	2,356
Colchester	2,050	2,134	2,338	3,007	4,648	6,603	7,761	10,980	12,101	12,732
East Haddam	2,312	2,114	2,217	2,554	3,637	4,676	5,621	6,676	7,333	7,347
East Hampton	2,394	2,616	2,955	4,000	5,403	7,078	8,572	10,428	11,010	10,994
East Lyme	2,291	2,575	3,338	3,870	6,782	11,399	13,870	15,340	15,869	16,170
Franklin	552	611	667	727	974	1,356	1,592	1,810	1,777	1,818
Griswold	4,220	6,010	5,343	5,728	6,472	7,763	8,967	10,384	10,200	10,674
Groton	9,227	10,770	10,910	21,896	29,937	38,244	41,062	45,144	44,084	42,922
Hebron	915	879	999	1,320	1,819	3,815	5,453	7,079	7,776	7,789
Lebanon	1,343	1,436	1,467	1,654	2,434	3,804	4,762	6,041	6,326	6,392
Ledyard	1,161	1,144	1,426	1,749	5,395	14,837	13,735	14,913	14,844	14,839
Lisbon	867	1,097	1,131	1,282	2,019	2,808	3,279	3,790	3,923	3,912
Lyme	674	546	717	857	1,183	1,484	1,822	1,949	2,000	2,013
Marlborough	303	319	476	901	1,961	2,991	4,746	5,535	5,714	5,623
Montville	3,411	3,970	4,135	4,766	7,759	15,662	16,455	16,673	16,518	17,139
New London	25,688	29,640	30,456	30,551	34,182	31,630	28,842	28,540	26,893	25,263
No. Stonington	1,144	1,135	1,236	1,367	1,982	4,219	4,280	4,884	4,850	4,987
Norwich	29,685	32,438	34,140	37,633	38,506	41,739	38,074	37,391	35,142	36,190
Old Lyme	946	1,313	1,702	2,141	3,068	4,964	6,159	6,535	6,681	6,569
Preston	2,743	3,928	4,206	1,775	4,992	3,593	4,644	5,006	4,934	5,116
Salem	424	403	504	618	925	1,453	2,335	3,310	3,579	3,557
Sprague	2,500	2,539	2,285	2,320	2,509	2,912	2,996	3,008	2,975	2,980
Stonington	10,236	11,025	11,002	11,801	13,969	15,940	16,220	16,919	16,230	16,953
Voluntown	656	651	723	825	1,028	1,452	1,637	2,113	2,258	2,248
Waterford	3,935	4,742	6,594	9,100	15,391	17,227	17,843	17,930	17,214	18,128
<b>Total</b>	<b>110,535</b>	<b>124,894</b>	<b>131,871</b>	<b>153,596</b>	<b>198,565</b>	<b>249,685</b>	<b>262,862</b>	<b>284,675</b>	<b>282,568</b>	<b>284,711</b>

Source: Office of Policy and Management Census Data (1920 through 1990) and Connecticut Department of Public Health (1996 and 1997 data)

**Figure 5-1**  
**Historic and Projected Population (1920-2040)**  
**Southeast Connecticut Region**

No. of Individuals



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

### *Urban*

A declining population trend is evident in the urban municipalities of the southeast region. Some of the decreased urban population can be attributed to the migration from urban to suburban areas in the 1980's, as well as cutbacks that occurred in the 1990's in the country's defense program on which the southeast region is so economically dependent. The City of New London is most notable with its population steadily decreasing by 5,642 (16.5%) between 1960 and 1990.

### *Suburban*

Several decades ago, some of the municipalities currently considered suburban were still rural. Municipalities such as Marlborough, Lisbon, Griswold, and Hebron have become suburban communities within the last 20 years. This correlates with the period when people were leaving the urban centers for more rural lifestyles. As a group, the suburban communities increased steadily throughout the 80-year period of record, with only some of the more developed municipalities losing population.

Colchester stands out among this group as having a significant population increase in recent years, with 3,219 additional people or a 30% increase between 1980 and 1990. Other municipalities that have had higher than average increases include East Haddam, East Hampton, Marlborough, and Hebron. All of these municipalities are clustered together in the northwest corner of the region. With the emergence of the Route 2 access corridor, these communities have become prime locations as "commuter communities."

### *Rural*

In the past several decades, rural communities have seen a noticeable population increase. Lebanon has had the most pronounced growth, with a 2,237 person or 40% increase in population between 1970 and 1990. Lebanon is located in the northwest area of the

region, similar to the growing municipalities in the suburban class. North Stonington saw a doubling effect in its population between 1960 and 1970 but, since then, the population has leveled off. Salem also experienced a significant amount of growth, more than tripling from 1960 to 1990. However, it has continued to grow at a more modest rate since 1990.

### **5.3 Municipal Population Projections**

The overall regional population projection indicates steady but not dramatic growth. Urban areas are projected to lose population, then rebound and increase thereafter. The suburban municipalities are projected to be steady, with individual municipalities' numbers varying greatly. Population in the majority of the rural municipalities is projected to grow slowly. Table 5-3 presents these future projections by municipality for the southeast region. This data has been published by the Office of Policy and Management and is a combination of data obtained from Series 95.1 and 95.2.

When projections are compared to estimated 1997 data available from the Department of Public Health, discrepancies are noted. For instance, the 1997 population in the towns of East Lyme, Lyme, and Stonington exceeds the 2040 projected population. Conversely, the population in Ledyard and New London has dropped below 1990 levels and are lower than the 1995 OPM projections.

**Table 5-3  
Population by Municipality for the Southeast Region**

<b>Municipality</b>	<b>1990<sup>1</sup> (Census)</b>	<b>1995<sup>1</sup> (Projected)</b>	<b>2000<sup>1</sup> (Projected)</b>	<b>2005<sup>1</sup> (Projected)</b>	<b>2010<sup>1</sup> (Projected)</b>	<b>2015<sup>1</sup> (Projected)</b>	<b>2020<sup>1</sup> (Projected)</b>	<b>2030<sup>2</sup> (Projected)</b>	<b>2040<sup>2</sup> (Projected)</b>
Bozrah	2,297	2,310	2,320	2,340	2,360	2,390	2,420	2,500	2,500
Colchester	10,980	12,600	13,600	14,400	15,200	16,000	16,800	18,500	20,300
East Haddam	6,676	7,000	7,350	7,880	8,570	9,320	10,100	11,100	12,200
East Hampton	10,428	10,830	11,190	11,560	11,990	12,430	12,840	13,800	14,800
East Lyme	15,340	15,420	15,440	15,490	15,570	15,630	15,660	15,800	15,900
Franklin	1,810	1,710	1,660	1,650	1,710	1,780	1,860	1,900	1,900
Griswold	10,384	10,220	10,120	10,350	10,850	11,390	11,910	12,500	13,100
Groton	45,144	44,360	43,810	44,880	46,910	48,780	50,560	52,600	54,700
Hebron	7,079	7,420	7,720	8,060	8,480	8,970	9,470	10,400	11,500
Lebanon	6,041	6,340	6,620	6,940	7,320	7,750	8,200	9,000	9,900
Ledyard	14,913	15,880	16,780	17,180	17,480	17,780	18,080	19,300	20,600
Lisbon	3,790	3,830	3,850	3,910	4,000	4,100	4,200	4,300	4,500
Lyme	1,949	1,930	1,910	1,890	1,880	1,870	1,860	1,900	1,900
Marlborough	5,535	5,680	5,780	5,930	6,120	6,320	6,530	6,900	7,300
Montville	16,673	16,900	17,400	17,900	18,200	18,500	18,800	19,600	20,400
New London	28,540	26,920	26,050	26,160	27,900	29,480	31,020	32,000	33,000
No. Stonington	4,884	4,960	5,000	5,050	5,150	5,280	5,430	5,600	5,800
Norwich	37,391	36,030	35,060	35,440	36,850	38,240	39,550	40,400	41,200
Old Lyme	6,535	6,680	6,800	6,960	7,140	7,330	7,500	7,900	8,200
Preston	5,006	5,340	5,780	6,540	7,530	8,560	9,640	10,600	11,700
Salem	3,310	3,620	3,750	3,890	4,070	4,290	4,540	5,000	5,500
Sprague	3,008	3,100	3,220	3,390	3,590	3,780	3,940	4,300	4,700
Stonington	16,919	16,670	16,340	16,210	16,260	16,460	16,750	16,800	16,800
Voluntown	2,113	2,190	2,260	2,360	2,490	2,630	2,760	3,000	3,300
Waterford	17,930	17,880	17,860	18,120	18,630	19,170	19,750	20,400	21,100
<b>Total</b>	<b>284,675</b>	<b>285,820</b>	<b>287,670</b>	<b>294,480</b>	<b>306,250</b>	<b>302,230</b>	<b>330,170</b>	<b>346,100</b>	<b>362,800</b>

<sup>1</sup>Series 95.1 Data

<sup>2</sup>Series 95.2 Data



A discussion of municipal population projections for the three subregions follows.

### *Urban*

All three of the urban municipalities are projected to continue losing population until the year 2000 and then increase thereafter. The long-term projections for the year 2040 show Groton increasing its population by about 11,700 or 27%, New London by about 7,750 people or 30%, and Norwich by about 5,000 people or 14%.

### *Suburban*

Preston and Colchester are projected to increase in population significantly as compared to the rest of the municipalities in the suburban class. Projected growth for Preston is 10% every five years through the year 2040 or an average of more than 150 persons per year. Colchester is also projected to experience a significant increase in population, with a 5 to 10% growth every five years through the year 2040, or an average of over 175 persons per year.

East Haddam and Ledyard are also projected to have healthy population increases over the planning period, each increasing their total population by about 5,000 to 6,000 people. Based upon 1997 population estimates, Lyme and East Lyme have surpassed the year 2040 projections. Lyme is projected to lose 113 persons in remaining years of this planning period. Similarly, based on 1997 population data, both Lisbon and Stonington have grown more rapidly than projected, with Stonington having surpassed its 2040 projection. As such, both municipalities are projected to have minimal additional increases to their populations.

Population in the remaining municipalities are all projected to increase, but at a slow steady rate. These rates average between 25 to 85 persons per year over the planning period.

### *Rural*

Lebanon shows the greatest projected increase in population in this class, with a 55% increase through the year 2040, or an average of about 82 persons per year. The remaining municipalities are projected to grow very slowly. Franklin is projected to lose population until the year 2005, and then increase slowly thereafter for a total increase of only 127 persons. However, 1997 population estimates indicate that Franklin has already surpassed its 2015 population projection.

## **5.4 Community Water System Service Population Projections**

Table 5-4 presents existing service population and future projections for the community water systems 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 five years following development of the individual water supply plan. The 20- and 50-year planning periods are 20 and 50 years following the last census in 1990. Therefore, all of the 20- and 50-year planning periods occur in the years 2010 and 2040, respectively. Service population data for systems serving less than 1,000 people is included as Appendix E.

In several cases, individual water supply plans were prepared prior to 1993, resulting in a five-year projected population which occurs prior to 1999. Several plans were prepared in 1993 and project population to 1998. These projections tend to be on the low side when compared to actual 1998 populations served. Not surprisingly, the biggest population increase was projected to occur in Colchester, with a 1998 population of 3,500 increasing to 19,668 in the year 2040.

**TABLE 5-4**  
**Existing and Future Projected Population of Community Water Systems Serving > 1,000 People**

Community Water System	Estimated Current Population (1998)	Date of 5 Year Projected Population Served	5 Year Projected Population Served	20 Year Projected Population Served (2010)	50 Year Projected Population Served (2040)
Colchester Sewer & Water Commission	3,500	1999	5,062	6,365	19,668
CT-AM, Mystic Valley District <sup>1</sup>	11,515	1998	No Data	No Data	No Data
CWC, Shoreline Region, Point O' Woods <sup>2</sup>	1,007	1997	1,050	2,284	3,077
CWC, Shoreline Region, Sound View <sup>2</sup>	1,002	1997	1,058		
East Lyme Water Department	14,134	2000	11,722	11,994	14,092
Groton Long Point Association	2,500	1997	2,400	2,400	2,400
Groton Utilities <sup>3</sup>	45,000	1999	39,150	44,250	50,150
Jewett City Water Company	6,432	1995	4,815	5,163	7,563
Ledyard WPCA Gales Ferry	1,200	1995	1,045	1,151	1,289
Ledyard WPCA Highlands	2,300	2,000	2,387	2,530	2,833
Montville Correctional Complex	1,460	2001	2,228	2,228	2,228
Montville WWPCA	1,304	1998	825	1,325	14,000
New London Water Division <sup>4</sup>	31,243	2002	40,300	43,000	55,500
Noank Fire District	2,500	1998	1,508	1,650	1,892
Norwich Water Department	35,000	2001	32,900	34,800	43,750
SCWA, Montville Division	1,130	1998	1,329	1,329	1,329
SCWA, Tower Division <sup>5</sup>	2,213	1998	16,303	17,840	22,300
Sprague Water and Sewer Authority	1,652	1998	1,260	1,290	1,320
Waterford WPCA	13,757	2002	14,200	15,100	19,500
Westerly Water Department <sup>6</sup>	5,918	2000	5,052	5,377	6,350

<sup>1</sup> Combines Stonington and Groton.

<sup>2</sup> CWC, Shoreline Region, Point O' Woods and Sound View systems combine within the 20-year planning period.

<sup>3</sup> Includes 9,350 U.S. Navy service population.

<sup>4</sup> Excludes the Town of Waterford service population.

<sup>5</sup> Combines Ferry View Heights and Tower Division.

<sup>6</sup> Extrapolated. Excludes Town of Westerly service population.

## **5.5 Land Uses and Available Land**

### **5.5.1 Overview of the Southeastern COG Planning Area**

The Southeastern Connecticut Council of Governments (COG) planning jurisdiction covers a majority of the WUCC region. However, it excludes numerous municipalities which are located within the broader planning area of the Southeastern Connecticut WUCC. The ensuing discussion concerning land uses and available land utilizes information provided by the Southeastern Connecticut Council of Governments and, therefore, excludes the Southeastern Connecticut WUCC municipalities of East Haddam, East Hampton, Hebron, Lebanon, Lyme, Marlborough, Old Lyme, and Westerly.

The core of the southeastern Connecticut region, as defined by the boundaries of the Southeastern Council of Government, consists of the suburban municipalities of Colchester, East Lyme, Griswold, Ledyard, Lisbon, Montville, Preston, Sprague, Stonington, and Waterford, surrounded by the rural towns of Salem, Bozrah, Franklin, Voluntown, and North Stonington. Norwich, Groton, and New London are the urban centers, making up approximately 11.3% of the 559.2 square miles of the region.

Approximately 21% of the region is occupied by intensive land uses, leaving a rather large portion (61%) of undeveloped lands. The balance (18%) is reserved open space, reservoir lands, active recreational facilities, and agriculture. Several factors limit the ability to intensively develop areas in the southeastern Connecticut region, including poorly drained soils, shallow depth to bedrock, steep slopes, flood hazard areas, availability of public utilities, ownership, zoning, financing, and regulatory jurisdictions of state and federal governments.

The major development contributing to regional growth has occurred at low densities, more in the rural and suburban towns than the three urban municipalities, although urban growth continues along the Thames River corridor and the Long Island Sound coast, and more recently along Interstate 95. (*Land Use, Southeastern Council of Governments, 1990, February 1991*).

The region has had a historic dependence on defense-related industries. The employment and demographic shifts that resulted from the reduction of defense-related industries and manufacturing at the end of the Cold War, in turn, brought about significant alterations to regional land use patterns. It is further expected that significant changes will continue to occur with the increase in gaming facilities and associated development. (*Regional Conservation and Development Policy Guide for Southeastern Connecticut, October 1997*).

### **5.5.2 Land Uses Within the WUCC Region**

Using available data from local, regional, and state sources, it was possible to compile and analyze generalized existing land use and land potentially available for development. The same municipal classifications (urban, suburban, and rural) are used in this analysis.

Table 5-5 provides a generalized outline of existing land use for the Connecticut municipalities participating in the Southeastern Connecticut WUCC process. It should be noted that the term "Uncommitted" has been utilized by the Connecticut River Estuary Regional Planning Agency to refer to both undeveloped and agricultural lands. Additionally, the "Other" category in Table 5-5 includes watercourses, waterbodies, unknown uses, and other obscure uses. This category is not considered to be available for future development.

### *Urban Land Uses*

The municipality within the urban classification that has the largest land area is Groton (28,928 acres), whereas the City of New London has the smallest total land area of all Connecticut municipalities.

The uncommitted/undeveloped percentages for the urban communities of Groton, New London, and Norwich vary greatly at 20.16%, 3.40%, and 47.64%, respectively. The weighted average is 27.5% (15,063 acres). The percent of developed residential land is consistent among municipalities at about 17% (9,503 acres). Average developed commercial and industrial land use is almost 4% (2,110 acres). It is interesting to note that Norwich has a relatively large percentage of agricultural land at almost 6% (1,110 acres). By contrast, New London has no agricultural land. The total agricultural land acreage for the three municipalities is 1,196 acres.

### *Residential*

All three municipalities have similar residential land use percentages, with Norwich at 19.6%, New London at almost 19%, and Groton at about 15.6%, for a total of 9,503 acres. Each municipality has a densely populated urban center. In Groton and Norwich, urban development tapers off to a more suburban environment.

**TABLE 5-5  
Existing Land Use**

	Municipality	Residential		Commercial		Industrial		Institutional		Transportation		Open Space		Agriculture		Other		Uncommitted/ Undeveloped		Total <sup>1</sup> Acres
		Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	
Urban	Groton	4,505	15.57	576	1.99	486	1.68	1,359	4.70	2,004	6.93	2,732	9.44	86	0.30	11,347	39.22	5,833	20.16	28,928
	New London	1,298	18.78	341	4.93	71	1.03	472	6.83	652	9.43	185	2.68	0	0.00	3,658	52.92	235	3.40	6,912
	Norwich	3,700	19.60	301	1.59	335	1.77	433	2.29	1,800	9.53	761	4.03	1,110	5.88	1,445	7.65	8,995	47.64	18,880
	<b>Subtotal</b>	<b>9,503</b>	<b>n/a</b>	<b>1,218</b>	<b>n/a</b>	<b>892</b>	<b>n/a</b>	<b>2,264</b>	<b>n/a</b>	<b>4,456</b>	<b>n/a</b>	<b>3,678</b>	<b>n/a</b>	<b>1,196</b>	<b>n/a</b>	<b>16,450</b>	<b>n/a</b>	<b>15,063</b>	<b>n/a</b>	<b>54,720</b>
Suburban	Colchester	3,026	9.49	189	0.59	247	0.77	156	0.49	1,285	4.03	2,504	7.86	391	1.23	2,387	7.49	21,687	68.04	31,872
	East Haddam <sup>2</sup>	n/a	n/a	74	0.20	113	0.31	n/a	n/a	857	2.37	1,100	3.04	2,805	7.74	2,463	6.80	28,000	77.30	36,224
	East Hampton	2,344	9.95	254	1.08	95	0.40	73	0.31	158	0.67	5,169	21.95	719	3.05	0	0.00	14,740	62.58	23,552
	East Lyme	3,375	12.56	199	0.74	116	0.43	3,596	13.38	1,090	4.06	3,073	11.43	442	1.64	4,544	16.90	10,445	38.86	26,880
	Griswold	2,355	9.92	97	0.41	281	1.18	98	0.41	867	3.65	3,176	13.38	1,222	5.15	2,395	10.09	13,253	55.82	23,744
	Hebron <sup>2</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	396	1.66	n/a	n/a	2,988	12.52	n/a	n/a	n/a	n/a	23,872
	Ledyard	2,661	10.39	105	0.41	126	0.49	635	2.48	1,000	3.91	2,008	7.84	806	3.15	2,036	7.95	16,223	63.37	25,600
	Lisbon	1,078	10.15	40	0.38	90	0.85	36	0.34	579	5.45	289	2.72	19	0.18	106	1.00	8,387	78.94	10,624
	Lyme <sup>3</sup>	2,068	9.37	15	0.07	31	0.14	493	2.23	320	1.45	4,106	18.60	---	---	2,650	12.00	12,397	56.15	22,080
	Marlborough	2,708	18.08	121	0.81	26	0.17	125	0.83	668	4.46	2,815	18.80	506	3.38	147	0.98	7,860	52.48	14,976
	Montville	3,077	10.90	138	0.49	395	1.40	357	1.26	1,943	6.88	1,411	5.00	232	0.82	2,125	7.53	18,546	65.71	28,224
	Old Lyme <sup>3</sup>	3,152	17.10	94	0.51	39	0.21	895	4.86	855	4.64	1,506	8.17	---	---	2,847	15.44	9,044	49.07	18,432
	Preston	1,224	6.01	61	0.30	33	0.16	787	3.87	646	3.17	513	2.52	1,639	8.05	572	2.81	14,877	73.10	20,352
	Sprague	542	6.14	14	0.16	167	1.89	54	0.61	263	2.98	290	3.28	618	7.00	624	7.06	6,260	70.88	8,832
	Stonington	3,089	9.65	349	1.09	152	0.48	195	0.61	1,355	4.23	2,509	7.84	786	2.46	7,032	21.97	16,533	51.67	32,000
	Waterford	4,173	14.69	432	1.52	163	0.57	730	2.57	2,018	7.10	1,776	6.25	27	0.10	7,407	26.07	11,690	41.14	28,416
<b>Subtotal</b>	<b>34,872</b>	<b>n/a</b>	<b>2,182</b>	<b>n/a</b>	<b>2,074</b>	<b>n/a</b>	<b>8,230</b>	<b>n/a</b>	<b>14,300</b>	<b>n/a</b>	<b>32,245</b>	<b>n/a</b>	<b>13,200</b>	<b>n/a</b>	<b>37,335</b>	<b>n/a</b>	<b>209,942</b>	<b>n/a</b>	<b>373,680</b>	
Rural	Bozrah	813	6.29	28	0.22	77	0.60	70	0.54	713	5.52	823	6.37	981	7.50	283	2.2	9,140	70.7	12,928
	Franklin	611	4.87	168	1.34	64	0.51	34	0.27	367	2.93	973	7.76	2,193	17.48	1	0.01	8,133	64.84	12,544
	Lebanon	6,161	17.44	82	0.23	169	0.48	447	1.27	687	1.94	2,896	8.20	11,332	32.08	5,407	15.30	8,147	23.06	35,328
	No. Stonington	1,598	4.54	116	0.33	319	0.91	124	0.35	834	2.37	4,995	14.19	2,044	5.81	0	0.00	25,170	71.51	35,200
	Salem	1,644	8.62	54	0.28	93	0.49	36	0.19	608	3.19	553	2.90	1,256	6.59	1,679	8.80	13,149	68.94	19,072
	Voluntown	716	2.81	12	0.05	3	0.01	22	0.09	338	1.33	13,807	54.20	762	2.99	270	1.06	9,541	37.46	25,472
<b>Subtotal</b>	<b>11,543</b>	<b>n/a</b>	<b>460</b>	<b>n/a</b>	<b>725</b>	<b>n/a</b>	<b>733</b>	<b>n/a</b>	<b>3,547</b>	<b>n/a</b>	<b>24,047</b>	<b>n/a</b>	<b>17,673</b>	<b>n/a</b>	<b>11,842</b>	<b>n/a</b>	<b>69,973</b>	<b>n/a</b>	<b>140,544</b>	
<b>Total</b>	<b>55,918</b>	<b>n/a</b>	<b>3,860</b>	<b>n/a</b>	<b>3,691</b>	<b>n/a</b>	<b>11,227</b>	<b>n/a</b>	<b>22,303</b>	<b>n/a</b>	<b>59,970</b>	<b>n/a</b>	<b>32,069</b>	<b>n/a</b>	<b>65,627</b>	<b>n/a</b>	<b>294,978</b>	<b>n/a</b>	<b>570,944</b>	

Source: Southeastern Connecticut Council of Governments, Midstate Regional Planning Agency (East Haddam and East Hampton), Connecticut River Estuary Regional Planning Agency (Lyme and Old Lyme), and local plans of conservation and development (Marlborough and Lebanon).

<sup>1</sup> Total municipal acreage as calculated by the State of Connecticut Register & Manual 1997, which includes all water bodies found within municipal borders.

<sup>2</sup> N/A indicates data not available.

<sup>3</sup> Agriculture acreage is included with uncommitted/undeveloped calculations.

Note: Double border indicates greatest area recorded for specific land use category in municipal classification.

### *Commercial/Industrial*

The City of New London has the highest commercial/industrial development percentage at almost 6% (412 acres) of its total land. Groton has far more acreage dedicated to commercial and industrial development (1,062 acres), slightly more than Norwich and New London combined, but it occupies only 4% of its total acreage.

### *Uncommitted/Undeveloped*

The three urban communities have differing numbers in terms of undeveloped land. New London is almost totally built out, with only 3.4% (235 acres) undeveloped land at the present time, while Norwich has nearly half its land in an undeveloped/uncommitted state (47.64% or 8,995 acres). Groton falls between the two with 20.16% (5,833 acres) undeveloped.

### *Suburban Land Uses*

Sixteen municipalities are classified as suburban. The municipality with the largest total land area in this classification is East Haddam (36,224 acres). The majority of these municipalities have greater than 50% of their land in an uncommitted/undeveloped category. On average, about 11% of the land use is residential, and another 1.2% is commercial and industrial.

### *Residential*

Marlborough, Old Lyme, and Waterford all have large percentages of developed residential land (18%, 17%, and 15%, respectively) as compared to the average of 11%. Preston and Sprague have lower than average percentages of about 6% each.

### *Commercial/Industrial*

Waterford, Stonington, and East Hampton have relatively high percentages of developed commercial area (1.52%, 1.09%, and 1.08%, respectively), as compared to the average of only 0.6%. Lyme, Sprague, and East Haddam have low commercial percentages (0.07%, 0.16%, and 0.20%, respectively).



Sprague, Montville, and Griswold have a relatively high percentage of developed industrial area (1.89%, 1.40%, and 1.18%, respectively), as compared to the average (0.6%). Lyme, Preston, and Marlborough have low industrial percentages (0.14%, 0.16%, and 0.17%, respectively).

#### *Uncommitted/Undeveloped*

Lisbon and East Haddam stand out as having high percentages of their land use as uncommitted/undeveloped at 79% (8,387 acres) and 77% (28,000 acres), respectively. East Lyme and Waterford, two fairly developed municipalities, had the lowest percentages in this category with 39% (10,445 acres) and 41% (11,690 acres), respectively.

#### *Rural Land Uses*

Six municipalities are classified as rural. Within this classification, Lebanon and North Stonington have the largest land area, a total of 35,328 acres and 35,200 acres, respectively. Fifty percent of the total land area in this classification fall under the uncommitted/undeveloped category (69,973 acres). An average of 8% of the land use is residential, and another 0.85% is commercial and industrial. The average agricultural land use percentage is almost 13% and the open space land use average is 17%. As a comparison, the agricultural and open space land use category percentages for urban and suburban municipalities are 2% and 7%, and 4% and 9%, respectively.

#### *Residential*

Lebanon stands out as having a high percentage of residential land, over 17% (6,161 acres). Voluntown also stands out, but for extremely low residential land, just under 3% (716 acres). The remaining municipalities have residential land percentages ranging from 4.5% to 8.6%.

### *Commercial/Industrial*

Franklin has a relatively high percentage of commercial/industrial land (1.85% or 232 acres), attributable to nearby interstate access and/or proximity to the region's urban centers.

### *Uncommitted/Undeveloped*

The range of uncommitted/undeveloped land for rural municipalities is scattered due to large quantities of land being used for agriculture and open space. With the exception of Lebanon and Voluntown, which only have 23% (8,147 acres) and 37% (9,451 acres), respectively, of uncommitted/undeveloped land, the rural communities have greater than two-thirds of their land available for potential development. The low percentages in Lebanon and Voluntown can be attributed to Lebanon's high acreage committed to agriculture and Voluntown's acreage in state forest land.

## **5.6 Growth Trends**

### **5.6.1 Housing Permits**

As with previous analyses, the participating municipalities have been organized into the three classifications of urban, suburban, and rural for this analysis. Data was collected for the 12-year period between 1985 and 1996. This period has been divided into two subgroup periods for comparative analysis: a five-year span from 1985 to 1989 and a seven-year span from 1990 to 1996, representing the housing boom of the late 1980's that slowed considerably after 1989. Table 5-6 presents these figures.

**TABLE 5-6  
Housing Construction**

		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Total in 1996
Connecticut		24,947	28,203	26,765	19,052	12,464	7,804	7,704	8,259	8,969	9,439	8,279	7,808	1,366,410
Urban	Groton	107	273	866	622	95	52	46	121	59	71	40	74	16,953
	New London	40	45	26	17	28	16	5	11	3	1	2	0	11,942
	Norwich	66	231	371	236	94	192	25	21	27	44	21	18	16,556
Suburban	Colchester	220	224	378	159	95	84	92	106	225	256	114	92	5,023
	East Haddam	61	105	109	100	62	63	66	76	59	52	47	55	3,637
	East Hampton	106	134	206	103	40	45	65	45	37	40	40	36	4,466
	East Lyme	107	119	120	68	52	30	174	44	59	95	77	77	7,298
	Griswold	69	92	114	122	60	25	45	38	38	59	51	79	4,481
	Hebron	120	83	71	48	22	18	67	43	60	70	52	49	2,822
	Ledyard	146	110	103	95	37	32	14	27	28	33	30	48	5,427
	Lisbon	35	59	52	39	17	13	14	10	15	26	22	11	1,498
	Lyme	10	21	24	17	13	10	9	19	15	14	11	11	1,063
	Marlborough	47	42	60	24	19	8	17	54	31	21	20	32	2,041
	Montville	78	71	83	95	51	29	83	120	70	64	57	32	6,692
	Old Lyme	56	57	59	47	22	36	17	48	40	51	52	77	4,617
	Preston	32	38	52	28	23	14	21	9	14	25	22	20	1,796
	Sprague	10	10	19	13	11	4	8	10	8	3	3	4	1,145
	Stonington	128	136	114	166	51	30	38	45	58	147	61	66	8,330
Waterford	119	151	142	170	96	37	42	42	58	110	89	157	7,835	
Rural	Bozrah	14	12	30	20	14	10	7	11	8	9	12	8	929
	Franklin	15	35	16	6	7	6	6	5	6	1	4	0	688
	Lebanon	73	90	117	82	52	36	50	33	44	37	22	30	2,629
	No. Stonington	25	28	41	29	19	22	12	9	15	35	22	16	1,967
	Salem	55	61	49	36	23	20	12	17	32	36	27	18	1,382
	Voluntown	18	27	45	24	17	19	16	15	15	9	18	13	972
<b>Total</b>		<b>1,757</b>	<b>2,254</b>	<b>3,267</b>	<b>2,366</b>	<b>1,020</b>	<b>851</b>	<b>951</b>	<b>979</b>	<b>1,024</b>	<b>1,309</b>	<b>916</b>	<b>1,023</b>	<b>122,189</b>

Source: State of Connecticut Department of Economic and Community Development

### *Southeastern Region*

Between 1985 and 1996, the region witnessed a 17% or 17,717 unit increase in total housing construction as compared to the 14.2% or 169,693 unit increase for the entire State of Connecticut. The region's growth was stronger between 1985 and 1989 as compared to the time period of 1990 to 1996. This was true for the entire State of Connecticut.

### *Urban*

The urban municipalities saw a dramatic difference in new housing construction from the late 1980's as compared to the 1990's. A total of 3,117 units (a 78.5% increase) were constructed in the 1986 to 1989 period as compared to 849 units (a 21.5% increase) in the 1990 to 1996 period. The urban communities had a 9.5% or 3,966 unit total increase in their housing stock as compared to 17% or 17,717 units for the region.

Groton received the bulk of new construction development in the urban community category, with 2,426 units at an average of 202 units per year. Norwich also had high construction numbers in the late 1980's (998 units) and then tapered off to 348 units in the early 1990's, resulting in an average of 112 units per year for the entire period. New London had weaker construction numbers, with 194 units during the late 1980's and 38 units in the early 1990's, averaging 16 units per year for the entire period. New London's weak numbers can be attributed to numerous factors, the most significant being that it has considerably less developable land available compared to that of the other two urban communities.

### *Suburban*

The suburban municipalities witnessed stronger new construction numbers during the first half of the 12-year study period, 6,945 or 58%, as compared to the second half at 4,983 or 42%, and averaged 994 units per year. Although the number of new housing units permitted in the late 1980's was higher than the early 1990's, relatively speaking, this difference is not significant and demonstrates the constant demand for new housing

units in suburban communities. The total increase in this municipal class for the period was 17.5% or 11,928 units, as compared to 17% or 17,717 units for the region.

Undoubtedly, the municipality with the most dramatic increase in housing construction was Colchester, with a total of 2,045 units or about 170 units per year. A distant second was Waterford, with a total of 1,213 units or about 101 units per year. It is noteworthy that these two municipalities maintained their growth throughout the period, with only a slight reduction in the very early 1990's.

On the other end of the spectrum, a total of 103 units were constructed, or about nine units per year in Sprague. Several other municipalities had relatively low total unit construction: Preston with 298 units or about 25 units per year, Lisbon with 313 units or about 26 units per year, and Marlborough with 375 units or about 31 units per year.

#### *Rural*

The rural municipalities within this group had varying numbers, with a combined total of 1,823 units or about 152 units per year. The late 1980's were stronger than the early 1990's, with 1,080 units and 743 units permitted, respectively. The total increase in this municipal class for the period was 27%, as compared to 17% for the region.

Lebanon had the most new housing construction in the rural class, with a total of 666 units built or 56 units per year. Lebanon saw most of its new construction in the late 1980's. However, housing construction has remained relatively strong throughout the period. Salem also showed a high number of new construction, with 386 units or 32 units per year.

Franklin had very little growth, with a total of 107 new units for the entire period, or about nine units per year. Franklin had no new construction in 1996. Bozrah also had low new construction numbers, with a total of 155 units or 13 units per year.

## 5.6.2 Zoning

Existing zoning information was obtained for a majority of the municipalities and is presented in Table 5-7. It is useful to compare zoning with existing land use to evaluate future development potential. For study purposes, the zones have been generalized into four categories: residential, commercial, industrial, and other. Undeveloped and agriculture land use was assumed to be potentially developable land.

Using the population projections and the housing trends in conjunction with the known existing land use and zoning, it is possible to foresee future growth trends. The northwest corner of the region, made up of mostly suburban communities, will likely experience significant growth. Comparing undeveloped land and zoning indicates that Colchester has over 20,000 undeveloped acres in residential zoning and almost 1,600 acres in commercial/industrial zoning. Combining this fact with current housing trends and projected growth, Colchester will likely grow steadily in the future. Similar findings are recorded for East Haddam and East Hampton, whose large quantities of undeveloped land and projected population growth is likely to equate to additional growth.

The area surrounding the two casino facilities in the region, located in Ledyard and Montville, are also likely to experience growth. Municipalities such as Preston, Montville, and Ledyard all have significant land available for development, 16,500 acres, 18,700 acres, and 17,000 acres in undeveloped and agricultural land, respectively, and are projected to experience measurable growth in population.

Municipalities along Interstate 95, such as East Lyme, Waterford, and Groton, have had strong growth trends in the past and should be watched for growth in the future. State population projections for these municipalities are not strong, but current housing trends and available developable land suggest that these areas have potential for future growth.

### 5.6.3 Conclusions

The population projections show that the urban municipalities will lose population in the coming years, but will rebound with an overall gain by the year 2040. The suburban communities will gain continuously throughout this period, with municipalities such as Preston and Colchester making large gains. Besides Lebanon's relatively large projected population gain, the rural municipalities are projected to grow slowly.

Comparing the percentages of increased total housing of the different classes, the rural class appears to have had the most growth, but when the actual numbers are used, a different picture emerges. Average new housing units constructed by class and municipality shows that rural municipalities had an average of 25 units per year, suburban municipalities had 62 units per year, and urban municipalities had 110 units per year. The urban communities had almost twice as much new housing growth as the suburban communities and more than four times that of the rural communities.

This can be taken a step further by performing the same analysis on the first and second halves of the study period. During the first half, 1985 to 1989, new housing units constructed in rural municipalities averaged 36 units per year, suburban municipalities averaged 81 units per year, and urban municipalities averaged 208 units per year. During the second half, 1990 to 1996, new housing units constructed in rural municipalities averaged 18 units per year, suburban municipalities 49 units per year, and urban municipalities averaged 40 units per year.

Based on this data, it is obvious that housing construction has slowed considerably, especially within the urban areas. In recent years, the suburban municipalities have been accumulating the most new homes. A second pattern emerges in the cyclic nature of the housing market, one that perhaps suggests future growth in this region will occur in the suburban areas.

**TABLE 5-7  
Generalized Zoning**

	Municipality	Residential		Commercial		Industrial		Other	
		Acre	%	Acre	%	Acre	%	Acre	%
Urban	Groton	14,750	77.86	792	4.18	2,653	14.00	749	3.95
	New London	1,795	51.33	536	15.33	113	3.23	1,053	30.11
	Norwich	15,299	85.00	1,046	5.81	1,610	8.94	44	0.24
Suburban	Colchester	28,354	92.65	535	1.75	1,715	5.60	0	0.00
	East Haddam	34,243	94.53	169	0.47	846	2.34	984	2.72
	East Hampton	18,284	77.63	748	3.18	314	1.33	4,326	18.37
	East Lyme	20,602	92.24	716	3.21	478	2.14	540	2.42
	Griswold	21,681	96.79	534	2.38	135	0.60	50	0.22
	Hebron	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Ledyard	23,184	92.41	658	2.62%	391	1.56	855	3.41
	Lisbon	9,827	91.94	151	1.41%	710	6.64	0	0.00
	Lyme	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Marlborough	14,688	98.08	242	1.62%	46	0.31	0	0.00
	Montville	24,898	90.05	668	2.42%	2,009	7.27	73	0.26
	Old Lyme	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Preston	18,541	93.74	529	2.67%	710	3.59	0	0.00
	Sprague	7,946	94.06	55	0.65%	422	5.00	25	0.30
	Stonington	23,547	93.62	703	2.80%	565	2.25	337	1.34
Waterford	16,699	78.12	1,123	5.25%	2,335	10.92	1,219	5.70	
Rural	Bozrah	11,629	91.97	367	2.90%	649	5.13	0	0.00
	Franklin	10,997	87.67	121	0.96%	470	3.75	955	7.61
	Lebanon	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	No. Stonington	33,287	94.39	306	0.87%	1,359	3.85	312	0.88
	Salem	17,223	94.43	623	3.42%	392	2.15	0	0.00
	Voluntown	24,881	98.67	0	0.00%	0	0.00	335	1.33

Sources: Southeastern Connecticut COG, Midstate Regional Planning Agency, and Marlborough Plan of Conservation and Development.



*Section 6*

## **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 community water systems serving greater than 1,000 people in the southeastern Connecticut region. Eighteen of 19 individual water supply plans have been submitted and approved, representing 95% completion. The remaining plan is anticipated to be submitted by early December 1999 for review. These figures do not include two WUCC members, the Portland Water Department and the Metropolitan District Commission WUCC members, which have supply but do not maintain service areas within the region.

Several of the individual community water systems have completed more than one round of water supply planning. Numerous systems are preparing to submit their second water supply plan and three have already completed this 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.

**TABLE 6-1  
Individual Water Supply Plan Status**

<b>Community Water System</b>	<b>Date Next WSP Due</b>	<b>Date of Most Recently Approved/Revised WSP</b>	<b>Additional Notes</b>
Colchester Sewer & Water Commission	---	13-June -95	First WSP approved.
CT-AM Water Co., Mystic Valley District	---	09-Jan-97	Second WSP approved.
CWC, Shoreline Region, Point O' Woods	---	28-Aug-95	First WSP approved.
CWC, Shoreline Region, Sound View	19-Mar-99	29-Mar-95	First WSP approved.
East Lyme Water Department *	10-Dec-99	---	Several modifications completed.
ECRWC, Lake Hayward Water Division	---	25-Aug-98	Second WSP approved.
Groton Long Point Association	15-Sept-98	20-July-93	Modifications submitted. Under review.
Groton Utilities	---	26-Feb-99	First WSP approved.
Jewett City Water Company	---	Feb-99	First WSP approved.
Ledyard WPCA	---	15-July-96	First WSP approved.
Montville Correctional Complex	---	10-Sept-96	First WSP approved.
Montville WWPCA	---	01-Mar-96	First WSP approved.
New London Water Division	30-Sept-99	01-June-93	Modifications submitted. Under review.
Noank Fire District	30-Apr-99	08-Nov-94	Update requested.
Norwich Water Department	---	12-Aug-98	Second WSP approved.
SCWA, Montville and Tower Divisions	---	11-Mar-96	
Sprague Water and Sewer Authority	---	15-Nov-95	First WSP approved.
Waterford WPCA	15-Nov-99	01-June-93	Modifications submitted under review.
Westerly Water Department	---	06-Nov-95	First WSP approved.

Key to abbreviations: WSP = water supply plan and TBD = to be determined.

\* Water supply plan, as submitted in 1994, is not approved.

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. Most of the plans are relatively up to date and do consider public water supply concerns. However, plans can quickly become outdated as a result of the rapidly changing character of some areas within the region. 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 Planning Document(s)**

<b>Municipality</b>	<b>Planning Documents</b>	<b>Date of Last Publication/Revision</b>
Bozrah	Plan of Development	1964
Colchester	Plan of Development	1990, 1998 (in progress)
East Haddam	Plan of Development	May 1989
East Hampton	Plan of Development	1981
East Lyme	Plan of Development	July 1987
Franklin	Plan of Development	November 1989
Griswold	Plan of Development	February 1993
Groton (Town)	Plan of Development(Town)	August 1990
Groton (City)	Plan of Conservation & Development	August 1996
Hebron	Plan of Conservation & Development	May 1993
Lebanon	Plan of Conservation & Development	Draft 1998
Ledyard	Plan of Conservation & Development	Draft 1998
Lisbon	Town Development Plan	September 1969
Lyme	Plan of Development	November 1990
Marlborough	Plan of Conservation & Development	November 1995
Montville	Plan of Development	1995
New London	Plan of Conservation & Development	March 1997
No. Stonington	Plan of Development	January 1994
Norwich	Plan of Development	October 1989
Old Lyme	Plan of Development	March 1990
Preston	Plan of development	February 1993
Salem	Plan of Development	July 1991
Sprague	Plan of Development	June 1994
Stonington	Plan of Development	June 1978
Voluntown	Plan Of Development	1974
Waterford	Plan of Preservation, Conservation & Development	April 1998

### **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 community water systems 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 community water supply.

### **6.3.1 Community Water System Source Protection Efforts**

The following discussion focuses on the efforts of the larger community water systems 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 community water system serving greater than 1,000 people.

*Colchester Sewer & Water Commission* – The Town of Colchester historically consisted of a relatively small population and low density development. The Town has been experiencing considerable growth over the past several years. Source protection is, therefore, an important issue. The Colchester Sewer & Water Commission is a municipal entity which has input in local planning decisions. Presently, the Town owns land surrounding its supply sources and maintains adequate radii of protection around these sources. None of its supplies are located outside of Town boundaries. Routine inspection of the watershed in which the wells are located is conducted to identify potential sources of contamination.

*Connecticut-American Water Co., Mystic Valley District* – The Mystic Valley District of the Connecticut-American Water Company includes water service to areas within the Towns of Groton and Stonington. Source protection is provided in the form of ownership

of the lands adjacent to the supplies and routine inspections of the watershed lands for potential sources of contamination.

*CWC, Shoreline Region, Point O' Woods System* – It is not anticipated that this system will grow considerably over the next several years through increased development or vary greatly from the popular recreational cottage uses. CWC owns most of the 150-foot sanitary radius of the wells. CWC also maintains a source protection program which includes ownership of land around its sources of supply, on-site field inspections, review of proposed land use activities for potential source protection concerns, and an emergency spill response program.

*CWC, Shoreline Region, Sound View System* – Expansion of this system within the 20-year planning horizon is anticipated for incorporation of adjacent water systems, including the Point O' Woods system. Within the 50-year planning horizon, interconnection with the CWC Guilford system is also anticipated. CWC either owns or controls the 150-foot sanitary radius around the wells of the Sound View system. CWC also maintains a source protection program which includes ownership of land around its sources of supply, on-site field inspections, review of proposed land use activities for potential source protection concerns, and an emergency spill response program.

*East Lyme Water Department* – The Town of East Lyme currently owns or has established easements within the 200-foot radius of all production wells, excluding Well 4. Aquifer regulations are also being implemented, and it is anticipated that upon the adoption and approval of Level A aquifer mapping local land use regulations will be improved to reflect resource management concerns.

The Town of East Lyme maintains a list of open space for aquifer lands not owned by the Town. These lands are high priority for establishment of easements or purchase, if funds become available, to protect water quality.

*Groton Long Point Association* – Short-term planning schedules include the revision of the master plan for the Groton Long Point Association. Source protection is not specifically addressed in the current water supply plan. However, Groton Utilities, from which all of the Association's water is purchased, does have a source protection program.

*Groton Utilities* – Land within a 200-foot radius of the wellheads is either owned by the City of Groton or has designated easements from development. Additionally, an overlay district, referred to as the Water Resource Protection District, has been designed to further protect the watershed of existing source supplies. Groton also encourages local institutions, land trusts, and individuals to preserve open space. Great Brook watershed land located in Ledyard is not protected under the Water Resource Protection District. However, development to date on watershed land has generally been low density. Concurrent with the Town of Ledyard developing its own zoning districts for aquifer protection, Groton Utilities is negotiating with Ledyard for watershed land protection zoning.

Interstate 95 crosses directly over Groton Utilities' active reservoirs. As a result, source protection efforts with respect to this potential source of contamination have been made including the placement of an oil boom (excluding winter months when ice buildup occurs) along the intake. A spill response team composed of in-house staff is also available, including a trailer for their use on-site. Groton Utilities has also been coordinating with the State DOT concerning continued maintenance of sediment basins located between the north and southbound lanes of I-95 as well as for possible installation of chatter strips and Jersey barriers along I-95 as an additional means of protection.

*Jewett City Water Company* – The Jewett City Water Company has committed to coordinate with the Town of Griswold as well as individuals to establish programs for catch basin maintenance, elimination of roadside pesticide use, and discouragement of illegal dumping. The majority of watershed land is forested and under ownership of the community water system. Also, routine inspections of the watershed are performed for potential sources of pollution.

*Ledyard WPCA* – To date, development in the Williams Brook watershed has been low density, although several potential sources of contamination have posed threats to the quality of water supply sources in Ledyard. As a result, zoning districts for aquifer protection have been identified by the Town. This overlay will help protect Ledyard's wellfields and the portion of Groton's supply source watershed that falls within the Town boundary. Additionally, two of SCWA's seven systems in Ledyard, Gray Farms and Tower Divisions have active wells in stratified drift aquifers and are, therefore, included within this zone of protection. When adopted, activities within this overlay area will be restricted for source protection through the application of zoning regulations and best management practices, as well as via a review of proposed actions within the area.

*Montville Correctional Complex* – Source protection at this State-owned facility includes ownership of the land and use of pollution prevention measures. Two oil-containing storage tanks, one above ground and one below ground, are located at the facility and are potential sources of contamination. The wells are maintained and routinely inspected. No further means of source protection for the supplies have been identified by the State.

*Montville Water and Water Pollution Control Authority* – The Town of Montville has initiated efforts to protect water supply sources within its boundaries through the use of an overlay referred to as the Water Resource Protection Zone. The Water Resource Protection Zone will afford a minimum lot size of four acres and restrict uses to residential.

The Town of Montville receives its water from the New London Water Division and owns none of these supply sources. [REDACTED]

[REDACTED]

[REDACTED] At present, the well identified as a potential source of future supply for Montville is not located within this



zone, and if development of the aquifer is pursued, an aquifer protection zone would need to be designated.

*New London Water Division* – New London owns its water supply reservoirs as well as a large percentage of watershed lands surrounding these sources, some of which extend outside the City into Salem, Montville, and Waterford. Table 6-3 indicates the percent of area, including the surface area of the individual reservoirs, owned by the City for each current supply source. Additional land is owned surrounding sources that have been identified as potential future supplies. Review of proposed activities within the water supply watersheds is coordinated between the community water system and local inland wetlands and planning and zoning boards.

**TABLE 6-3**  
**Percent of Active Water Supply Watersheds**  
**Owned by City of New London**

Water Supply Source	Percent
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Source: Comprehensive Water Supply Plan, revised 1998.

[REDACTED]

[REDACTED] and protection through the Town of Montville's zoning regulations. As a result, only small areas of the watersheds have minimum lot sizes less than four acres. [REDACTED]

[REDACTED] The portions of the source supply watersheds in Salem are mostly characterized as two-acre or three-acre zoned lands. [REDACTED]

[REDACTED] also a relatively small lot zoning designation.

[REDACTED]  
[REDACTED] Minimum lot size is three acres (rural residential). In the [REDACTED] and south of I-395, the zoning is mixed with lot sizes less than three acres in size. A Special Aquifer Protection Park has been assigned to the watershed area for the potential future supply source referred to as Polly Brook Well.

*Noank Fire District* – Groton Utilities is responsible for source protection and is the sole supplier of water to the Noank Fire District.

*Norwich Water Department* – The City of Norwich maintains ownership of lands around its water supply reservoirs, totaling approximately 2,000 acres for the four reservoirs. The percentage of land owned by the City within each watershed is: [REDACTED]

Routine inspections of the watersheds are performed by the Norwich Water Department to identify potential sources of contamination. Signage and fencing are used along frontage properties to the surface supplies to discourage trespassing. [REDACTED] mapping has been completed for [REDACTED]

Norwich reviews activities proposed within contributing watersheds to their supply sources both within and outside of the City. [REDACTED]

[REDACTED] been suggested and include cluster zoning, consideration of physical land characteristics as opposed to pre-establishment of zones of uniform lot sizes, and broader use of the rural residential zoning in these areas in place of current designations. [REDACTED]

[REDACTED] located outside City boundaries. Land in [REDACTED]

Specifically, the Department of Public Health oversees water supply system compliance for community 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.

#### **6.4 Coordination Among Community Water Systems**

Formal organizations exist within the region that provide opportunity for administrative and technical staff of community water systems to interact with one another on issues of

water supply. These include the American Water Works Association, the Atlantic States Rural Water Association and the regional planning organizations such as the Southeastern Connecticut Council of Governments, Capitol Region Council of Governments, Midstate Regional Planning Agency, Connecticut River Estuary Regional Planning Agency, and Windham Regional Planning Agency.

In addition, many informal and unwritten agreements currently exist between community water systems and municipalities in the region for exchange of equipment and services. The Connecticut section of the AWWA maintains a database of water systems and has agreed to accept phone calls for providing technical assistance.

## 7.0 ISSUES, NEEDS, AND DEFICIENCIES IN THE REGION

Various issues, needs, and deficiencies have been identified for the southeastern Connecticut WUCC region 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.

*Future Supply Sources* – Many of the community water systems, both small and large, have identified the need for additional water supply sources to meet current and future projected demands. The cost and difficulty in obtaining diversion permits is recognized as a major issue in obtaining these adequate supplies. Presently, there are several diversion permits under review by the Department of Environmental Protection (DEP) with respect to proposed future supply sources. Of particular interest are two conflicting diversion permits recently submitted to the DEP by two independent entities. [REDACTED]

[REDACTED]

will be an issue further evaluated in the *Integrated Report*.

*Water Supply Planning Coordination* – Additional coordination between community water systems with respect to various aspects of water supply, such as shared use of equipment and technical staff, would be desirable. 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. Also, numerous large systems are within short distances from one another and have either not completed or have not pursued formal interconnections. Such interconnections would provide greater security in case of drought or system problems. Another benefit of improved coordination is the potential to establish a more organized and holistic approach to the exploration of future source supply.

*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 iron and manganese are prevalent in many well supplies, and treatment can be costly. This may present a disproportionate burden on small systems.

*Source Protection* – Wellhead and watershed protection for both existing and future supply sources is an issue facing the region. Roadway widening and other construction-related activities in the area may pose a threat to existing sources. In 1997, the Department of Public Health initiated the Source Water Assessment and Protection Program (SWAP). In accordance with this program and EPA guidance, a Source Water Assessment must be completed for each public water supply in the State. This issue will be further evaluated in the Integrated Report.

*Exclusive Service Areas* – There are numerous exclusive service area issues in the region where more than one WUCC member has expressed a desire to service a particular area. There are also overlapping franchise areas. These issues will need to be resolved as part of the exclusive service area delineation.

*High Number of Single Source Supplies* – Many of the smaller community water systems in the region operate with a single source of supply, with no backup supply. This leaves these systems vulnerable to interrupted service due to equipment failures, contamination, and the like.

*Viability of Small Community Water Systems* – The large number of small community water systems in the region is not viewed as an issue per se. However, the viability of these systems is an issue of concern. DPUC has addressed this issue in a viability docket that evaluated management and economic issues, including the disproportionate regulatory burden on small systems, consolidation, and the lack of incentives for take-over of failing systems.

*Discontinuity of Service* – Various community water systems supply water to other systems through existing and planned interconnections. However, many of these systems located in close proximity to one another are not currently interconnected. This is most notable in the towns of Montville, East Hampton, Ledyard and Old Lyme. The City of Groton and Connecticut-American Water Company are also located in close proximity to one another. This is an issue that needs to be further evaluated during the exclusive service area delineation and Integrated Report.

*Need for Water Supply for Economic Expansion versus Population Demands* – Recent trends are suggesting that the need for additional public water supply may be driven more by economic expansion than population growth. The implications on water supply planning will be further evaluated in the Integrated Report.

*Suburban Growth Trend* – There is a noted trend of population growth leaving urban centers and spreading to suburban areas, such as Preston and Colchester. High demands for public water have moved outside of the three large systems to areas such as Ledyard, Montville, and Stonington. These municipalities are now experiencing significant changes to their plans for public water supply. Only 10 years ago, the municipal water systems in both Ledyard and Montville did not exist. These systems are now major public water purveyors. In certain areas where development may be favorable, public water may not be available or only available at a high cost.

*Unknown Growth Impacts* – A unique issue in the region is the unknown impact associated with the flux of visitors to the area. Response to the growing gaming industries, improvements presently underway for increasing tourism via waterfront revitalization, and the possible construction of a large theme park in the region are altering the local economy. Several individual water supply plans have specifically noted this transformation as having an observed influence on the business of water supply that, as yet, can not be quantified.

*Impact of Existing and Future Anticipated Regulations* – Regulations that affect the community water systems will remain an issue for this region as well as for water systems statewide. Radon and land use aquifer protection regulations are examples of such regulations.

*Role of Major Existing and Planned Transportation Routes* – Major transportation routes are planned in the southeast region. Specifically, studies are underway for the Route 2 and Route 11/85 corridors. These may have an impact on growth as well as source protection and land use plans and regulations.

*Impacts of Deregulation of Electrical Industry* – One of the potential impacts of deregulation of the electrical industry is the development of power development facilities around the state and in the region. These facilities, depending upon design, often require water demands in the range of three million gallons or more per day.

These and other various issues 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 proposed stratified drift wells.

a13cwsp-jea.doc



## Appendix A

# Documentation of Notifications and Correspondence



# STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

## MEMORANDUM

TO: The Honorable Miles S. Rapoport, Secretary of State  
Office of the Secretary of State  
30 Trinity Street  
Hartford, Connecticut

FROM: <sup>LM</sup> Lori Mathieu, Planning Analyst  
Water Supplies Section  
Department of Public Health

DATE: July 21, 1998

SUBJECT: Southeast Water Utility Coordinating Committee

This memorandum is to inform you that in accordance with Connecticut General Statute Section 25-33f(a), the department will convene a meeting of the Southeast Water Utility Coordinating Committee on Wednesday, August 5, 1998 at 7:00 p.m. at the Southeastern Mental Health Authority (Uncas on the Thames), 401 West Thames Street, Building 301, Norwich, Connecticut.

A copy of the legal notice is attached for your information. This notice will be published in *The Day* (New London), the *Hartford Courant*, and the *Norwich Bulletin* on July 29th and 30th. The announcement which was mailed to eligible members is also attached for your information.

*c:/sewucc/secofstate/initial meeting*



Phone: (860) 509-7333

Telephone Device for the Deaf (860) 509-7191

410 Capitol Avenue - MS # 51WAT

P.O. Box 340208 Hartford, CT 06134

## **LEGAL NOTICE**

In accordance with Connecticut General Statute 25-33f, public water supplier's and regional planning agency representatives in the Southeast public water supply management area are invited to attend a meeting sponsored by the Connecticut Department of Public Health to officially convene a Water Utility Coordinating Committee. The public meeting will be held on Wednesday, August 5, 1998 at 7:00 p.m. at the Southeast Mental Health Authority (Uncas on the Thames), 401 West Thames Street, Building 301, Norwich, Connecticut. The meeting is open to the public.

The Water Utility Coordinating Committee is responsible under Connecticut General Statute 25-33f for preparing an Areawide Supplement for the twenty-five town Southeast area consisting of Bozrah, Colchester, East Haddam, East Hampton, East Lyme, Franklin, Griswold, Groton, Hebron, Lebanon, Ledyard, Lisbon, Lyme, Marlborough, Montville, New London, North Stonington, Norwich, Old Lyme, Preston, Salem, Sprague, Stonington, Voluntown, Waterford.

Eligible Water Utility Coordinating Committee members are as follows:

- One Representative of each public water system which has either:
  1. 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
  2. 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.
- 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 municipality that are members of such regional planning agency.



# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH

### MEMORANDUM

TO: John Radasci  
Office of Policy and Management

FROM: Gerald R. Iwan, Ph. D., Chief <sup>GRI by je</sup>  
Water Supplies Section  
Department of Public Health

DATE: July 21, 1998

SUBJECT: Southeast Water Utility Coordinating Committee (WUCC)

This memorandum is to request your agency's participation in the Southeast WUCC process. The first meeting of the WUCC is planned for August 5, 1998. Many issues of interest to your programs will be discussed and addressed in the Southeast WUCC meetings and areawide supplement plan. Your active participation is therefore important to the success of the WUCC and for the completeness of the Southeast WUCC areawide supplement plan.

Please contact Lori Mathieu of my staff if you need more information. We look forward to working with you in this important regional water supply planning process.

GRI/ems

*s:/planning/Lori/opm*



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT  
P.O. Box 340308 Hartford, CT 06134



# STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

## MEMORANDUM

**TO:** Thomas Morrissey, Director  
Planning and Standards Division  
Department of Environmental Protection

**FROM:** Gerald R. Iwan, Ph.D, Chief  
*GRI*  
Water Supplies Section

**DATE:** July 21, 1998

**SUBJECT:** Southeast Water Utility Coordinating Committee (WUCC)

This memorandum is to request your participation in the Southeast WUCC process. The first meeting of the WUCC is planned for August 5, 1998. Many issues of interest to your programs will be discussed and addressed in the Southeast WUCC meetings and areawide supplement plan. Your agency's active participation is therefore important to the success of the WUCC and for the completeness of the Southeast WUCC areawide supplement plan.

Please contact Lori Mathieu of my staff if you need more information. We look forward to working with you and your agency in this important regional water supply planning process.

GRI/ems

S:\planning\lori\dep



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT  
P.O. Box 340308 Hartford, CT 06134



# STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

## MEMORANDUM

**TO:** Arthur Gamache  
Department of Public Utility Control

**FROM:** Gerald R. Iwan, Ph.D., Chief  
Water Supplies Section

**DATE:** July 21, 1998

**SUBJECT:** Southeast Water Utility Coordinating Committee (WUCC)

This memorandum is to request your participation in the Southeast WUCC process. The first meeting of the WUCC is planned for August 5, 1998. Many issues of interest to your programs will be discussed and addressed in the Southeast WUCC meetings and areawide supplement plan. Your agency's active participation is therefore important to the success of the WUCC and for the completeness of the Southeast WUCC areawide supplement plan.

Please contact Lori Mathieu of my staff if you need more information. We look forward to working with you and your agency in this important regional water supply planning process.

GRI/ems

S:\planning\lori\dpuc



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT  
P.O. Box 340308 Hartford CT 06134



# STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

## MEMORANDUM

TO: Town Clerks

FROM: <sup>LM</sup> Lori Mathieu, Planning Analyst  
Water Supplies Section

DATE: July 21, 1998

SUBJECT: Initial Meeting of the Southeast Water Utility Coordinating (WUCC)

Please post in your Town Hall the enclosed agenda for the initial meeting of the Southeast (WUCC).  
Contact me directly at (860) 509-7333 If you have any questions.

*c:/sewucc/townclerks/initialmeeting*



Phone: (860) 509-7333

Telephone Device for the Deaf (860) 509-7191

410 Capitol Avenue - MS # 51WAT

P.O. Box 340208 Hartford, CT 06134



# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH

OFFICE OF COMMISSIONER

July 21, 1998

Dear Public Water Supplier and Regional Planning Agency:

I am pleased to announce the convening of a water utility coordinating committee (WUCC) in the Southeast management area on Wednesday, August 5, 1998, at 7:00 p.m. in the Southeastern Connecticut Mental Health Authority Building, Uncas on Thames Campus, 401 West Thames Street (Route 32), Building 301, Norwich, Connecticut. Directions to this facility are enclosed. Each public water system and regional planning agency located in the southeast management area is eligible to be a member of the WUCC. Eligible public water systems must have a source of supply or service area within the management area. Each regional planning agency serving at least one municipality within the Southeast management area is also an eligible member.

I encourage all eligible members to attend this meeting. Your participation is critical to achieve our objective of identifying and discussing public water supply planning issues and concerns to ensure an adequate supply of pure drinking water for the future. To produce a meaningful regional water supply plan for the Southeast area, your participation in the WUCC process is essential.

This meeting has two specific objectives. The first objective is to introduce the WUCC water supply planning process. Presentations will be made by Department of Public Health officials outlining the Connecticut Plan process. Representatives from Milone & MacBroom, Inc., the lead consulting firm assisting the water utility coordinating committee (committee), will introduce the WUCC process. A question and answer period will follow the presentations.

During the second phase of this initial meeting, the committee members must:

- Elect a chairman;
- Adopt a work plan and schedule for the coordinated plan;
- Adopt rules for publication of meeting times and agendas, and for public comment, including notice of a comment period and documentation of responses to comments, and
- Establish meeting times and locations.



PHONE: (860) 509-7101 FAX: (860) 509-7111  
410 CAPITOL AVENUE - MS#13COM, P.O. Box 340308, HARTFORD, CONNECTICUT 06134-0308  
*An Equal Opportunity Employer*

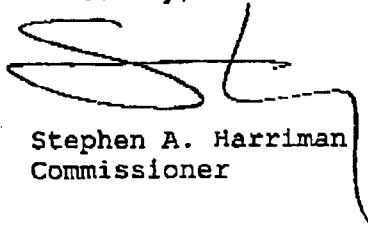


-2-

It is very important for all eligible members to attend this initial meeting. My department looks forward to working with the committee in producing a useful and meaningful regional water supply plan for the southeast area of Connecticut.

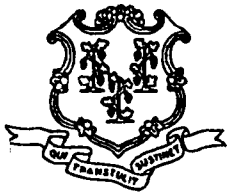
Please contact Ms. Lori Mathieu at (860)509-7333 for further information.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Harriman", with a long horizontal stroke extending to the right.

Stephen A. Harriman  
Commissioner

SAH/jpt  
Enclosure



# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH MEMORANDUM

TO: Chief Administrative Officials  
Local Health Directors  
Planning and Zoning Commissions  
Interested Persons

FROM: <sup>LM</sup> Lori Mathieu, Planning Analyst  
Water Supplies Section

DATE: July 21, 1998

SUBJECT: Initial Meeting of the Southeast Water Utility Coordinating Committee

The State Department of Public Health will convene a Water Utility Coordinating Committee (WUCC) in the Southeast area of Connecticut on Wednesday, August 5, 1998 at 7:00 p.m. in the Southeastern Connecticut Mental Health Authority Building, Uncas on the Thames Hospital, 401 West Thames Street, Building 301, Norwich. Directions to this facility are enclosed. Public water systems and regional planning agencies of the southeast area are eligible to be a member of the WUCC. Eligible public water systems have a source of supply or service area within the management area. Each regional planning agency serving at least one municipality within the Southeast WUCC area are also eligible members.

This memorandum is to notify you of the initial meeting of the Southeast WUCC and to invite your participation at this meeting. Information concerning the WUCC process is included. The objectives of this two year regional water supply planning process are to identify and discuss public water supply conflicts and issues to ensure an adequate supply of pure drinking water for the future of the region. Your knowledge of the region and participation in the WUCC process is key to the project's success. Notification of all Southeast WUCC meetings will continue to be sent to you. Chief administrative officials will receive preliminary and final Southeast WUCC documents.

This meeting has two specific objectives. The first objective is to introduce the WUCC water supply planning process. Presentations will be made by Department of Public Health officials outlining the Connecticut Plan process. Representatives from Milone & MacBroom, Inc., the lead consulting firm assisting the water utility coordinating committee (committee), will introduce the WUCC process. A question and answer period will follow the presentations.

During the second phase of this meeting, the committee is responsible for electing a chairman, adopt a work plan and schedule, adopt rules for publication of meeting times and agendas, and for public comment, including notice of a comment period and documentation of responses to comments, and establish meeting times and locations.

Your participation in the Southeast WUCC process will help to produce a meaningful and accurate plan for drinking water in southeastern Connecticut. We look forward to working with you on this important planning process. Please feel free to contact me at (860) 509-7333 if you have any questions concerning the WUCC process.

Enclosures *c:/sewucc/cao,lhd,p&z/initial meeting*

Phone: (860) 509-7333

Telephone Device for the Deaf (860) 509-7191

410 Capitol Avenue - MS # 51WAT



Ms. Lori Mathieu, Planning Analyst  
Water Supplies Section  
410 Capitol Avenue, MS#51 WAT  
Hartford, CT 06134-0304

**SOUTHEAST WATER UTILITY COORDINATING  
COMMITTEE**

**MEMORANDUM**

TO: Southeast Water Utility Coordinating Committee (SEWUCC) Members

FROM: Thomas Marston and Alfred Dion, SEWUCC Co-Chairmen

SUBJECT: Water Supply Assessment

DATE: November 20 , 1998

The Southeast Water Utility Coordinating Committee (SEWUCC) has started a two year drinking water supply planning process in the southeast public water supply management area. The enclosed map outlines the southeast management boundaries area. This letter is being sent to all eligible SEWUCC members to provide notice that a preliminary assessment of public drinking water supply conditions and problems has been initiated. Eligible SEWUCC members include all public water systems which service over 25 or more persons or supply water to fifteen or more service connections within the southeast area, and regional planning agency serving at least one municipality within the management area.

The Water Supply Assessment document is the first of four documents which will be created through the SEWUCC planning process. This document is a review of the existing public water supply systems, assessing conditions and problems. Specifically, the assessment will include a history of water quality, reliability, service, and supply adequacy. Also, the document will include fire fighting capability, system expansion/replacement, availability and adequacy of future water sources, existing service area boundaries and public water system limits, present and projected growth rates, status of water system planning, land use planning, and coordination between public water systems. Once this data is gathered, an overall assessment will be made to evaluate public water supply conditions and problems in the SEWUCC.

The SEWUCC encourages participation in all stages of the SEWUCC process in order to receive input from all parties impacted. It is important to participate in order to understand how this process and specifically the water supply assessment document will affect your public water system or planning agency.

**SOUTHEAST WATER UTILITY COORDINATING**  
**COMMITTEE**

**MEMORANDUM**

TO: Chief Administrative Officials  
Planning and Zoning Commissions  
Interested Persons

FROM: Thomas Marston and Alfred Dion, SEWUCC Co-Chairmen

SUBJECT: Water Supply Assessment

DATE: November 25, 1998

The Southeast Water Utility Coordinating Committee (SEWUCC) has started a two year drinking water supply planning process in the southeast public water supply management area. The enclosed map outlines the southeast management boundaries area. This letter is being sent to all eligible SEWUCC members, municipalities, and other interested parties to provide notice that a preliminary assessment of public drinking water supply conditions and problems has been initiated. Eligible SEWUCC members include all public water systems which service over 25 or more persons or supply water to fifteen or more service connections within the southeast area, and regional planning agency serving at least one municipality within the management area.

The Water Supply Assessment document is the first of four documents which will be created through the SEWUCC planning process. This document is a review of the existing public water supply systems, assessing conditions and problems. Specifically, the assessment will include a history of water quality, reliability, service, and supply adequacy. Also, the document will include fire fighting capability, system expansion/replacement, availability and adequacy of future water sources, existing service area boundaries and public water system limits, present and projected growth rates, status of water system planning, land use planning, and coordination between public water systems. Once this data is gathered, an overall assessment will be made to evaluate public water supply conditions and problems in the SEWUCC.

The SEWUCC has met on August 5, 1998, September 10, 1998, October 14, 1998, and November 16, 1998. The SEWUCC encourages participation in all stages of the SEWUCC process in order to receive input from all parties impacted. It is important to participate in order to understand how this process and specifically the water supply assessment document will affect your planning.

---

Mr. Al Dion  
Groton Water Department  
295 Meridian Street  
Groton, CT. 06340  
(860) 446-4093

Mr. Thomas Marston  
Connecticut Water Company  
93 West Main Street  
Clinton, CT. 06413  
(860) 669-8630

Engineering,  
Landscape Architecture  
and Environmental Science



John M. Milone, P.E.  
James G. MacBroom, P.E.  
Vincent C. McDermott, F.A.S.L.A.  
Robert A. Jackson, L.S.  
John R. Gilmore, P.E.  
Edward A. Hart, P.E.  
Rahney I. Shaw, L.A.  
Thomas R. Shell, L.A.  
David R. Bragg, P.E., L.S.  
Stephen R. Dietzko, P.E.  
David W. Dickson, L.A.  
Jeanine A. Bonin, P.E.  
Laura A.S. Wildmar, P.E.  
Glen M. Martin, L.A.  
Thomas J. Daly, P.E.  
W. Andrew Greene, P.E.  
Darin L. Overton, P.E.  
Robert J. Bass, P.E.

November 25, 1998

Active WUCC Members

**RE: Southeastern Connecticut WUCC  
Internal Review Draft  
MMI #1017-02**

Dear Active WUCC Member:

Enclosed please find an Internal Review Draft of the Water Supply Assessment. Although this extra review step is not required by regulation or statute, in the interest of fully involving interested participants, we are providing the opportunity to evaluate the draft document. The appendices are not included in this draft. However, this information is summarized in the body of the text. Should you have an interest in reviewing the appendices in their entirety, please contact me.

Initially, the internal review and comment period was scheduled to end on December 10, 1998. However, the WUCC may decide at the December 10 meeting to extend the review time and request an extension on the six-month deadline. Following internal review, there will be a 30-day public comment period during which time WUCC members, regulators, and interested parties may comment.

The next WUCC meeting is scheduled for December 10, 1998 at 7:00 p.m. Verbal comments on the document can be relayed at that time. Prior to the meeting, specific input, comments, or suggestions can be relayed to Milone & MacBroom, Inc. by mail, fax, e-mail, or telephone.

Very truly yours,

MILONE & MACBROOM, INC.

A handwritten signature in cursive script, appearing to read "Jeanine A. Bonin".

Jeanine Armstrong Bonin, P.E.  
Project Manager

Enclosure

cc: Lori Mathieu, DPH

n25scw-jea.doc

DEPT. OF HEALTH SERVICES  
WATER SUPPLIES  
98 NOV 27 PM 1:11  
RECEIVED



# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH

January 12, 1999

Southeastern Connecticut Water  
Utility Coordinating Committee  
C/O Mr. Alfred Dion, Co-chair  
Groton Water Dept.  
295 Meridian Street  
Groton, CT 06340

Southeastern Connecticut Water  
Utility Coordinating Committee  
C/O Mr. Thomas Marston, Co-chair  
Connecticut Water Company  
93 West Main Street  
Clinton, CT 06413

Dear Messrs. Dion and Marston:

Pursuant to your request and the Regulations of Connecticut State Agencies Section 25-33h-1(f)(2), the Department of Public Health herein grants the Southeastern Water Utility Coordinating Committee a sixty day extension for the submission of the Final Water Supply Assessment. This document is now due for submission to this department by April 6, 1999.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gerald R. Iwan".

Gerald R. Iwan, Ph.D., Chief  
Water Supplies Section

c: L. Mathieu, WSS (Project Coordinator)

s:\planning\jim\Wuccext.doc



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT  
P.O. Box 340308 Hartford, CT 06134



STATE OF CONNECTICUT  
DEPARTMENT OF PUBLIC HEALTH

January 25, 1999

The Hartford Courant  
285 Broad Street  
Hartford, Connecticut 06115

Dear Sir:

Attached is a Legal Notice to be inserted in your newspaper on the following consecutive days: February 2 and 3, 1999. Please contact Ms. Joyce Tillman at (860) 509-7333 prior to publishing the notice and advise her of the price.

When billing the State Department of Public Health, we ask that you please use our Requisition Number - RS 99-750170. We also ask that you send us a copy of the Legal Notice as it appeared in your paper and the tear sheet. This should be included with your billing to our office.

If you have any questions concerning this Legal Notice, please contact Joyce Tillman.

Sincerely,

Lori Mathieu  
Planning Analyst  
Water Supplies Section

*c:/sewucc/legalnotice/hartfordcourant*



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT



STATE OF CONNECTICUT  
DEPARTMENT OF PUBLIC HEALTH

January 25, 1999

The Day  
47 Eugene O'Neill Drive  
P.O. Box 1231  
New London, Connecticut 06320

Dear Sir:

Attached is a Legal Notice to be inserted in your newspaper on the following consecutive days: February 2 and 3, 1999. Please contact Ms. Joyce Tillman at (860) 509-7333 prior to publishing the notice and advise her of the price.

When billing the State Department of Public Health, we ask that you please use our Requisition Number - RS 99-750171. We also ask that you send us a copy of the Legal Notice as it appeared in your paper and the tear sheet. This should be included with your billing to our office.

If you have any questions concerning this Legal Notice, please contact Joyce Tillman.

Sincerely,

Lori Mathieu  
Planning Analyst  
Water Supplies Section

LM/jpt  
Attachment

*c:/sewucc/legalnotice/newlondonday*



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT  
P.O. Box 340308 Hartford, CT 06134





# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH

January 25, 1999

Norwich Bulletin  
66 Franklin Street  
Norwich, Connecticut 06360

Dear Sir:

Attached is a Legal Notice to be inserted in your newspaper on the following consecutive days: February 2 and 3, 1999. Please contact Ms. Joyce Tillman at (860) 509-7333 prior to publishing the notice and advise her of the price.

When billing the State Department of Public Health, we ask that you please use our Requisition Number - RS 99-750172. We also ask that you send us a copy of the Legal Notice as it appeared in your paper and the tear sheet. This should be included with your billing to our office.

If you have any questions concerning this Legal Notice, please contact Joyce Tillman.

Sincerely,

A handwritten signature in cursive script that reads "Lori Mathieu".

Lori Mathieu  
Planning Analyst  
Water Supplies Section

c:/sewucc/legalnotice/cl



Phone: (860) 509-7333  
Telephone Device for the Deaf (860) 509-7191  
410 Capitol Avenue - MS # 51WAT  
P.O. Box 340308 Hartford, CT 06134

**LEGAL NOTICE**

In accordance with section 25-33h-1 of the regulations of Connecticut State Agencies, the Southeast Water Utility Coordinating Committee (WUCC) hereby gives notice that its Preliminary Assessment exists and is available for public comment. The Preliminary Water Supply Assessment is a presentation of baseline data that can be used for public water system planning in the Southeast WUCC region. The information will be used in the determination of exclusive service areas later in the process.

The Southeast study area includes the towns of: Bozrah, Colchester, East Haddam, East Hampton, East Lyme, Franklin, Griswold, Groton, Hebron, Lebanon, Ledyard, Lisbon, Lyme, Marlborough, Montville, New London, North Stonington, Norwich, Old Lyme, Preston, Salem, Sprague, Stonington, Voluntown and Waterford.

Copies of the Preliminary Water Supply Assessment are available for public viewing during normal business hours at the following locations:

Connecticut Department of Public Health  
Water Supplies Section  
450 Capitol Avenue  
Hartford, CT. 06134  
(860) 509-7333

Capitol Region Council of Governments  
241 Main Street, 4th Floor  
Hartford, CT 06106  
(860) 522-2217

Connecticut River Estuary Regional Planning Agency  
455 Boston Post Road  
Old Saybrook, CT 06475  
(860) 388-3497

Midstate Regional Planning Agency  
100 Dekoven Drive, P.O. Box 139  
Middletown, CT 06457  
(860) 347-7214

Southeastern Connecticut Council of Governments  
139 Boswell Avenue  
Norwich, CT 06360  
(860) 889-2324

Windham Regional Planning Agency  
968 Main Street  
Willimantic, CT 06226  
(860) 456-2221

The WUCC encourages all interested people to provide comments. Comments must be received by the WUCC on or before the end of the business day on Wednesday, March 3, 1999. Submit comments to:

---

Ms. Jeanine Bonin  
Project Manager  
Milone & MacBroom, Inc.  
716 South Main Street  
Cheshire, Connecticut 06410

---

Dated: February 2, 1999

# Southeastern Connecticut Water Utility Coordinating Committee

---

Convened the Fifth of August 1998 pursuant to Public Act 85-535

## MEMORANDUM

**TO:** Southeastern Connecticut WUCC Region:  
Public Water Systems, Planning & Zoning, Local Health & Interested Parties  
**FROM:** Southeastern Connecticut WUCC Co-Chairs  
**RE:** Preliminary Public Water Supply Assessment  
**DATE:** 01 February 1999

This is a notice of the existence and availability of the *Preliminary Public Water Supply Assessment* for the Southeast Water Utility Coordinating Committee (WUCC). A 30 day public comment period has been set beginning **February 2, 1999** and ending **March 3, 1999**. Comments are due by the end of the business day on **March 3, 1999**. The Preliminary Water Supply Assessment is a presentation of baseline data that can be used for public water system planning in the Southeast WUCC region. The information will be used in the determination of exclusive service areas later in the process.

The Southeast study area includes the towns of: Bozrah, Colchester, East Haddam, East Hampton, East Lyme, Franklin, Griswold, Groton, Hebron, Lebanon, Ledyard, Lisbon, Lyme, Marlborough, Montville, New London, North Stonington, Norwich, Old Lyme, Preston, Salem, Sprague, Stonington, Voluntown and Waterford.

Copies of the Preliminary Water Supply Assessment which include the service area map are available for public viewing during normal business hours at the following locations:

Connecticut Department of Public Health  
Water Supplies Section  
450 Capitol Avenue  
Hartford, CT. 06134  
(860)509-7333

Capitol Region Council of Governments  
241 Main Street, 4th Floor  
Hartford, CT 06106  
(860) 522-2217

Connecticut River Estuary Regional Planning Agency  
455 Boston Post Road  
Old Saybrook, CT 06475  
(860) 388-3497

Midstate Regional Planning Agency  
100 Dekoven Drive, P.O. Box 139  
Middletown, CT 06457  
(860) 347-7214

Southeastern Connecticut Council of Governments  
139 Boswell Avenue  
Norwich, CT 06360  
(860) 889-2324

Windham Regional Planning Agency  
968 Main Street  
Willimantic, CT 06226  
(860) 456-2221

Please contact the Department of Public Health, Water Supplies Section at (860) 509-7333 if you would like a copy of the Southeast WUCC preliminary assessment. The WUCC appreciates and encourages active participation by interested parties. Comments must be received by the WUCC on or before the end of the business day on **Wednesday, March 3, 1999**. Submit comments to:

**Ms. Jeanine Bonin**  
Project Manager  
Milone & MacBroom, Inc.  
716 South Main Street  
Cheshire, Connecticut 06410

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**Mr. Alfred Dion**  
Groton Utilities  
295 Meridian Street  
Groton, CT 06340  
p: (860) 446-4039  
f: (860) 446-4098

*Co-Chairs*

**Mr. Thomas Marston**  
Connecticut Water Company  
96 West Main Street  
Clinton, CT 06413  
p: (860) 669-8630, ext. 254  
f: (860) 669-9326

# Southeastern Connecticut Water Utility Coordinating Committee

Convened the Fifth of August 1998 pursuant to Public Act 85-535

## MEMORANDUM

**TO:** All Interested Parties and Southeastern Connecticut WUCC Members  
**FROM:** Southeastern Connecticut WUCC Co-Chairs  
**RE:** Notice of Availability of the *Preliminary Water Supply Assessment*,  
dated February 1999, for Public Review and Comment  
**DATE:** February 1, 1999

In accordance with Section 25-33h-1 of the Regulations of Connecticut State Agencies, the Southeastern Connecticut Water Utility Coordinating Committee (WUCC) hereby gives notice that its *Preliminary Water Supply Assessment* exists and is available for public comment. The *Preliminary Water Supply Assessment* is a presentation of baseline data that can be used for public water system planning in the Southeastern Connecticut WUCC Region. The information will be used in the determination of exclusive service areas later in the process.

The Southeast study area includes the towns of Bozrah, Colchester, East Haddam, East Hampton, East Lyme, Franklin, Griswold, Groton, Hebron, Lebanon, Ledyard, Lisbon, Lyme, Marlborough, Montville, New London, North Stonington, Norwich, Old Lyme, Preston, Salem, Sprague, Stonington, Voluntown, and Waterford.

Copies of the *Preliminary Water Supply Assessment* are available for public viewing during normal business hours at the following locations:

Connecticut Department of Public Health  
Water Supplies Section  
450 Capitol Avenue  
Hartford, CT 06134  
(860) 509-7333

Connecticut River Estuary Regional Planning Agency  
455 Boston Post Road  
Old Saybrook, CT 06475  
(860) 388-3497

Southeastern Connecticut Council of Governments  
139 Boswell Avenue  
Norwich, CT 06360  
(860) 889-2324

Capitol Region Council of Governments  
241 Main Street, 4<sup>th</sup> Floor  
Hartford, CT 06106

(860) 522-2217

Midstate Regional Planning Agency  
100 Dekoven Drive, P.O. Box 139  
Middletown, CT 06457  
(860) 347-7214

Windham Regional Planning Agency  
968 Main Street  
Willimantic, CT 06226  
(860) 456-2221

The WUCC encourages all interested people to provide comments. Please note that comments must be received by the WUCC on or before the end of the business day on Wednesday, March 3, 1999. Submit comments to the attention of:

Ms. Jeanine Bonin  
Project Manager  
Milone & MacBroom, Inc.  
716 South Main Street  
Cheshire, CT 06410

J. Alfred Dion  
Groton Utilities  
295 Meridian Street  
Groton, CT 06340  
p: (860) 446-4039

Co-Chairs

Mr. Thomas Marston  
Connecticut Water Company  
96 West Main Street  
Clinton, CT 06413  
p: (860) 669-8630, ext. 254

## MEMORANDUM

TO: Southeastern Connecticut WUCC Members and Interested Parties

FROM: Carla A. I. Koyama, Environmental Scientist  
Milone & MacBroom, Inc. caile

DATE: April 12, 1999, WUCC meeting

RE: Public Comment Received on the *Preliminary Water Supply Assessment (February 1999)*  
Southeastern Connecticut Water Utility Coordinating Committee (WUCC)  
MMI #1017-02

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We would like to thank the members of the sub-committee responsible for reviewing public comment received on the *Preliminary Water Supply Assessment (February 1999)* for their valuable insight and participation. Based on discussions with the sub-committee, our office has made every effort to address all comments received and provide explanation for how they were or why they were not incorporated. Attached please find a briefing table summarizing our response. Also, several drafts of the document proposed for submittal to DPH as the *Final Water Supply Assessment* are available for review on the back table of the meeting room.

Our office has performed many of the suggested *minor* refinements to the document. As the attached briefing table states, however, not all comments have been incorporated. As well, some comments revealed the need for clarification of sections beyond that suggested. Even after substantial review of the document, there were several "unknowns" left remaining that the sub-committee, Milone & MacBroom, Inc., and the Department of Public Health have grappled with to resolve. Changes and clarifications, such as these, are not highlighted in the attached draft as they were considered minor.

Sections that have been afforded greater detail of discussion, based on information made available more recently, are highlighted in the draft. These are noted for their significance to the WUCC; some of which are entirely new to the document. Please review these sections of text and provide your comment before the end of today's meeting (April 12).

Please note that several comments were received after the 30-day period prescribed in the legal notice for review (February 2 through March 3, 1999). We would like to emphasize the importance of the deadlines set by the WUCC, most especially, those established in a legal notice. It is extremely important that adequate time to review and incorporate your suggestions is provided, as there is considerable discussion required to best determine how each comment should be addressed.

Again, please review the attached table and draft *Final Water Supply Assessment* and provide your comment by the end of today's meeting (April 12) so we may forward the final report to DPH within the week.

Enclosure

memo on public comments received.doc

## Appendix B

# Summary of System Reliability and Fire Protection Capabilities of Public Water Systems Serving <1,000 People

**Summary of System Reliability and Firefighting Capabilities  
of Public Water Systems Serving <1000 People \***

<b>Public Water System</b>	<b>Back-Up or Emergency Supply</b>	<b>Interconnections</b>	<b>Emergency Power Availabilities</b>	<b>Fire Fighting Capabilities</b>
Abby Estates c/o A&J Realty LLC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Arlington Acres Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Avery Hill Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Barbara's Rest Home	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Beechwood Acres, Lathrop Cluster Wtr.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Bellwood Court	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Birchwood Estates Water Assoc., Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Bolton Associates (Country Manor Apt)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Boxwood Condominium Association	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Carefree Homeowners' Assoc., Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cedar Ridge Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Center for Optimum Care Summit	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chadwick Homeowners' Assoc., Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chatham Acres Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chatham Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chestelm Health Care	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Christy Hill Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cobalt Lodge Health Care & Rehab. CT	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colchester Commons Management Corp.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colchester Courtyards	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colonial Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Connolly's Trailer Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no information was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Back-Up or Emergency Supply	Interconnections	Emergency Power Availabilities	Fire Fighting Capabilities
Countryside Drive Assoc.				
Crystal Lake Associates - Bldg 103/105				
Crystal Lake Associates - Bldg 111/113				
Crystal Lake Associates - Bldg 63/65				
Crystal Lake Associates - Bldg 73				
Crystal Lake Associates - Bldg 83/85				
CT Water Co., Shoreline Region, Bay Mountain Water Co.				
CT Water Co., Shoreline Region, Mason's Island				
CT Water Co., Shoreline Region, SDC Water System				
CT-AM Water Co., East Hampton District				
CT-AM Water Co., Lebanon District				
D&W Trailer Park				
Deer Run Supply				
East Hampton Water & Sewer Authority				
ECRWC, Amston Lake Division				
ECRWC, Baker Hill Division				
ECRWC, Florence Lord (MASH) Division				
ECRWC, Lake Hayward Water Division				
ECRWC, Lebanon Elderly				
ECRWC, London Park Division				
ECRWC, Marlborough Gardens Div.				
ECRWC, Marlborough Health Care Center Inc.				
ECRWC, Mill at Stonecroft Div.				
ECRWC, Ponemah Village				
ECRWC, Sachem Village Condo Division				

\* If no information was available, it was assumed that the public water system did not have the service/capability.



Public Water System	Back-Up or Emergency Supply	Interconnections	Emergency Power Availabilities	Fire Fighting Capabilities
ECRWC, Spice Hill Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Wellwood Village Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Edgemere Condominium Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fair Acres Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Forest Homes Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fort Shantock Manor Apts - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fort Shantock Manor Apts - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fox Laurel Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Freedom Village Elderly Housing (MHA)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Gallup Water, Country Mobile Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Grandview Trailer Park - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Grandview Trailer Park - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Haddam Hills Academy (formerly Founders School)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hanover Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hawk's Nest Beach III	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hawk's Nest II	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hebron Arms Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Heritage Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hillside Condos	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hillside Corporation	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Independence Village Elderly Housing (MHA)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jensens, Inc. Marina Cove Residential	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jewett City Water Co., Hill-N-Dale	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jewett City Water Co., S&W System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Kitemaug Orchard Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no information was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Back-Up or Emergency Supply	Interconnections	Emergency Power Availabilities	Fire Fighting Capabilities
Knob Hill Condominiums	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lakeside Manor Apartments	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lakeview Mobile Home Park	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Latimer Point Fire District	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Laurel Heights Association, Inc.	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Laurel Hill Water Assoc.	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lebanon Pines	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Ledyard Village Homeowners' Assoc, Inc.	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Ledyard WPCA, Gales Ferry System	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Ledyard WPCA, Pfizer System	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lincoln Park Senior Citizen Center	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lisbon Mobile Home Park	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lord's Point System	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lyme Regis, Inc.	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Lymewood Elderly Housing	[Redacted]	[Redacted]	[Redacted]	[Redacted]
M. H. Garden Park	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Mallard Cove Condominium Assoc.	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Martin Realty Inc. Mobile Home Park	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Mashantucket Pequot Water System	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Meadows Apartments (Montville)	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Miami Beach Water Co.	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Mile Creek Apartments	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Montville Countryside LLC	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Mountview Apartments	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Oak Grove Senior Housing Corp.	[Redacted]	[Redacted]	[Redacted]	[Redacted]

\* If no information was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Back-Up or Emergency Supply	Interconnections	Emergency Power Availabilities	Fire Fighting Capabilities
Oak Ridge Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oakdale Heights Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oakland Heights Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pheasant Run Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Platoz Apts. (Total Technology)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Preston Plains Water Company	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Roger's Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Round Hill Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Rye Field Manor Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Salem Manor Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Barrett Division (BAR)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Birchwood Division (BWD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Chesterfield Division (CHF)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Chriswood Division (CWD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Ferry View Heights Div. (FVII)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Gray Farms Division (GRF)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Hillcrest Division (HLC)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Lantern Hill Division (LHD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Mohegan Division (MGN)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, North Stonington Division (NST)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Robin Div. (RBN)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sleepy Hollow Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no information was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Back-Up or Emergency Supply	Interconnections	Emergency Power Availabilities	Fire Fighting Capabilities
St. Thomas More School-System #2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Strawberry Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sunny Waters Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Tunnel Hill Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Utz Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Village Apartments (Montville)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Village Hill Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Waterford Country School	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Wellswood Estates Foundation, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester East Limited Partnership	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester Hills Condominium Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester Village	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Whipple's Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
White Sands Beach Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Wildwood Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Williamsburg Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Woodland Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no information was available, it was assumed that the public water system did not have the service/capability.

System Demand, Available Yield, and  
Margin of Safety for  
Public Water Systems Serving >1,000  
People

Appendix C

## System Demand, Available Yield, and Margin of Safety for Public Water Systems Serving <1000 People

Public Water System	Primary Location Served	Est. Popn. Served (No. of Individuals)	Average Current Demand (gpd) (1)	Existing Available Yield (gpd) (1,2)	Existing Margin of Safety (1)	Peak Hourly Demand (gph) (1)
Abby Estates c/o A&J Realty LLC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Arlington Acres Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Avery Hill Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Barbara's Rest Home	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Beechwood Acres, Lathrop Cluster Wtr.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Bellwood Court	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Birchwood Estates Water Assoc., Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Bolton Associates (Country Manor Apt)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Boxwood Condominium Association	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Carefree Homeowners' Assoc., Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cedar Ridge Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Center for Optimum Care Summit	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chadwick Homeowners' Assoc., Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chatham Acres Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chatham Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Chestelm Health Care	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Christy Hill Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Cobalt Lodge Health Care & Rehab. CT	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colchester Commons Management Corp.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colchester Courtyards	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Colonial Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Connolly's Trailer Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Countryside Drive Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Crystal Lake Associates - Bldg 103/105	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(1) Blanks indicate no data available.

(2) Represents calculated "safe yield" or available water over 18-hr day.

Public Water System	Primary Location Served	Est. Popn. Served (No. of Individuals)	Average Current Demand (gpd) (1)	Existing Available Yield (gpd) (1,2)	Existing Margin of Safety (1)	Peak Hourly Demand (gph) (1)
Crystal Lake Associates - Bldg 111/113	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Crystal Lake Associates - Bldg 63/65	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Crystal Lake Associates - Bldg 73	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Crystal Lake Associates - Bldg 83/85	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT Water Co., Shoreline Region, Bay Mountain Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT Water Co., Shoreline Region, Mason's Island	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT Water Co., Shoreline Region, SDC Water System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT-AM Water Co., East Hampton District	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT-AM Water Co., Lebanon District	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
D&W Trailer Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Deer Run Supply	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
East Hampton Water & Sewer Authority	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Amston Lake Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Baker Hill Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Florence Lord (MASH) Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Lake Hayward Water Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Lebanon Elderly	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, London Park Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Marlborough Gardens Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Marlborough Health Care Center Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Mill at Stonecroft Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Ponemah Village	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Sachem Village Condo Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Spice Hill Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Wellswood Village Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(1) Blanks indicate no data available.  
(2) Represents calculated "safe yield" or available water over 18-hr day.

Public Water System	Primary Location Served	Est. Popn. Served (No. of Individuals)	Average Current Demand (gpd) (1)	Existing Available Yield (gpd) (1,2)	Existing Margin of Safety (1)	Peak Hourly Demand (gph) (1)
Edgemere Condominium Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fair Acres Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Forest Homes Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fort Shantock Manor Apts - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fort Shantock Manor Apts - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fox Laurel Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Freedom Village Elderly Housing (MHA)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Gallup Water, Country Mobile Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Grandview Trailer Park - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Grandview Trailer Park - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Haddam Hills Academy (formerly Founders School)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hanover Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hawk's Nest Beach III	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hawk's Nest II	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hebron Arms Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Heritage Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hillside Condos	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hillside Corporation	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Independence Village Elderly Housing (MHA)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jensens, Inc. Marina Cove Residential	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jewett City Water Co., Hill-N-Dale	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jewett City Water Co., S&W System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Kitemaug Orchard Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Knob Hill Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lakeside Manor Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(1) Blanks indicate no data available.

(2) Represents calculated "safe yield" or available water over 18-hr day.



Public Water System	Primary Location Served	Est. Popn. Served (No. of Individuals)	Average Current Demand (gpd) (1)	Existing Available Yield (gpd) (1,2)	Existing Margin of Safety (1)	Peak Hourly Demand (gph) (1)
Lakeview Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Latimer Point Fire District	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Laurel Heights Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Laurel Hill Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lebanon Pines	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ledyard Village Homeowners' Assoc, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ledyard WPCA, Gales Ferry System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ledyard WPCA, Pfizer System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lincoln Park Senior Citizen Center	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lisbon Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lord's Point System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lyme Regis, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lymewood Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
M. H. Garden Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mallard Cove Condominium Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Martin Realty Inc. Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mashantucket Pequot Water System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Meadows Apartments (Montville)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Miami Beach Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mile Creek Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Montville Countryside LLC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mountview Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oak Grove Senior Housing Corp.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oak Ridge Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oakdale Heights Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(1) Blanks indicate no data available.

(2) Represents calculated "safe yield" or available water over 18-hr day.

Public Water System	Primary Location Served	Est. Popn. Served (No. of Individuals)	Average Current Demand (gpd) (1)	Existing Available Yield (gpd) (1,2)	Existing Margin of Safety (1)	Peak Hourly Demand (gph) (1)
Oakland Heights Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pheasant Run Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Platoz Apts. (Total Technology)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Preston Plains Water Company	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Roger's Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Round Hill Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Rye Field Manor Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Salem Manor Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Barrett Division (BAR)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Birchwood Division (BWD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Chesterfield Division (CHF)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Chriswood Division (CWD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Ferry View Heights Div. (FVH)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Gray Farms Division (GRF)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Hillcrest Division (HLC)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Lantern Hill Division (LHD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Mohegan Division (MGN)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, North Stonington Division (NST)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Robin Div. (RBN)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sleepy Hollow Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(1) Blanks indicate no data available.

(2) Represents calculated "safe yield" or available water over 18-hr day.

Public Water System	Primary Location Served	Est. Popn. Served (No. of Individuals)	Average Current Demand (gpd) (1)	Existing Available Yield (gpd) (1,2)	Existing Margin of Safety (1)	Peak Hourly Demand (gph) (1)
St. Thomas More School-System #5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	800
Strawberry Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sunny Waters Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Tunnel Hill Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Utz Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Village Apartments (Montville)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Village Hill Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Waterford Country School	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Wellswood Estates Foundation, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester East Limited Partnership	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester Hills Condominium Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester Village	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Whipple's Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
White Sands Beach Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Wildwood Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Williamsburg Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Woodland Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(1) Blanks indicate no data available.

(2) Represents calculated "safe yield" or available water over 18-hr day.

Major Facilities of  
Public Water Systems Serving >1,000  
People

Appendix D

## Major Facilities of Public Water Systems Serving <1000 People

Public Water System	Number of Active Sources of Supply	Treatment *	Distribution Pumping Facilities *	Storage *
Abby Estates c/o A&J Realty LLC				
Arlington Acres Mobile Home Park				
Avery Hill Water Assoc.				
Barbara's Rest Home				
Beechwood Acres, Lathrop Cluster Wtr.				
Bellwood Court				
Birchwood Estates Water Assoc., Inc.				
Bolton Associates (Country Manor Apt)				
Boxwood Condominium Association				
Carefree Homeowners' Assoc., Inc.				
Cedar Ridge Water Assoc.				
Center for Optimum Care Summit				
Chadwick Homeowners' Assoc., Inc.				
Chatham Acres Elderly Housing				
Chatham Apartments				
Chestelm Health Care				
Christy Hill Condominiums				
Cobalt Lodge Health Care & Rehab. CT				
Colchester Commons Management Corp.				
Colchester Courtyards				
Colonial Apartments				
Connolly's Trailer Park				
Countryside Drive Assoc.				
Crystal Lake Associates - Bldg 103/105				
Crystal Lake Associates - Bldg 111/113				
Crystal Lake Associates - Bldg 63/65				
Crystal Lake Associates - Bldg 73				
Crystal Lake Associates - Bldg 83/85				
CT Water Co., Shoreline Region, Bay Mountain Water Co.				

\* If no data was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Number of Active Sources of Supply	Treatment *	Distribution Pumping Facilities *	Storage *
CT Water Co., Shoreline Region, Mason's Island	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT Water Co., Shoreline Region, SDC Water System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT-AM Water Co., East Hampton District	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CT-AM Water Co., Lebanon District	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
D&W Trailer Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Deer Run Supply	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
East Hampton Water & Sewer Authority	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Amston Lake Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Baker Hill Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Florence Lord (MASH) Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Lake Hayward Water Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Lebanon Elderly	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, London Park Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Marlborough Gardens Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Marlborough Health Care Center Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Mill at Stonecroft Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Ponemah Village	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Sachem Village Condo Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Spice Hill Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ECRWC, Wellswood Village Division	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Edgemere Condominium Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fair Acres Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Forest Homes Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fort Shantock Manor Apts - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fort Shantock Manor Apts - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Fox Laurel Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Freedom Village Elderly Housing (MHA)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Gallup Water, Country Mobile Div.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Grandview Trailer Park - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Grandview Trailer Park - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no data was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Number of Active Sources of Supply	Treatment *	Distribution Pumping Facilities *	Storage *
Haddam Hills Academy (formerly Founders School)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hanover Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hawk's Nest Beach III	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hawk's Nest II	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hebron Arms Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Heritage Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hillside Condos	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hillside Corporation	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Independence Village Elderly Housing (MHA)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jensens, Inc. Marina Cove Residential	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jewett City Water Co., Hill-N-Dale	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Jewett City Water Co., S&W System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Kitemaug Orchard Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Knob Hill Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lakeside Manor Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lakeview Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Latimer Point Fire District	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Laurel Heights Association, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Laurel Hill Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lebanon Pines	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ledyard Village Homeowners' Assoc, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ledyard WPCA, Gales Ferry System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ledyard WPCA, Pfizer System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lincoln Park Senior Citizen Center	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lisbon Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lord's Point System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lyme Regis, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lymewood Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
M. H. Garden Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mallard Cove Condominium Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no data was available, it was assumed that the public water system did not have the service/capability.

Public Water System	Number of Active Sources of Supply	Treatment *	Distribution Pumping Facilities *	Storage *
Martin Realty Inc. Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mashantucket Pequot Water System	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Meadows Apartments (Montville)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Miami Beach Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mile Creek Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Montville Countryside LLC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mountview Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oak Grove Senior Housing Corp.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oak Ridge Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oakdale Heights Water Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Oakland Heights Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pheasant Run Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Platoz Apts. (Total Technology)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Pleasure Valley M.H.P. - System 3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Preston Plains Water Company	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Roger's Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Round Hill Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Rye Field Manor Elderly Housing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Salem Manor Condominiums	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Barrett Division (BAR)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Birchwood Division (BWD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Chesterfield Division (CHF)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Chriswood Division (CWD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Ferry View Heights Div. (FVH)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Gray Farms Division (GRF)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Hillcrest Division (HLC)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Lantern Hill Division (LHD)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Mohegan Division (MGN)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no data was available, it was assumed that the public water system did not have the service/capability.



Public Water System	Number of Active Sources of Supply	Treatment *	Distribution Pumping Facilities *	Storage *
SCWA, North Stonington Division (NST)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SCWA, Robin Div. (RBN)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sleepy Hollow Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
St. Thomas More School-System #5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Strawberry Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sunny Waters Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Tunnel Hill Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Utz Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Village Apartments (Montville)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Village Hill Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Waterford Country School	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Wellswood Estates Foundation, Inc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester East Limited Partnership	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester Hills Condominium Assoc.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Westchester Village	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Whipple's Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
White Sands Beach Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Wildwood Water Co.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Williamsburg Apartments	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Woodland Mobile Home Park	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

\* If no data was available, it was assumed that the public water system did not have the service/capability.

# Population Data for Public Water Systems Serving >1,000 People

## Appendix E

## Population Data for Public Water Systems for Public Water Systems Serving <1,000 People

Water Utility	System	DPH SID	Primary Location Served	Population Served (No. of Individuals)
Abby Estates c/o A&J Realty LLC	Abby Estates c/o A&J Realty LLC	67002	Hebron	100
Arlington Acres Mobile Home Park	Arlington Acres Mobile Home Park	137007	Stonington	392
Avery Hill Water Assoc.	Avery Hill Water Assoc.	72006	Ledyard	117
Barbara's Rest Home	Barbara's Rest Home	42100	East Hampton	30
Beechwood Acres, Lathrop Cluster Wtr.	Beechwood Acres, Lathrop Cluster Wtr.	86707	Montville	77
Bellwood Court	Bellwood Court	42003	East Hampton	32
Birchwood Estates Water Assoc., Inc.	Birchwood Estates Water Assoc., Inc.	79005	Marlborough	260
Bolton Associates (Country Manor Apt)	Bolton Associates (Country Manor Apt)	67100	Hebron	72
Boxwood Condominium Association	Boxwood Condominium Association	105101	Old Lyme	56
Carefree Homeowners' Assoc., Inc.	Carefree Homeowners' Assoc., Inc.	71001	Lebanon	168
Cedar Ridge Water Assoc.	Cedar Ridge Water Assoc.	102001	North Stonington	496
Center for Optimum Care Summit	Center for Optimum Care Summit	58100	Griswold	125
Chadwick Homeowners' Assoc., Inc.	Chadwick Homeowners' Assoc., Inc.	105001	Old Lyme	292
Chatham Acres Elderly Housing	Chatham Acres Elderly Housing	42401	East Hampton	45
Chatham Apartments	Chatham Apartments	42007	East Hampton	30
Chestelm Health Care	Chestelm Health Care	41106	East Haddam	101
Christy Hill Condominiums	Christy Hill Condominiums	72104	Ledyard	86
Cobalt Lodge Health Care & Rehab. CT	Cobalt Lodge Health Care & Rehab. CT	42101	East Hampton	60
Colchester Commons Management Corp.	Colchester Commons Management Corp.	28601	Colchester	160
Colchester Courtyards	Colchester Courtyards	28004	Colchester	276
Colonial Apartments	Colonial Apartments	59007	Groton	60
Connolly's Trailer Park	Connolly's Trailer Park	58006	Griswold	75
Countryside Drive Assoc.	Countryside Drive Assoc.	104006	Norwich	60
Crystal Lake Associates	Crystal Lake Associates - Bldg 103/105 (system 1)	121005	Salem	40
Crystal Lake Associates	Crystal Lake Associates - Bldg 111/113 (system 2)	121004	Salem	40

<b>Water Utility</b>	<b>System</b>	<b>DPH SID</b>	<b>Primary Location Served</b>	<b>Population Served (No. of Individuals)</b>
Crystal Lake Associates	Crystal Lake Associates - Bldg 63/65 (system 3)	121003	Salem	40
Crystal Lake Associates	Crystal Lake Associates - Bldg 73 (system 4)	121002	Salem	24
Crystal Lake Associates	Crystal Lake Associates - Bldg 83/85 (system 5)	121006	Salem	40
CT Water Co., Shoreline Region	Bay Mountain Water Co.	58004	Griswold	440
CT Water Co., Shoreline Region	Mason's Island	137005	Stonington	429
CT Water Co., Shoreline Region	SDC Water System	147001	Voluntown	162
CT-AM Water Co., Mystic Valley District	East Hampton District	42001	East Hampton	168
CT-AM Water Co., Mystic Valley District	Lebanon District	71002	Lebanon	288
D&W Trailer Park	D&W Trailer Park	86115	Montville	39
Deer Run Supply	Deer Run Supply	86005	Montville	53
East Hampton Water & Sewer Authority	East Hampton Water & Sewer Authority	42903	East Hampton	85
ECRWC	Amston Lake Division	6733	Hebron	770
ECRWC	Baker Hill Division	42901	East Hampton	156
ECRWC	Florence Lord (MASHI) Division	79120	Marlborough	30
ECRWC	Lake Hayward Water Division	41079	East Haddam	563
ECRWC	Lebanon Elderly	71107	Lebanon	24
ECRWC	London Park Division	67001	Hebron	234
ECRWC	Marlborough Gardens Div.	79003	Marlborough	156
ECRWC	Marlborough Health Care Center Inc.	79100	Marlborough	370
ECRWC	Mill at Stonecroft Div.	67201	Hebron	97
ECRWC	Ponemah Village	28007	Colchester	35
ECRWC	Sachem Village Condo Division	79201	Marlborough	78
ECRWC	Spice Hill Div.	42803	East Hampton	190
ECRWC	Wellswood Village Division	67202	Hebron	52
Edgemere Condominium Assoc., Inc.	Edgemere Condominium Association, Inc.	42002	East Hampton	520
Fair Acres Mobile Home Park	Fair Acres Mobile Home Park	137802	Stonington	202

<b>Water Utility</b>	<b>System</b>	<b>DPH SID</b>	<b>Primary Location Served</b>	<b>Population Served (No. of Individuals)</b>
Forest Homes Water Association	Forest Homes Water Assoc.	79001	Marlborough	160
Fort Shantock Manor Apts	Fort Shantock Manor Apts - System 1	86010	Montville	144
Fort Shantock Manor Apts	Fort Shantock Manor Apts - System 2	86708	Montville	36
Fox Laurel Mobile Home Park	Fox Laurel Mobile Home Park	86111	Montville	40
Freedom Village Elderly Housing (MHA)	Freedom Village Elderly Housing (MHA)	86630	Montville	48
Gallup Water, Country Mobile Div.	Gallup Water, Country Mobile Div.	58002	Griswold	193
Grandview Trailer Park	Grandview Trailer Park - System 1	72101	Ledyard	60
Grandview Trailer Park	Grandview Trailer Park - System 2	72704	Ledyard	30
Haddam Hills Academy	Haddam Hills Academy (formerly Founders School)	41801	East Haddam	155
Hanover Park	Hanover Park	133004	Sprague	48
Hawk's Nest Beach III	Hawk's Nest Beach III	105003	Old Lyme	420
Hawk's Nest II	Hawk's Nest II	105002	Old Lyme	93
Hebron Arms Apartments	Hebron Arms Apartments	67004	Hebron	39
Heritage Apartments	Heritage Apartments	72010	Ledyard	108
Hillside Condos	Hillside Condos	67005	Hebron	96
Hillside Corporation	Hillside Corporation	79002	Marlborough	124
Independence Village Elderly Housing (MHA)	Independence Village Elderly Housing (MHA)	86019	Montville	50
Jensens, Inc. Marina Cove Residential	Jensens, Inc. Marina Cove Residential	86014	Montville	71
Jewett City Water Company	Hill-N-Dale	73002	Griswold	76
Jewett City Water Company	S&W System	58005	Lisbon	312
Kitemaug Orchard Association, Inc.	Kitemaug Orchard Association, Inc.	86004	Montville	472
Knob Hill Condominiums	Knob Hill Condominiums	28005	Colchester	84
Lakeside Manor Apartments	Lakeside Manor Apartments	86009	Montville	72
Lakeview Mobile Home Park	Lakeview Mobile Home Park	58003	Griswold	96
Latimer Point Fire District	Latimer Point Fire District	137801	Stonington	282
Laurel Heights Association, Inc.	Laurel Heights Association, Inc.	105623	Old Lyme	45

<b>Water Utility</b>	<b>System</b>	<b>DPH SID</b>	<b>Primary Location Served</b>	<b>Population Served (No. of Individuals)</b>
Laurel Hill Water Assoc.	Laurel Hill Water Assoc.	79004	Marlborough	100
Lebanon Pines	Lebanon Pines	71004	Lebanon	124
Ledyard Village Homeowners' Assoc, Inc.	Ledyard Village Homeowners' Assoc, Inc.	72005	Ledyard	184
Ledyard WPCA	Gales Ferry System	72705	Ledyard	500
Ledyard WPCA	Pfizer System	72007	Ledyard	40
Lincoln Park Senior Citizen Center	Lincoln Park Senior Citizen Center	114002	Preston	52
Lisbon Mobile Home Park	Lisbon Mobile Home Park	73003	Lisbon	90
Lord's Point System	Lord's Point System		Stonington	524
Lyme Regis, Inc.	Lyme Regis, Inc.	105014	Old Lyme	32
Lymewood Elderly Housing	Lymewood Elderly Housing	105622	Old Lyme	50
M H Garden Park	M H Garden Park	102100	North Stonington	90
Mallard Cove Condominium Assoc.	Mallard Cove Condominium Assoc.	42701	East Hampton	177
Martin Realty Inc. Mobile Home Park	Martin Realty Inc. Mobile Home Park	86113	Montville	29
Mashantucket Pequot Water System	Mashantucket Pequot Water System	72301	Ledyard	80
Meadows Apartments (Montville)	Meadows Apartments (Montville)	86102	Montville	301
Miami Beach Water Co.	Miami Beach Water Co.	105102	Old Lyme	440
Mile Creek Apartments	Mile Creek Apartments	105013	Old Lyme	60
Montville Countryside LLC	Montville Countryside LLC	86106	Montville	30
Mountview Apartments	Mountview Apartments	86105	Montville	102
Oak Grove Senior Housing Corp.	Oak Grove Senior Housing Corp.	41301	East Haddam	72
Oak Ridge Mobile Home Park	Oak Ridge Mobile Home Park	86017	Montville	70
Oakdale Heights Water Assoc.	Oakdale Heights Water Assoc.	86003	Montville	876
Oakland Heights Mobile Home Park	Oakland Heights Mobile Home Park	104008	Norwich	225
Pheasant Run Condominiums	Pheasant Run Condominiums	72009	Ledyard	144
Platoz Apts. (Total Technology)	Platoz Apts. (Total Technology)	86702	Montville	54
Pleasure Valley M.H.P.	Pleasure Valley M.H.P. - System 1	104100	Norwich	150

<b>Water Utility</b>	<b>System</b>	<b>DPH SID</b>	<b>Primary Location Served</b>	<b>Population Served (No. of Individuals)</b>
Pleasure Valley M.H.P.	Pleasure Valley M.H.P. - System 2	104102	Norwich	115
Pleasure Valley M.H.P.	Pleasure Valley M.H.P. - System 3	104103	Norwich	65
Preston Plains Water Company	Preston Plains Water Company	114001	Preston	400
Roger's Mobile Home Park	Roger's Mobile Home Park	59702	Groton	55
Round Hill Apartments	Round Hill Apartments	73102	Lisbon	36
Rye Field Manor Elderly Housing	Rye Field Manor Elderly Housing	105624	Old Lyme	78
Salem Manor Condominiums	Salem Manor Condominiums	121001	Salem	32
SCWA	Barrett Division (BAR)	72001	Ledyard	300
SCWA	Birchwood Division (BWD)	86901	Montville	76
SCWA	Chesterfield Division (CHF)	86008	Montville	352
SCWA	Chriswood Division (CWD)	72703	Ledyard	160
SCWA	Ferry View Heights Div. (FVH)	72002	Ledyard	320
SCWA	Gray Farms Division (GRF)	72008	Ledyard	311
SCWA	Hillcrest Division (HLC)	86013	Montville	154
SCWA	Lantern Hill Division (LHD)	137002	Stonington	53
SCWA	Mohegan Division (MGN)	86002	Montville	925
SCWA	North Stonington Division (NST)	102002	North Stonington	606
SCWA	Robin Div. (RBN)	86710	Montville	256
Sleepy Hollow Mobile Home Park	Sleepy Hollow Mobile Home Park	72105	Ledyard	51
St. Thomas More School	St. Thomas More School-System #2	86018	Montville	344
St. Thomas More School	St. Thomas More School-System #3	86125	Montville	326
St. Thomas More School	St. Thomas More School-System #5	86126	Montville	160
Strawberry Park	Strawberry Park	114047	Preston	880
Sunny Waters Mobile Home Park	Sunny Waters Mobile Home Park	104009	Norwich	360
Tunnel Hill Mobile Home Park	Tunnel Hill Mobile Home Park	73101	Lisbon	55
Utz Mobile Home Park	Utz Mobile Home Park	86021	Montville	90

<b>Water Utility</b>	<b>System</b>	<b>DPH SID</b>	<b>Primary Location Served</b>	<b>Population Served (No. of Individuals)</b>
Village Apartments (Montville)	Village Apartments (Montville)	86703	Montville	132
Village Hill Apartments	Village Hill Apartments	71100	Lebanon	36
Waterford Country School, Inc.	Waterford Country School	152006	Waterford	100
Wellswood Estates Foundation, Inc.	Wellswood Estates Foundation, Inc.	67102	Hebron	56
Westchester East Limited Partnership	Westchester East Limited Partnership	42702	East Hampton	153
Westchester Hills Condominium Assoc.	Westchester Hills Condominium Assoc.	28003	Colchester	168
Westchester Village	Westchester Village	28200	Colchester	252
Whipple's Mobile Home Park	Whipple's Mobile Home Park	59801	Groton	164
White Sands Beach Water Co.	White Sands Beach Water Co.	105076	Old Lyme	600
Wildwood Water Co.	Wildwood Water Co.	105015	Old Lyme	132
Williamsburg Apartments	Williamsburg Apartments	72106	Ledyard	63
Woodland Mobile Home Park	Woodland Mobile Home Park	152005	Waterford	160

**TOTAL POPULATION SERVED BY COMMUNITY WATER SYSTEMS: 25,021**