



CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

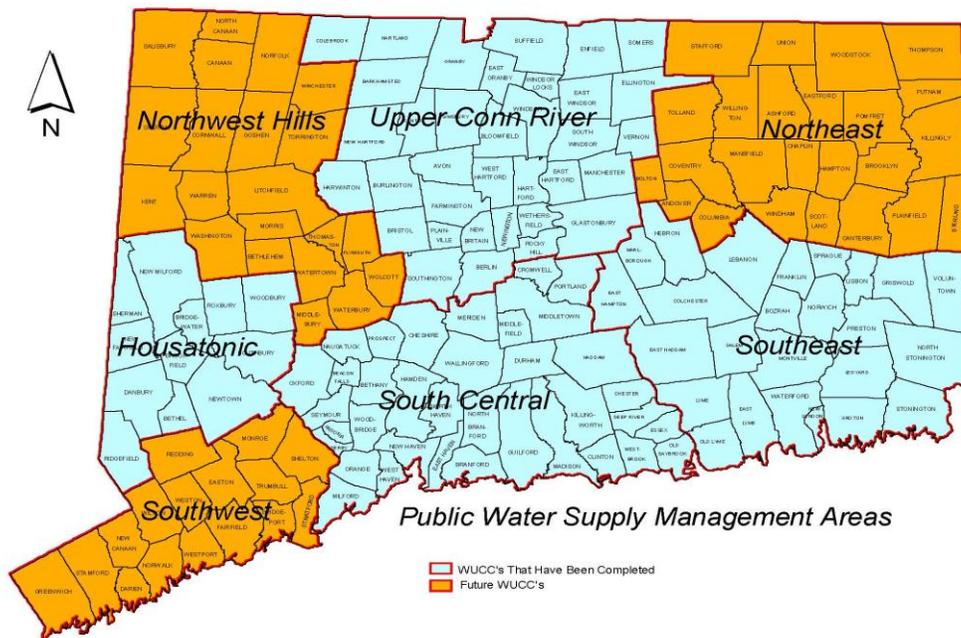
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Governor M. Jodi Rell Commissioner J. Robert Galvin, M.D., M.P.H.

ANNUAL REPORT ON THE WATER UTILITY COORDINATING COMMITTEE (WUCC) PLANNING PROCESS FOR PUBLIC WATER SYSTEMS

(PURSUANT TO CONNECTICUT GENERAL STATUTE 25-33n)

April 2010



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I) EXECUTIVE SUMMARY:

Connecticut General Statute (CGS) Section 25-33n requires the Commissioner of Public Health to submit a report to the joint standing committees of the General Assembly having cognizance of matters relating to the environment and energy and public utilities. The report summarizes the status of the Water Utility Coordinating Committee (WUCC) planning process for public water systems established under Section 25-33g to 25-33j, inclusive, for the year ending the proceeding June thirtieth and efforts to expedite the completion of the process. Activities that occurred between the dates of July 1, 2008 to June 30, 2009 are detailed within this report. A general background discussion of the history of water supply planning, a chronological summary of the WUCC process since its inception, and the current status of the water supply planning process requirements pursuant to CGS 25-33g to 25-33j is provided in **Appendix 1**.

The Department of Public Health (DPH) has the authority and responsibility per C.G.S. 25-33(c) to coordinate the planning of public water supply systems. This authority stems from the legislative finding of the General Assembly that an adequate supply of potable water for domestic, commercial and industrial use is vital to the health and well-being of the people of the state. DPH further has the authority per C.G.S. 25-32(a) to ensure the purity and adequacy of public drinking water supply in Connecticut. To fulfill these two mandated responsibilities; DPH, as the lead agency for water supply planning per C.G.S. 25-32(d) and C.G.S. 25-33c through C.G.S. 25-33n, attempts to ensure that major public water suppliers possess a sustainable supply currently and throughout a 50 year planning period. Safe, sustainable water supplies are necessary to protect public health, safety, and the economic prosperity of the state.

Water supply plans and the WUCC planning process identify potential solutions to local and regional public drinking water supply issues and assist in assuring future availability, viability, and purity of the state's public drinking water supplies. Sustainability issues, including the necessary infrastructure investments required for the state's existing large public drinking water suppliers, are also identified, scheduled and tracked within water supply plans. Long term water supply planning both at the local and regional level helps keep our state healthy and competitive in terms of attracting the new industry and businesses required to create additional employment opportunities. Major issues identified through the current water supply planning process that could hamper successful long term water supply planning, necessary infrastructure development, and the sustainability of some of Connecticut's largest public water suppliers are identified below in **Section IIC-Critical Issues** and **Section IID-New Developments**.

II) INTRODUCTION:

A) Legislative Intent:

"An Act Concerning a Connecticut Plan for Public Water Supply Coordination" (Public Act 85-535) was passed by the Connecticut General Assembly during the 1985 legislative session. The General Assembly found that "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 (DPH) shall administer a procedure to coordinate the planning of public water supply systems." The act provides for a coordinated approach to long-range water supply planning by addressing water quality and quantity issues from an area-wide perspective in a cost effective manner.

The WUCC planning process delineated the state into seven geographical areas and public water systems serving greater than 1,000 persons within the delineated geographical area were required to prepare an individual water supply plan every five years. The WUCC management areas were also required by CGS Section 25-33h to create a coordinated regional water supply plan which was intended to be updated every ten years. The original concept was for a grass roots community based planning process to allow for a consolidated, cost effective approach to problem resolution. A companion process, CGS 16-262m: Certificate of Public Convenience and Necessity (CPCN), was similarly created to eliminate the proliferation of small water systems henceforward due to concerns regarding their long term viability. The CPCN process was intended to dovetail with the efforts of the WUCC water supply planning process

to create an orderly expansion of water supply service throughout Connecticut and to ensure the long term viability of any new small community public water systems created.

Public Act 89-327 enacted water resources goals and policies for the State of Connecticut which were institutionalized within the water supply planning regulations as revisions to C.G.S. Section 25-32(d). The State of Connecticut water resources goals and policies added to the water supply planning process were the preservation and protection of water supply watershed lands, the prevention of degradation of surface water and groundwater, the protection of groundwater recharge areas critical to existing and potential drinking water supplies, the conservation of water resources through methodologies designed to promote the efficient use of water, the reduction or elimination of the waste of water through water supply management practices, the prevention of contamination of water supply sources or reduction in the availability of future water supplies, and to make water resources conservation a priority in all decisions.

B) Current Status of WUCC Process:

The Housatonic, South Central, Upper Connecticut, and Southeast WUCC management areas have been convened to date and Exclusive Service Area (ESA) providers have been designated in these management areas. However, coordinated regional management area plans for the Housatonic, South Central, Upper Connecticut management areas have not been approved by DPH due to outdated information in their respective coordinated regional plans by the time individual water supply plans had been approved for each utility within the management areas. The Southeast WUCC coordinated regional plan has been approved by DPH and serves as an example of the effectiveness of regional cooperation and the resultant available solutions possible when neighboring communities and public service utilities partner in an open, transparent process. The SEWUCC member communities of Groton, Ledyard, Montville, Norwich, New London, Waterford, and the Mohegan Tribal Nation all worked together to construct a major regional system to convey safe and reliable public water service in a cost effective manner. This regional pipeline was the top priority for the SEWUCC.

The Northeast, Northwest Hills, and Southwest WUCC areas have not been convened to date, thus, no Exclusive Service Area (ESA) providers exist for responsible ownership or operation of newly created public water systems. The following municipalities are affected: Andover, Ashford, Bethlehem, Bolton, Bridgeport, Brooklyn, Canaan, Canterbury, Chaplin, Columbia, Cornwall, Coventry, Darien, Eastford, Easton, Fairfield, Goshen, Greenwich, Hampton, Kent, Killingly, Litchfield, Mansfield, Middlebury, Monroe, Morris, New Canaan, Norfolk, North Canaan, Norwalk, Plainfield, Plymouth, Pomfret, Putnam, Redding, Salisbury, Scotland, Sharon, Shelton, Stafford, Stamford, Sterling, Stratford, Thomaston, Thompson, Tolland, Torrington, Trumbull, Union, Warren, Washington, Waterbury, Watertown, Weston, Westport, Willington, Wilton, Winchester, Windham, Wolcott, and Woodstock. The Northeast and Northwest WUCC management areas are the fastest growing areas in Connecticut as far as creating new small public water systems which adds to the urgency to convene the remaining WUCC management areas and assign ESA providers.

C) Critical Needs:

Connecticut is at a critical juncture in regards to water supply planning and water resource availability and Connecticut must plan now for action to preserve this most precious natural resource for future generations. To assist decision makers in making wise choices regarding the future of Connecticut's water resources and necessary water system infrastructure investments at this critical point, the DPH Drinking Water Section Planning Unit instituted significant positive changes to the water supply planning process and the review of water supply plans including calculating accurate and consistently evaluated margin of safety data for Connecticut's largest public water systems. This newly compiled statewide data base reveals that many of the 84 major public water suppliers who submit water supply plans, particularly large municipal systems, do not have an adequate minimum margin of safety or in some cases any margin of safety at all for their continued operation. A minimum adequate margin of safety is necessary to

provide protection for a public water system against droughts, sudden increases in consumption which may occur during a dry period, system redundancy failures, and other various public water supply emergencies.

The potential loss or reduction of current safe yield capabilities at public water system due to proposed Department of Environmental Protection (DEP) minimum stream flow regulations is magnified for the water utilities that are already supply deficient and do not have a minimum adequate margin of safety. To assist in assuring the current and future viability and sustainability of Connecticut's major public water suppliers, the newly calculated margin of safety data for these public water systems has been made available to assist in effectively implementing the proposed minimum stream flow release regulations while still protecting the purity and adequacy of public water supplies pursuant to C.G.S. 25-32a. This critical data on an individual utility, regional, and statewide basis will also greatly assist in making wise choices on any necessary future water infrastructure improvements to be implemented in Connecticut. DPH staff will link this critical need for improved water infrastructure to the Drinking Water State Revolving Loan Fund (DWSRF) and the Needs Survey of the United States Environmental Protection Agency (EPA) conducted every four years which helps determine State funding allotments.

The timing of the DPH water supply planning improvements, available funding sources for building system capacity, and DEP's minimum stream flow release initiative can be fortuitous and provide a great opportunity for DPH to partner with DEP and public water systems to determine the best available and most cost effective solutions to ensure the long term viability of Connecticut's public water suppliers and water resources. It is essential to ensure the supply deficient public water systems in Connecticut obtain additional supply to minimally ensure an adequate margin of safety. DPH is adamant that Connecticut remain one out of only two states in the U.S. that utilizes only the most pristine sources of water supply for drinking water as Connecticut currently uses no Class B surface water sources where wastewater treatment discharges are allowed. DPH seeks to ensure through the water supply planning process that protection of water resources in Connecticut continues to provide for an adequate supply of the cleanest water for its highest use – human consumption. DPH is also structuring a statewide plan, detailed below under **New Developments** with a goal of assuring all 84 public water systems that prepare water supply plans will have an adequate and sustainable margin of safety by the year 2020.

D) New Developments:

A critical need still exists to assign Exclusive Service Area (ESA) providers in the Northeast, Northwest Hills, and Southwest WUCC management areas. To assist in facilitating and addressing this need, DPH will continue to sponsor regional forums in 2010 in these three management areas. The regional forums will apprise chief elected officials, regional planning officials, local health directors, and community public water systems of the history of the WUCC process, the relevance and importance to their communities, and upcoming new mandates. The forums will feature presentations from participants of already convened WUCC management areas to offer experience based guidance based upon their own successes and failures. Input from local officials will also be sought for recommended process revisions that may better suit their communities in ensuring an adequate supply of water for all residents. The first regional forum held July 14, 2009 for the Northeast management area in Ashford was well received by the attendees including water companies, local officials, State officials, environmental groups, and the general public.

A DPH Commissioner's WUCC Advisory Committee was instituted and held regular meetings on December 3, 2008 and June 25, 2009. This committee will be offering recommendations on necessary changes to the current WUCC and water supply planning process. It is also expected this WUCC advisory committee can offer guidance and consistency to the individual WUCC management areas statewide. Additional representatives for the Advisory Committee will be solicited at the three regional forums convened to ensure fair and equal representation statewide.

DPH formed a Water Supply Planning Technical Advisory Committee (WSPTAC) in 2009 comprised of staff from water companies and consultant engineering firms that are involved with writing water supply plans. This technical advisory group has initially focused its efforts on safe yield, available water, and margin of safety which are essential foundations of water supply planning and will aid in consistent water supply plan preparation statewide. A fundamental aspect of any successful water supply planning process is the proper definition of technical terms and the proper calculation of safe yield, available water, margin of safety, and other fundamental foundations of water supply planning in a consistent manner statewide by all water companies. With the availability of consistent, accurate fundamental water supply data statewide, DPH's water supply planning staff will be able to provide consistent, accurate water supply assessments on a local, regional, or statewide basis. Such consistent, accurate data statewide has not always been regularly provided to the regulatory agencies in the past. To address this fundamental deficiency, the DPH Planning Unit formed the above mentioned technical committee and also undertook a massive data collection and analysis project to ensure the best available data from the most recently approved water supply plans was readily available. Current and accurate data on safe yield, available water, margin of safety, and potential new sources is now available on an individual water company, regional, and statewide basis. This newly available data is critical information to begin discussions on diversion permits, water allocation, and potential future minimum stream flow requirements and the connection to water supply planning necessary to ensure a safe and an adequate water supply for all residents of Connecticut.

A meeting was held with Connecticut Water Works Association (CWWA) leaders at DPH on January 8, 2009 to discuss possible revisions of the water supply planning regulations during the 2009 legislative session. A major revision extended the required time period for plan updates from five years to six years with a provision for an extension to nine years for any water company satisfactorily meeting all their regulatory obligations including maintaining a minimum adequate margin of safety and acquiring Sale of Excess Water permits for bulk water sales to another water company. A presentation on changes to the water supply planning process was also given to the CWWA/CT Section American Water Works Association (AWWA) general membership at the CWWA/CT Section AWWA Annual Conference on October 23, 2009 in Wallingford.

DPH will draft a comprehensive plan to assist in addressing the critical issues surrounding water resources in Connecticut and many additional items of concern for water supply planning statewide. The plan entitled The 2020 Plan will address an adequate minimum margin of safety at all public water systems that prepare water supply plans, infrastructure investment in the water industry to ensure long term sustainability of public water systems, the lack of required Sale of Excess water permits within the industry, a lack of capacity at small community public water systems which has led to an increase in these systems petitioning the State for take-over proceedings, and the lack of a dedicated water infrastructure fund or a grant mechanism to link up with the Drinking Water State Revolving Loan Fund (DWSRF) to encourage additional support of or investment by water companies in implementing much needed regional water supply solutions.

III) CURRENT STATUS OF WUCC MANAGEMENT AREAS:

A) HOUSATONIC WUCC:

Housatonic Member Towns: Bethel, Bridgewater, Brookfield, Danbury, New Fairfield, New Milford, Newtown, Ridgefield, Roxbury, Sherman, Southbury, Woodbury

Housatonic Member Regional Planning Organizations: Council of Governments of the Central Naugatuck Valley, Housatonic Valley Council of Elected Officials, Northwestern Connecticut Council of Governments

The Housatonic Water Utility Coordinating Committee (HWUCC) met on November 6, 2008 for the first time in over three years and has been reinvigorated by the water supply planning improvements and staff

changes implemented at DPH. It was evident that the regional plan crafted by the original Housatonic WUCC participants in 1988 had been long forgotten and set aside due to conflicting priorities, loss of participant legacies; and the inability of water companies to work together, communicate effectively, and engage local political leaders to enact solutions to the longstanding regional water supply issues. The Housatonic WUCC leadership and local municipal leaders have now become more active in promoting regional water supply solutions. Three additional regional committee meetings of the HWUCC were held in 2009 on June 17th, July 15th, and November 4th which helped foster communication and ensure continued discussions concerning regional water supply issues. The HWUCC also set up two subcommittees in 2009; one which will revisit and codify WUCC rules and procedures and the second will focus on identifying a regional solution for much needed additional supply.

Major challenges in the Housatonic WUCC management area continue to be the immediate need for new sources of supply at Danbury Water Department, United Water-CT New Milford Division; and in the Towns of Brookfield and New Fairfield. This WUCC management area has the most pressing need statewide for additional sources of supply and regional partners need to work together to bring additional supply into the region to ensure public health, safety, and economic development are not adversely impacted. It is essential that the public water suppliers work together with municipal leaders to craft a regional solution to resolve water supply issues/needs in Bethel, Brookfield, Danbury, New Fairfield, New Milford, Newtown, and Ridgefield. The vast majority of the municipalities within the Housatonic WUCC management area would benefit greatly from the resolution of this longstanding water availability problem. One possible regional option would be to connect Danbury Water Department as a regional hub for water supply in the Housatonic area to Aquarion-CT whose water mains are currently located approximately one half mile away on Route 7 in Ridgefield. Additionally, the purchases of Bethel Consolidated and Greenridge Tax District water systems by United Water-CT has opened up the possibility of other regional solutions such as bringing in supply from the now combined distribution systems of Heritage Village Water Company/Connecticut Water Company-Naugatuck Division/Waterbury Water Department or even from the Regional Water Authority in New Haven which purchased the former Birmingham Utilities in the Ansonia Valley towns.

B) SOUTHEAST WUCC:

South East Member Towns: 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

South East Member Regional Planning Organizations: Capitol Region Council of Governments, Connecticut River Estuary Regional Planning Agency, Midstate Regional Planning Agency, Southeastern Connecticut Council of Governments, Windham Regional Council of Governments

The Southeast Water Utility Coordinating Committee (SEWUCC) met on September 15, 2008 for the first time in three and one half years. DPH called the meeting to reinvigorate the original participants, introduce new water supply planning and WUCC initiatives, and introduce the new supervisor and staff members of the DWS Planning Unit. The SEWUCC has not held a regular meeting since September 2008 but key SEWUCC members gave presentations at the Northeast Regional Forum in Ashford on July 14, 2009 to assist municipal counterparts by conveying lessons learned through the SEWUCC.

It is critical that the Southeast WUCC become more active in promoting regional solutions. Smaller communities have struggled with major water supply issues such as creating a town wide water system in East Hampton to resolve several contamination issues and continued efforts to ensure Sprague has a viable water supply system. East Lyme struggles every year to meet the peak demands of their customer base during the summer tourism months due to a lack of available supply. First Selectman Paul Formica and the Town of East Lyme sponsored a special meeting on January 14, 2009 to discuss regional water supply solutions that was very well attended and positively received by the participants. The critical

importance of a well balanced regional system with adequate redundancy was borne out by the significant impacts to several of the major water suppliers in the SEWUCC region including the City Of Norwich, City of New London, and Aquarion Water Company-Mystic Division during the drought advisory of September 2007-January 2008. All of these major suppliers were at the point of requesting approvals for implementation of significant emergency measures if the drought had persisted.

Major challenges include immediate need for new sources of supply in East Hampton, East Lyme, Franklin, New London, Norwich, Old Lyme, and Sprague; major water infrastructure needed in East Hampton and Old Lyme; and known DEP contamination sites in East Haddam, East Hampton, Hebron, Marlborough, Montville, and Salem. This WUCC management area would benefit from additional expansion of the Southeast Regional Pipeline to add East Lyme, Sprague, and Franklin; or even an interconnection with Windham Water Works or Jewett City Water Company to Connecticut Water Company-Gallup Division who currently have excess supplies in the Northeast WUCC management area.

C) SOUTH CENTRAL CONNECTICUT WUCC:

South Central Member Towns: Ansonia, Beacon Falls, Bethany, Branford, Cheshire, Chester, Clinton, Cromwell, Deep River, Derby, Durham, East Haddam, East Haven, Essex, Guilford, Haddam, Hamden, Killingworth, Madison, Meriden, Middlefield, Middletown, Milford, Naugatuck, New Haven, North Branford, North Haven, Old Saybrook, Orange, Oxford, Portland, Prospect, Seymour, Wallingford, Westbrook, West Haven, Woodbridge

South Central Member Regional Planning Organizations: Connecticut River Estuary Regional Planning Agency, Council of Governments of the Central Naugatuck Valley, Midstate Regional Planning Agency, South Central Regional Council of Governments, Valley Council of Governments
The South Central Water Utility Coordinating Committee (SCCWUCC) met on December 8, 2008 at Connecticut Water Company's main office in Clinton. DPH called the meeting to reinvigorate the original participants, introduce new water supply planning and WUCC initiatives, present the new management team and section organization of the DPH Drinking Water Section (DWS), and introduce the new supervisor and staff members of the DWS Planning Unit. The meeting was well attended by chief elected officials and local health officers. A special invitation was provided from DPH to local chief elected officials and health districts for this meeting to encourage participation in this process. The new attendees contributed significantly to the meeting and brought to light real local water supply issues from their communities. This interaction between ESA providers, drinking water professionals, and local officials in resolving local problems was the original intention of the WUCC process.

DPH staff gave a presentation that was derived from the initial South Central WUCC coordinated regional water supply plan. The meeting attendees responded positively to the DPH presentation and were again genuinely surprised to find out that the presentation was culled from the highlights and regional water supply solutions offered in their own coordinated regional plan. The coordinated regional plan hit upon several key issues and possible solutions that are still relevant today, eighteen years later. It was evident that the regional plan crafted by the original South Central WUCC participants in 1990 had also been long forgotten and set aside due to conflicting priorities, loss of participant legacies; and the inability of water companies to work together, communicate effectively with local political leaders to enact solutions to the longstanding water supply issues in this region.

DPH will continue to call meetings of the SCWUCC in 2010 to continue discussions concerning regional water supply issues, foster communication, and bridge gaps that may not have been considered by previous WUCC participants. The Upper Connecticut River WUCC has also agreed to hold joint meetings with the South Central WUCC to offer even improved coordination and communication among regional partners and municipal leaders.

Major challenges include the immediate need for new sources of supply at Middletown Water Department; naturally occurring radioactive contaminants in Madison and Killingworth; and known DEP contamination sites in Durham, East Haddam, and Haddam. This WUCC management area could benefit greatly from a regional solution to resolve water supply issues/needs in Durham stemming from multiple known contamination sites. A relatively short water main extension of approximately 7 miles from the current termination of the Regional Water Authority distribution system in North Branford to Durham/Middletown would not only resolve water supply issues for those two communities but would result in interconnected water infrastructure from New Haven to Enfield capturing the entire central portion of Connecticut.

D) UPPER CONNECTICUT RIVER WUCC:

Upper Connecticut River Member Towns: Avon, Barkhamsted, Berlin, Bloomfield, Bristol, Burlington, Canton, Colebrook, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Hartland, Harwinton, Manchester, New Britain, Newington, New Hartford, Plainville, Rocky Hill, Simsbury, Somers, South Windsor, Southington, Suffield, Vernon, West Hartford, Wethersfield, Windsor, Windsor Locks

Upper Connecticut Member Regional Planning Organizations: Capitol Region Council of Governments, Central Connecticut Regional Planning Agency, Litchfield Hills Council of Elected Officials

The Upper Connecticut River Water Utility Coordinating Committee (UCRWUCC) held one meeting on May 14, 2009. DPH staff gave a presentation derived from the initial Upper Connecticut WUCC coordinated regional plan. The meeting attendees responded positively and were again genuinely surprised to find out that the presentation was culled from the highlights and regional water supply solutions offered in their own coordinated plan. The coordinated plan hit upon several key issues and possible solutions that are still relevant today. It was evident that the regional plan crafted by the original Upper Connecticut WUCC participants had been forgotten and set aside due to conflicting priorities, loss of participant legacies; and the inability of water companies to work together, communicate effectively, and engage local political leaders to enact solutions to longstanding regional water supply issues.

DPH will continue to call meetings of the UCRWUCC in 2010 to continue discussions concerning regional water supply issues, foster communication, and bridge gaps that may not have been considered by previous WUCC participants. The Upper Connecticut River WUCC has also discussed and agreed to hold joint meetings with the South Central WUCC to offer even improved coordination and communication among regional partners and municipal leaders.

The vast majority of the communities located within this WUCC management area would benefit greatly from the previously mentioned alternative of a water main extension from Regional Water Authority to Durham/Middletown and the currently existing margin of safety deficiencies at many of these public water systems serving these communities would be resolved through this type of regional cooperation and cost sharing. The Upper Connecticut WUCC management area does have major water supply infrastructure in many of the larger municipalities, but still needs to make a few critical interconnections between these large water suppliers to protect against emergencies and drought conditions.

E) NORTHEAST WUCC:

Northeast Member Towns : Andover, Ashford, Bolton, Brooklyn, Canterbury, Chaplin, Columbia, Coventry, Eastford, Hampton, Killingly, Mansfield, Plainfield, Pomfret, Putnam, Scotland, Stafford, Sterling, Thompson, Tolland, Union, Willington, Windham

Northeast Member Regional Planning Organizations: Capitol Region Council of Governments, Northeast Connecticut Council of Governments, Windham Regional Council of Governments

The Northeast WUCC (NEWUCC) has yet to be convened despite final legislation for the water supply planning process being passed by the legislature in 1985. Exclusive Service Area (ESA) providers do not

exist to serve these towns to ensure responsible ownership or operation of newly created public water systems. This region of the state has also seen the most growth in terms of adding new small public water systems over the past several years. The lack of designated Exclusive Service Area (ESA) providers in Northeastern CT will result in the creation of new community public water system owners and orderly expansion of public water infrastructure and could result in duplication of service at a much higher cost in the long term for the residents of these towns. Considerable technical assistance over the past few years was provided by DPH staff to the University of Connecticut and the Town of Willington to help ensure orderly growth with proper water service. The Towns of Andover, Columbia, Coventry, and Mansfield are at the point of facing similar development challenges now. The first regional forum for WUCC management areas yet to be convened was scheduled for the Northeast WUCC management area and held June 23, 2009 in Ashford at the Knowlton Memorial Hall auditorium.

Other major challenges include the immediate need for new sources of supply at Putnam Water Department and the University of Connecticut, naturally occurring radioactive contaminants at Johnson Memorial Hospital in Stafford, and recognized Department of Environmental Protection (DEP) contamination investigation sites in Ashford, Coventry, Killingly, Mansfield, Plainfield, Putnam, Stafford, Sterling, Willington, and Windham. This WUCC management area could benefit greatly from regional solutions to resolve water supply issues/needs in Coventry, Mansfield, and Putnam. Possible regional options could come from Windham Water Works which currently has additional margin of safety and available water to assist regionally or Connecticut Water Company working in conjunction with Tolland Water Department to get much needed public water service into the Route 195 area.

F) NORTHWEST WUCC:

Northwest Member Towns: Bethlehem, Canaan, Cornwall, Goshen, Kent, Litchfield, Middlebury, Morris, Norfolk, North Canaan, Plymouth, Salisbury, Sharon, Thomaston, Torrington, Warren, Washington, Waterbury, Watertown, Winchester, Wolcott

Northwest Member Regional Planning Organizations: Central Connecticut Regional Planning Agency, Council of Governments of the Central Naugatuck Valley, Litchfield Hills Council of Elected Officials, Northwest Connecticut Council of Governments

The Northwest WUCC (NWWUCC) has yet to be convened, thus, no Exclusive Service Area (ESA) providers exist to serve these towns to ensure responsible ownership or operation of newly created public water systems in this area of the state. This WUCC needs to be convened so ESA providers can assume responsibility for proper ownership, management, and maintenance of the many small public water systems being created in this area and to ensure orderly expansion of public infrastructure.

DPH has provided considerable technical assistance to the Middlebury area including sponsoring two regional forums in 2006-07 to ensure proper water service to this fast growing area which currently does not have a convened WUCC and ESA providers. This technical assistance has paid dividends as the Northwest WUCC management area will benefit shortly from an ongoing regional solution which will install regional pipelines to connect Heritage Water in Southbury with Connecticut Water Company in Middlebury which is already connected to Waterbury Water Department, a major regional water supply.

G) SOUTHWEST WUCC:

Southwest Member Towns: Bridgeport, Darien, Easton, Fairfield, Greenwich, Monroe, New Canaan, Norwalk, Redding, Shelton, Stamford, Stratford, Trumbull, Weston, Westport, Wilton

Southwest Member Regional Planning Organizations: Greater Bridgeport Regional Planning Agency, Housatonic Valley Council of Elected Officials, South Western Regional Planning Agency, Valley Council of Governments

The Southwest WUCC has yet to be convened, thus, no Exclusive Service Area (ESA) providers exist in these communities. Exclusive Service Area (ESA) providers are required to ensure responsible ownership or operation of newly created public water systems and also assist in ensuring orderly

development of public water supply in communities. Although this WUCC management area is the most densely populated and served by a few large major water suppliers, it would also benefit greatly from having a convened WUCC management area. ESA providers would then be designated to assume responsibility for proper ownership, management, and maintenance of any small public water systems that may be created in this area and to ensure orderly expansion of public infrastructure.

V) WATER PLANNING COUNCIL:

Public Act 01-177, as modified by Public Act 02-76, established the Water Planning Council (WPC) to address issues pertaining to Connecticut's water resources and identify any overlap that may exist between state agencies in regards to regulating water resources. The WPC has recognized the need to review relevant existing legislation and regulations for the purpose of proposing constructive legislative changes to ensure adequate water supply planning, responsible growth, water allocation, diversion permit issues, and minimum stream flow standards to support biodiversity. Among the items the WPC has identified as requiring attention is the need to revisit procedures for coordination of public water supply planning including the following:

- **Changes to Existing WUCC Management Areas:** A mechanism needs to be developed to consolidate the existing public water supply management areas. Given the changes that have taken place in Connecticut and the water industry over the past twenty years, the planning process would be more effectively served by consolidating the current structure of seven areas into a more manageable structure of three or four areas based upon similar water supply issues. *DPH has convened a DPH Commissioner's Advisory Committee, initially comprised of existing statewide WUCC Chairs, to make recommendations on potential revisions to the existing WUCC management areas and how to best incorporate the areas yet to be convened into the existing process. The DPH will also sponsor regional forums in the three management areas yet to be convened. The first regional forum was held July 14, 2009 in the Northeast management area in Ashford. These regional forums are intended to apprise chief elected officials, regional planning officers, local health directors and community public water systems of the WUCC process and to seek their input regarding the WUCC process. Additional representatives for the Commissioner's Advisory Committee will be selected at the regional forums to ensure fair and equal representation to all management areas in the state.*
- **Incorporation of Environmental Interest Groups to Existing WUCC Membership:** Environmental groups, such as Rivers Alliance, have also expressed an interest in participating in this planning process. This participation could be allowed now with the concurrence of the existing WUCC management area membership by revising their respective operating rules. *DPH recognizes and supports the need to have participation from the environmental groups in the WUCC process, but not as full voting members in the process. The environmental groups can and have added valuable input to the WUCC process in matters of items of discussion and water resources policy, however, only affected members of the management area served should be allowed voting privileges. The DWS Planning Unit also gave a presentation at the annual Envirothon conference held at Sessions Woods Training Center on May 21, 2009 in an effort to provide additional outreach to environmental groups.*
- **Consistent and Uniform Operating Procedures:** Procedural guidelines for the WUCC management areas should be provided to the WUCC management areas to make the process more efficient and uniform across management areas. *DPH will facilitate this issue through the Commissioner's Advisory Committee and make recommendations on necessary changes to the process and how to promote consistency and procedural guidelines across the WUCC regions. The Housatonic WUCC recognized this need in 2009 and has convened a subcommittee to make recommendations on consistent and uniform operating procedures.*

- **Exclusive Service Area Revisions:** Each WUCC historically has labored over establishing and making revisions to exclusive service areas. The process for establishing exclusive service areas and making revisions to existing exclusive service areas should be examined and revised as necessary. *DPH will facilitate this issue through the Commissioner's Advisory Committee and make recommendations on a process to revise existing service areas. Recommendations will also be made to ensure existing service providers properly claimed service areas or relinquish areas in which the ESA provider has not made significant strides in ensuring necessary water service is made available to the community.*

- **Incorporation of Municipal Officials to Existing WUCC Membership:** Many municipalities have expressed a desire to be designated as official members of the WUCC. Currently, some have been recognized as members by virtue of their ownership of a public water system and others could only participate as non-members without any voting rights. Municipal officials have not always participated in the process, when not given official membership status, and regional planning agencies have not always represented each municipality as thoroughly as necessary. Municipal officials need to be recognized and given official WUCC membership status. *DPH recognizes the need to have chief elected officials (or their designee) and local health directors participate as WUCC members with full voting privileges. A special invitation to routine WUCC meetings has been provided to local chief elected officials and health districts since late 2008 to encourage their participation in the WUCC process. These special invitations have resulted in many new attendees who significantly contribute to the meetings and bring to light real local water supply issues from their communities. This interaction between ESA providers and local officials to help solve local problems with the professional experts is the original intent of the WUCC process. It remains now to integrate these new participants as official WUCC members with full voting privileges. Many towns are already official members by virtue of owning a public water system such as a school, town hall, etc.*

- **WUCC Membership Definition:** The current WUCC membership definition includes all public water systems, which serve 25 or more people or have 15 or more service connections, and regional planning agencies. The WUCC legislation, when written in February 1985, initially recognized only the 700 community public water systems regulated by DPH. Since that time the DPH has identified and now regulates thousands of non-community public water systems. The current number of public water systems in Connecticut is approximately 2,600 (community and non-community public water systems). Logistically these numbers represent too large a group to participate in the planning process. The level of participation and role of various stakeholders in the process needs to be revised. *DPH recognizes that Non-Community PWS were never intended to be involved in this process nor do they have the financial, managerial, or technical ability to be considered as potential solutions to regional water supply issues.*

- **Assignments of Exclusive Service Areas for Public Water Systems with Water Supply Plans in growth areas based on 5, 20 & 50 year planning periods (updated every 5 yrs), and Exclusive Service Areas for satellite management:** The Department of Environmental Protection (DEP) has raised issues involving the assignment of exclusive service areas in relation to water allocation and DEP's diversion process. *DPH recognizes the connection between water supply plans, Exclusive Service Areas, diversion permits, water allocation, and potential future minimum stream flow requirements in CT. The DPH DWS Planning Unit undertook a massive data collection project to compile the best available data from the most recently approved water supply plans in regards to safe yield, available water, margin of safety, and potential new sources on an individual water company, regional, and statewide basis. This critical data has now been consistently evaluated and will be essential information needed to*

begin discussions on diversion permits, water allocation, and potential future minimum stream flow requirements and their connection to water supply planning to ensure a safe and adequate water supply for all residents of Connecticut.

VI) DISCUSSION:

The WUCC planning process was designed to be an interactive, transparent, consensus building process that was charged with identifying regional solutions to local problems. To identify regional solutions, it is essential to have up to date information on all known existing problems and then ensure there is widespread recognition of the problems among the water industry, local health departments, chief elected officials, and any other entities needed to partner in implementing a solution. To implement a local or regional solution to resolve known problems, it is further essential to ensure adequate funding and have adequate available water supply to solve the problem. The WUCC planning process offers the framework necessary to achieve the above necessary goals for identifying solutions and resolving known problems. A successful WUCC water supply planning process will also move CT ahead of its regional competitors in the terms of the water infrastructure necessary to attract and retain good jobs through new industry.

The current process does need to be made more efficient and responsive to local and regional needs. The addition of chief elected officials and local health directors to the WUCC voting membership will further allow for more effective problem solving. It also will result in readily available local leaders who understand the technical issues and can assist in tackling the financial issues required for regional projects. By enacting these small changes and additions to the WUCC membership rolls, the process can be an effective tool for change in problem areas seeking unique solutions or facing unanticipated problems. This local element was how the WUCC process was intended to work in engaging the proper entities necessary to identify how to implement potential solutions and who will participate in funding the implementation of regional solutions to unique water supply issues.

The WUCC planning process was not created to fund projects and finding adequate resources to serve these WUCC management areas is very difficult without sufficient funding. Finding adequate water resources and the financial support necessary to create, or expand, public water service infrastructure is often a very difficult challenge. All delineated water supply management areas would now benefit from updated WUCC plans and subsequent regional solutions that may become available to resolve longstanding problems. Only through an interactive, transparent, consensus building process, like a fully functioning engaged WUCC, will all the problems in a region be openly and honestly aired in a public forum once a bond and trust factor is built among participants. The private, rate regulated public water systems must engage decision makers at the Department of Public Utility Control and work towards a mechanism that allows the private companies to participate in regional solutions in a manner that allows these companies to recoup their original investments.

Changes still necessary for consideration to improve the current WUCC process include:

- Creating a mechanism to allow for consolidation of existing Public Water Supply Management Areas.
- Addressing the obstacles (financial, staffing and regulatory) that limited the completion, approval and/or updates of the WUCC regional plans.
- Establishing the level of participation of various stakeholders in the process.
- Providing procedural guidelines for WUCC management areas to make the process more efficient and allow a convening WUCC to benefit from previous WUCC management area's experiences.
- Revising the general process by which exclusive service areas (ESA) are established and conflicts are resolved.
- Creating a mechanism to ensure consistency between claimed exclusive service areas and water supply plans.

The general public also needs to have a better understanding of the state's water resources and conservation methods. The underlying problem with improving Connecticut's water resources planning process is the difficulty of gaining a consensus to solve a problem that many do not yet recognize as a problem. The American Water Resources Association's 2008 meeting included the following “**Top Ten List for Future State Water Planners**”:

- 1) **Start by Developing a Vision.** A product that is cost-effective and resonates with policy-makers is one where participants brainstorm what the landscape should look like in 20 or 50 years, putting recommendations up front and identifying benchmarks to help get there. By comparison, plans start with data collection and a gap analysis, which is resource intensive and controversial.
- 2) **Develop a Political Plan.** This is the piece that will make a technically good plan into a politically acceptable plan. It includes the development of an overall game plan and identifies up front which issues may be deal makers versus deal killers.
- 3) **Build a Solid Foundation on Water Law.** Planners must convey how they plan to allocate any “new” water (i.e., have water laws in place and well understood). Certainty helps build and maintain support during the planning process.
- 4) **Establish Funding Sources.** Planning is not a one-time effort. On-going funding is a key ingredient to ensure buy-in, participation, quality, and implementation of each plan. Find a dedicated funding source, but also leverage additional funding. Integrated planning that includes quality and quantity, water and land, etc., helps leverage additional funds from the federal government, foundations, etc.
- 5) **Employ an Open, Transparent Process.** Give stakeholders plenty of opportunities to suggest goals, methodologies, data sources, and content. Post documents on-line so they are easy to access. Establish Advisory, Stakeholder, and/or Technical Groups that will ensure a wide range of perspectives and expertise.
- 6) **Turn Challenges into Opportunities.** Challenges such as droughts, floods, climate change conditions, population growth, or other water-related events provide opportunities to establish or strengthen a water plan. Water challenges can provide needed insights and political support to improve plans and their implementation.
- 7) **Collaborate across Political Boundaries.** Planning is an inherently political process and must account for the fact that multiple counties, states, and even countries depend on water from the same river basins, watersheds, and aquifers.
- 8) **Use Regional Partnerships to Create Local Solutions.** In states with limited financial resources, supporting a series of disconnected local projects is no longer practical. Foster region-wide or basin-wide partnerships that will account not just for water quantity, but also water quality, ecological needs, land-use planning, and other factors.
- 9) **Standardize Data Sets and Methodologies.** Robust, state-wide forecasting tools, water budgets, and program evaluations require access to data sets that are developed with standardized methodologies. Use incentives to encourage the adoption and sharing of these methodologies.
- 10) **Strive for Consistency (and Flexibility)!** Provide a sense of continuity by building upon the work begun in previous plans and studies. At the same time, those with a background in planning recognize that times change, leaders change, and so does climate. Address important issues of the day to keep your plan relevant. As much as anything, this process is about managing “change,” not just managing “water.”

State governments are in different evolutionary stages of formal state-wide water planning. While some have not yet begun, other states are in their fourth or fifth decade of planning. The impetus behind water supply planning is likewise varied, with states responding to growing pressures, including: legislative mandates, Endangered Species Act listings, drought, water allocation issues, climate change conditions, and projected population growth. Our changing times are reflected in the process of creating these plans, with ever-increasing emphasis on public participation and integrated water management concepts.

VII) FUTURE DIRECTION AND RECOMMENDATIONS:

Critical recommendations are provided below to make the current water supply planning process more effective and prepare the State of Connecticut for the water resource realities faced today and into the future. Please note it would require an additional 8.0 FTE's to implement these recommendations which ideally would be the proper and proactive method of ensuring adequate water supply planning and would further ensure public water system sustainability in the State of Connecticut now and into the future. It should also be noted that without proper water supply planning and management of our water resources now that these additional referenced FTE's and possibly more would be required to deal reactively to water supply shortages and other problems that may occur at individual water systems statewide. Current staffing resources allocated to the DPH Drinking Water Section Planning Unit allow for proper technical review of the individual water supply plans submitted by public water systems serving more than 1000 persons and an annual meeting of each of the four convened WUCC management areas.

- 1) Exclusive Service Area (ESA) providers need to be assigned for the three areas of the state that still have not convened WUCC management areas: Northeast, Southwest and Northwest Hills. This action will at least allow for the orderly expansion of public water service and ensure responsible ownership and operation of public water systems in these areas. A need also exists to connect the Certificate of Public Convenience and Necessity (CPCN) process to the WUCC process to ensure the coordinated development of public water systems (PWS) across the state. The CPCN process governs the creation of new PWS in Connecticut. It is essential to coordinate the regulations for the CPCN and WUCC processes to ensure new public water systems being created have proper ownership/management to ensure viability for the long term. Public Act 07-244 recently connected the CPCN process with Exclusive Service Area (ESA) providers. This change will not be fully effective since Exclusive Service Areas are not fully established statewide. It is essential, at a minimum, to convene the final three WUCC management areas and assign Exclusive Service Areas to ensure proper ownership and management of public water systems in Connecticut. The next WUCC that is to be convened is the Northeastern management area. DPH anticipates convening and completing these three remaining WUCC management areas, including the assignments of Exclusive Service Areas, during the time period of 2012-2015.
- 2) Connecticut's major public water suppliers, community public water systems serving over 1,000 persons, must have a minimum adequate margin of safety to ensure not only continuous service to their customers but also to protect the purity and adequacy of our public water suppliers. Suppliers who currently are supply deficient and do not have this minimum adequate margin of safety should be required to enter legal agreements to obtain the necessary additional supply within a defined time period. DPH will draft a plan, The 2020 Plan, to set a strategy of ensuring minimum adequate margin of safeties at these public water systems by the year 2020.
- 3) The procedure to revise the management area boundaries and establish priorities for convening each WUCC should be revised to allow the department adequate flexibility to manage the process more efficiently. The existing timeline for implementing this planning process in the seven existing management areas, and periodically revisiting each management area, is not practical or reasonable. The process currently involves a two-year commitment in each area. Combined with limited staffing and funding resources, the first round of planning has already taken more than twenty years and has not been completed. Consolidation of management areas needs to be considered in order to accelerate the process and ensure that planning is done in all areas within reasonable intervals. The changes in the water industry and population trends in Connecticut over the past twenty years support the concept of consolidating the existing seven management areas into three of four areas based upon similar water supply needs. The DPH Commissioner's Advisory Committee should make recommendations on realigning the current WUCC boundaries to more effectively serve the realities of today. DPH anticipates completion of this activity by 2012.

- 4) Municipalities in each management area must be included as eligible WUCC members. This issue was raised in several management areas by municipalities that wanted a more official role in the planning process. This would also add a critical link to municipal land use planning that may not be adequately addressed under the current WUCC structure. It is recommended that both the chief elected official (or designee) and the local health director be added to the WUCC membership rolls with full voting privileges and that this action occur by allowing such new membership under WUCC rules and procedures.
- 5) DPH has filed a Federal Appropriations request for \$950,000 to complete the assignment of Exclusive Service Areas statewide, produce regional coordinated management area plans, and develop a comprehensive, statewide water supply plan.
- 6) Definition of technical terms; the content of the plan; procedural requirements for the structure of the WUCC, voting procedures, operating rules, and the time schedule for developing coordinated regional management area plans must all be reviewed and incorporated into revised regulations in order to make the process more efficient and consistent state-wide. The DPH Planning Unit has formed a Water Supply Planning Technical Advisory Committee (WSPTAC) composed of recognized leaders and experts in the drinking water field. This technical advisory group met several times in 2009 and has initially focused its initial work efforts on safe yield, available water, and margin of safety all of which will aid in consistent water supply plan preparation.
- 7) The criteria and process for removing and reassigning exclusive service areas designations must be developed. Regulations and/or guidance documents are needed to provide assistance to the WUCC management areas for revising an ESA, especially during the periods between regional coordinated management area plan updates. DPH will start addressing this important issue through the DPH Commissioner's WUCC Advisory Council. The major criteria for establishing an exclusive service area provider must be to ensure their plan provides for orderly development of pure and adequate water supplies as necessary. Existing WUCC management areas have tended to focus on assigning exclusive service areas to individual utilities. Some exclusive service areas, furthermore, appear to be treated as "franchise areas," where a utility is *entitled* to serve, rather than as areas in which they are *required* to serve."
- 8) DPH is attempting to compile one comprehensive list of future potential public water supply sources and identifying measures that will ensure protection of these critical future sources of water supply for Connecticut.
- 9) DPH worked extensively with DEP on proposed minimum stream flow release regulations and water allocation issues including the compilation of accurate, consistently evaluated safe yield, available water, and margin of safety data on a statewide basis for community public water systems serving more than 1,000 persons. DPH anticipates continued partnering with DEP on water allocation issues and the protection of current and future public water supply sources.
- 10) DPH has set a goal of ensuring all water companies that prepare water supply plans will be capable of meeting all their water supply obligations under law by the year 2020 including a minimum adequate margin of safety. Water companies that meet all water supply obligations can be allowed to submit water supply plans every nine years, an extension from the current six year schedule for most utilities.

APPENDICES

1. Background Information

- I) Introduction**
- II) History of Water Supply Planning in Connecticut**
- III) The Water Utility Coordinating Committee (WUCC) Process**
 - A) History of the WUCC Process**
 - B) Current Status of the WUCC Process**

2. Public Water Supply Management Areas

APPENDIX 1 : BACKGROUND INFORMATION

I) INTRODUCTION:

This document discusses the history of water supply planning in Connecticut and the Water Utility Coordinating Committee (WUCC) water supply planning process since its inception in 1986. The following terms will be frequently referred to when discussing the Connecticut Plan process:

- **Public Water Supply Management Area** - A geographic area for coordinated water supply planning determined by the Commissioner of Public Health to have similar water supply problems and characteristics.
- **Water Utility Coordinating Committee (WUCC)** - This currently refers to a regional committee consisting of one representative from each public water system with a source of supply or service area within a public water supply management area and one representative from each regional planning organization within the public water supply management area.
- **Exclusive Service Area (ESA)** – An area where the right to provide public water service has been awarded to one system.

II) HISTORY OF WATER SUPPLY PLANNING IN CONNECTICUT:

The state's need for water resources planning was recognized as early as the 1920's. Interest in water resources planning peaks during droughts and declines soon after because it is a challenging process and, without backing from state leaders, the effort is too readily abandoned as other needs arise. In 1950, the State Water Commission publicly claimed "*Solutions to the problems of water resources management do not come neatly packaged, ready-made and conveniently labeled ... Conservation of water requires a delicate balance of uses, allocation of water resources, detailed knowledge of the availability and location of water and a very considerable amount of foresight, planning, judgment and finally – arbitrary decisions.*" Sixty years later, the state still needs to make some of those arbitrary decisions to definitively determine the availability of water and balance competing needs.

The Water Utility Coordinating Committee (WUCC) planning process supplanted several failed water supply planning and policy attempts in CT as recommended by several boards, commissions, and task forces dating as far back as the 1920's. Each of these previous attempts (State Water Commission 1925-1957, Water Resources Commission 1957-1971, Interagency Water Resources Planning Board 1967) to enact state water supply planning was reactionary following the occurrence of severe droughts in CT and then was oft forgotten and the well intentioned efforts subsequently failed when each drought had passed and normalcy returned to everyday life.

In 1964-65 the state experienced a very dry period which represents the standard by which our water resources are evaluated to determine how much water would be available during a drought. As a result of the 60's drought, the legislature passed a bill in 1967 requiring that the state agencies convene an Interagency Water Resources Planning Board to prepare a statewide long-range plan for the management of the water resources of the state. The purpose of this plan was to develop and maintain a strategy for the management of our water resources for public water supply, wastewater, flood management, water-based recreation, aquatic habitat, agriculture, industry, hydropower and navigation.

The dry 60's were followed by the relatively wet 70's, and an economic climate that resulted in a slow down in development and in tight budgets. The federal Safe Drinking Water Act became federal law and drinking water quality became the state's primary water resource focus. Water resource planning was once again relegated to the sidelines. The drought of 1980-81 refocused the state's attention on the need to plan for drinking water. The most infamous example of problems resulting from a lack of water resource planning at that time was the drop in reservoir levels for the system serving the Greenwich area,

which resulted in a mere 16 days of water remaining in those reservoirs. Fortunately, adequate precipitation returned and a crisis was avoided. As a result of this severe drought, the legislature created the Water Resources Task Force (WRTF) to issue a report with recommendations that would assure the future availability and purity of the state's public drinking water supplies for all residents. The WRTF met from 1982-1984 and issued their report in 1985 that recommended legislation be drafted to create a water supply planning process in Connecticut. The WRTF recommendations resulted in Public Act 85-535, "An Act Concerning a Connecticut Plan for Public Water Supply Coordination" which was approved by the General Assembly in 1985 creating the WUCC water supply planning process.

III) THE WATER UTILITY COORDINATING COMMITTEE (WUCC) PROCESS:

A) History of the WUCC Process:

Public Act 85-535, "An Act Concerning a Connecticut Plan for Public Water Supply Coordination" was passed by the Connecticut General Assembly in the 1985 legislative session. The Legislature found that "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 (DPH) shall administer a procedure to coordinate the planning of public water supply systems." The act provides for a coordinated approach to long-range public water supply planning by addressing water quality and quantity issues from an area-wide perspective. The process is designed to bring together public water system representatives and regional planning organizations to discuss long-range public water supply issues and to develop a plan for dealing with those issues.

The types of problems public water systems were facing included: competition between public water systems for expansion of service areas, increasing regulatory requirements, aging and substandard infrastructure, inadequate source protection, difficulty in developing new water sources, inadequate financing, poor management, uncoordinated planning among public water systems, poor or no communication among public water systems, and poor or no communication between public water systems and town officials in communities where water was served. Many of these problems lend themselves to an area wide analysis and solutions where water utility representatives and local officials can use a team or consensus approach to solve the problems identified in each management area. The Water Utility Coordinating Committee (WUCC) planning process delineated the state into seven geographical areas and public water systems serving greater than 1,000 persons within the delineated geographical area were required to prepare an individual water supply plan every five years. The WUCC management areas were also required by CGS Section 25-33h to create a coordinated regional water supply plan which was intended to be updated every ten years.

Public hearings were held to establish management area priorities to begin the planning process. The Department of Public Health convened the first three WUCC management areas in 1986 and 1987 with funds allocated by the General Assembly in 1985. Regional coordinated plans for these three management areas were completed, but it became evident that legislative constraints on hiring consultants to draft the regional coordinated plans in the remaining four management areas was going to make it very difficult to continue the planning process. Staffing resource constraints in the early 90's and problems with the approval of individual water supply plans required of the largest water systems in each management area resulted in the WUCC planning process being halted. C.G.S. 25-33j was revised in 1998 to eliminate the immediate problem with funding the process by raising the cap from \$100,000 to \$200,000. Sufficient resources were then made available to fund the fourth WUCC which was convened in Southeastern Connecticut in August 1998. A final coordinated regional plan for the Southeastern Connecticut WUCC was approved by the DPH in February 2002 and this management area has been the most active and successful in promoting regional cooperation and shared costs of major infrastructure investment. Three WUCC management areas still need to be convened in the Northeast, Southwest and Northwest. The next WUCC to be convened will be the Northeastern management area.

B) Current Status of the WUCC Process:

Major changes have occurred in the water industry and Connecticut's population centers since the original legislation passed in 1985. Historically, public water infrastructure was created to serve the larger populations of cities and industrial centers with the sources of supply remotely located in outlying areas and piped for miles to water treatment facilities. Utility services, including drinking water, are now more expensive with the advent of more residents living in suburban communities with lower population densities. Water service can become even more costly when the need for this public service is not openly discussed, resolved, and cost shared on a regional basis as intended through the current WUCC process. Fortuitously, major interconnected regional water infrastructure is now much closer to a reality in several areas in Connecticut as a result of sales of private water companies, consolidation, and several main extensions to serve either contaminated areas or new private developments.

The planning process was also designed to include a coordinated regional water supply plan for addressing all known issues and future needs in each management area that is built upon the individual water supply plans from each utility and modified by regional requirements. The "area wide supplement", includes an assessment of water supply problems and conditions within the management area, exclusive service area designations, and integration of individual water utility plans into a cohesive area wide plan which emphasizes cooperation and coordination between public water systems. Each WUCC must be reconvened periodically to revise the coordinated regional plan to reflect the changing status of the individual water supply plans and current planning at the time. It was envisioned that each WUCC would revise the area wide supplement every ten years to reflect the changing status of the individual plans and current planning at the time. This iterative process results in a living document that requires constant vigilance and regular updates to reflect the changing status of individual water supply systems, the economic impacts to projected demographics and the environmental impact on our drinking water supplies.

The Housatonic, South Central, Upper Connecticut, and Southeast WUCC management areas all have been convened to date, but coordinated regional plans for the Housatonic, South Central, Upper Connecticut management areas have not been approved by DPH. The Southeast regional WUCC coordinated plan has been approved by DPH, however, the coordinated regional plans from all four previously convened WUCC management areas have not been updated as necessary primarily due to a lack of State funding available to the committees to prepare and update a new regional coordinated plan. An alternative method to funding contracts for consultants to prepare coordinated regional plans would be fund additional staffing resources for the DPH Drinking Water Section (DWS) Planning Unit and have DPH staff prepare the regional coordinated plans. This strategy could actually realize additional costs savings and a more detailed final product as one (1) additional experienced FTE could draft these regional coordinated plans based upon the review of the individual plans and the wealth of data available to the DPH DWS Planning Unit.

Other important aspects of the process that need to be revised in regulations to make the process more effective, efficient, and consistent statewide are definition of terms; the content of the plan; the legal definition of a minimum adequate margin of safety, procedural requirements for the structure of the WUCC, voting procedures, operating rules, and the criteria and procedures for approval of the plan. The criteria and process for establishing exclusive service areas should also be revised and regulations are needed to provide guidance to the WUCC management areas for revising an ESA, especially during the periods between plan updates.

APPENDIX 2 : PUBLIC WATER SUPPLY MANAGEMENT AREAS

