STATE OF CONNECTICUT

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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

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

(PURSUANT TO CONNECTICUT GENERAL STATUTE § 25-33n)

Report Period: July 1, 2017 through December 31, 2018

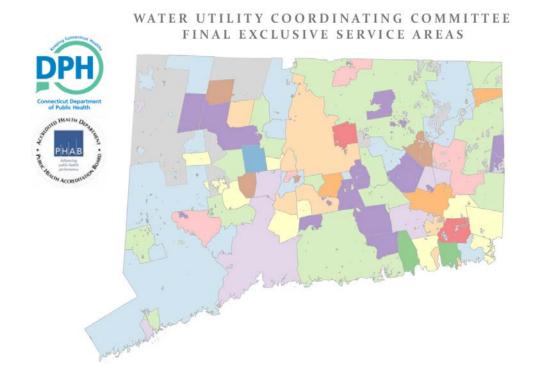


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I) EXECUTIVE SUMMARY:

Pursuant to § 25-33n of the Connecticut General Statutes (*Conn. Gen. Stat.*), the Commissioner of Public Health (Commissioner) is required, on or before the second Wednesday after the convening of each regular session of the General Assembly, to submit a report to the joint standing committees of the General Assembly having cognizance of matters relating to the environment and public utilities, which describes the status of, for the year ending the preceding June thirtieth, the water planning process established under *Conn. Gen. Stat.* §§ 25-33g to 25-33j, inclusive, and efforts to expedite the process (WUCC Annual Report). This report, which is required to cover the period from July 1, 2017 through June 30, 2018, will describe the status of the water planning process established under *Conn. Gen. Stat.* §§ 25-33g to 25-33j, inclusive, and efforts to expedite the process. Due to the significance of the approval of the WUCC coordinated water system plans, the period from July 1, 2018 to December 31, 2018 is also included in this annual report.

II) WUCC PLANNING PROCESS STATUS/PROGRESS JULY 1, 2017 – DECEMBER 31, 2018:

During this reporting period, monthly meetings were held for each of the three WUCCs. The meetings focused on the development of the planning documents. Attendees reliably included water utilities, environmentalists, local health departments, consultants, small water system operators, municipal officials, state agencies, and council of government representatives. Guided by a consultant moderator, all attendees were invited to contribute; a public comment period was also provided at each meeting. All meetings were publicly noticed on the DPH website, and all agendas and minutes were published. The contributions of the diverse group of meeting attendees was important in developing and balancing the content and recommendations of the plans.

The coordinated water system plans were published on the Connecticut Department of Public Health (DPH) website in March of 2018. A legal notice was posted in newspapers and the DPH website, and widely distributed via email, that offered public comment on the coordinated water system plans. Comments were received and analyzed, and the plans were updated to include recommended changes from commenters.

In August of 2018, the revised coordinated water system plans were published and a second legal notice announcing another public comment period was distributed and published. Additional comments were received during this public comment period.

Both versions of the coordinated water system plans and the comments received during both comment periods are available at: https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee. The coordinated water system plans include additional public comments that were received during the development of each of the individual components of the plans. Tables are also provided that detail how these comments were incorporated into the plan elements.

On December 20, 2018, the Commissioner approved the Western, Central and Eastern WUCC coordinated water system plans pursuant to Section 25-33h-1(g) of the Regulations of Connecticut State Agencies.

III) DPH PLAN TO COMPLETE THE WUCC PROCESS:

The development of the three coordinated water system plans is now completed. The final approved plans are available at: https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee.

The Commissioner of Public Health's signed approval and the *Report to the Commissioner* for each of the three WUCCs are included in this Report as APPENDIX.

IV) NEXT STEPS:

The distribution of the plans pursuant to Section 25-33h-1(g) of the Regulations of Connecticut State Agencies will occur in January 2019.

Implementation of the plans will begin in 2019. DPH will convene a WUCC workgroup to develop a framework for a prioritized implementation of coordinated water supply plan recommendations that will include and involve regional and town officials as well as local health departments.

V) CONCLUSION:

The completion of this important collaborative effort provides for a coordinated approach for public water system planning on a regional and statewide basis, ensuring that future development provides the best option for safe and adequate drinking water, while protecting Connecticut's environmental resources and rural areas. This plan provides the framework to move the state forward to assure an adequate supply of potable water for domestic, commercial and industrial use, which is vital to the health and well-being of the people of the state as is the stated finding by the 1985 legislature as memorialized under *Conn. Gen. Stat.* §§ 25-33c.

The coordinated water system plans analyzed, on a statewide and regional level: water conservation, water rates, droughts, small water system viability, protection of drinking water supply sources and other drinking water planning concepts. Water utilities, planners, local health directors, local and regional government, state and federal agencies and elected officials now have a resource available to them to assist in decision-making and planning. Implementation of recommendations will solidify Connecticut's ability to continue to provide safe and adequate drinking water.

APPENDIX

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

FINAL COORDINATED WATER SUPPLY PLAN OF THE EASTERN WATER UTILITY COORDINATING COMMITTEE

Pursuant to *Conn. Gen. Stat.* § 25-33h (a) and § 25-33h-1 (g) of the Regulations of Connecticut State Agencies, I hereby approve the Western Water Utility Coordinating Committee's final coordinated water supply plan, as recommended by the Department of Public Health ("Department") in its report regarding approval of the Eastern Water Utility Coordinating Committee's Consolidated Plan Report ("Report"). A copy of the Department's Report is attached hereto.

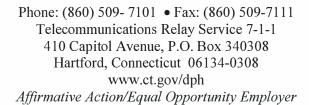
Raul Pino, MD, MPH

Commissioner

Date

Attachment









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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

REPORT TO THE COMMISSIONER

Prepared Pursuant to Section 25-33h of the Connecticut General Statutes

Regarding

Approval of the Eastern Water Utility Coordinating Committee's Consolidated Plan

On August 23, 2018, the Department of Public Health ("Department") published legal notice in the Danbury News-Times, Hartford Courant, New Haven Register, New London Day, Norwich Bulletin, La Voz Hispana, and Northeast News newspapers¹ in accordance with § 25-33h of the Connecticut General Statutes (*Conn. Gen. Stat.*) and § 25-33h-1(g)(1) of the Regulations of the Connecticut State Agencies announcing to the public that the Eastern Water Utility Coordinating Committee ("WUCC") submitted its final coordinated water system plan ("final coordinated plan") to the Commissioner of Public Health ("Commissioner") on May 22, 2018, for approval, and that such plan was available for public comment, to the extent disclosable by law ("August 23, 2018 Legal Notice"). Exhibit 1. The Department also posted the notice on its Internet webpage.

The Department accepted written comments until September 28, 2018. All of the written comments have been considered. Based on a consideration of the factors in *Conn. Gen. Stat.* § 25-33h(a) and § 25-33h-1(g)(2) of the Regulations of the Connecticut State Agencies, and the written comments received, the Department recommends that the Commissioner of Public Health ("Commissioner") approve the WUCC's final coordinated plan, which is in Exhibit 2. The WUCC's final coordinated plan is also available on the Department's webpage at: https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee.

¹ The Department published notice on its Internet webpage on August 28, 2018. *See https://portal.ct.gov/DPH/ Drinking - Water/WUCC/Water-Utility-Coordinating-Committee*.



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I. Background

A. Public Water Supply Management Areas and Priorities

Connecticut's public water supply planning process was prompted by the state's extended drought in the early 1980s. During the 1985 legislative session, the Connecticut General Assembly passed Public Act 85-535, "An Act Concerning a Connecticut Plan for Public Water Supply Coordination," initiating the first statewide water supply planning program. The Department, in consultation with the Public Utilities Regulatory Authority ("PURA"), the Department of Energy and Environmental Protection ("DEEP"), and the Office of Policy and Management ("OPM"), was given the charge of developing a coordinated approach to long-range water supply planning to assure future supplies. The legislative finding, as reflected in *Conn. Gen. Stat.* § 25-33c, states the following: "In order to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety, and welfare, the [Department] shall administer a procedure to coordinate the planning of public water supply systems".

On March 5, 1986, in accordance with Public Act 85-535 and *Conn. Gen. Stat.* § 25-33e, the Commissioner delineated the final boundaries of the public water system management area ("the 1986 PWSMAs"), which created seven public water supply management areas, and established the first three priorities for the initiation of the WUCC planning process established in *Conn. Gen. Stat.* §§ 25-33f to 25-3h, inclusive. The Commissioner established the last four priorities on October 30, 1995.

From 1987 to 1996, the Commissioner convened four of the seven WUCCs, the Housatonic, the Upper Connecticut River, the South Central and Southeastern. The WUCCs for each of these areas finalized area-wide supplement reports. The Southeastern WUCC was the only WUCC that prepared a final coordinated plan, which the Commissioner approved in 2002.

On April 15, 2014, pursuant to § 25-33h-1 of the Regulations of Connecticut State Agencies, the Commissioner altered the boundaries of the public water supply management areas ("PWSMA") and priorities for initiation of the WUCC planning process. *See* https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/drinking_water/pdf/2016AnnualWUCCReportsignedpdf.pdf?la=en. The final altered boundaries of the PWSMAs were delineated such that there were three areas, the Western, Central Corridor and Eastern. The final priorities for initiation of the WUCC planning process were established as follows: the Western PWSMA, the Central Corridor PWSMA and the Eastern PWSMA.

B. WUCC Process

Pursuant to *Conn. Gen. Stat.* § 25-33f, the Commissioner, following the establishment of the final altered priorities pursuant to *Conn. Gen. Stat.* § 25-33e, is required to convene a WUCC for each PWSMA to implement the planning process established by *Conn. Gen. Stat.* §§ 25-33f to 25-33h, inclusive. The Commissioner convened the WUCC on June 17, 2016.

A WUCC consists of one representative from each public water system with a source of water supply or a service area within the PWSMA 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. *Conn. Gen. Stat.* § 25-33(f). Pursuant to § 25-32-1(b)(7) of the Regulations of Connecticut State Agencies, any regional planning agency or public water system that is not included on the membership list for a WUCC may petition the Department to be included. The Department is required to maintain and make available the list of eligible WUCC members. § 25-32-1(b)(7) of the Regulations of Connecticut State Agencies.

Once the WUCC is convened, the WUCC, in consultation with the Commissioner, the Commissioner of DEEP, the Secretary of OPM, and PURA, is required to develop a preliminary assessment of water supply conditions and problems within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). The WUCC is required to

solicit comments on the preliminary assessment from municipalities, regional planning agencies, state agencies and other interested parties and respond to any comment received. <u>Id</u>. The WUCC is required thereafter to prepare a final assessment of water supply conditions and problems within the public water supply management area. Id.

Based on the final assessment of water supply conditions and problems within the PWSMA, the WUCC is required to establish preliminary exclusive service area ("ESA") boundaries for each public water system within the PWSMA. In establishing ESA boundaries, the WUCC is required to solicit comments on such boundaries from municipalities, regional planning agencies, the Commissioner, the Commissioner of DEEP, the Secretary of OPM, PURA, and other interested persons within the PWSMA and respond to all comments received.

Pursuant to *Conn. Gen. Stat.* § 25-33h, the WUCC is also required to prepare a coordinated water system plan ("Coordinated Plan") for its PWSMA. A coordinated plan consists of the individual water system plans of each public water system within a PWSMA, filed pursuant to *Conn. Gen. Stat.* § 25-32d, and an area-wide supplement to such plans developed pursuant to *Conn. Gen. Stat.* § 25-33h that addresses public water system concerns pertaining to the PWSMA as a whole. *Conn. Gen. Stat.* § 25-33d(f).

A WUCC is required to review and update its coordinated water system plan at least every ten years or sooner. § 25-33-1(i)(1) of the Regulations of Connecticut State Agencies. Any permit issued by the Commissioner of Public Health is required, to the extent feasible, to be consistent with any coordinated plan. *Conn. Gen. Stat.* § 25-33i(a). In addition, Public Act 14-163² required the Water Planning Council ("WPC") to consider WUCC plans in developing the state water plan.

C. Coordinated Water Supply Plan.

The WUCC submitted its Coordinated Plan to the Commissioner for the Commissioner's approval on May 31, 2018, which was not more than two years after the first meeting of the WUCC. The coordinated plan is required to promote cooperation among public water systems and include, but not be limited to, provisions for: (1) integration of public water systems, consistent with the protection and enhancement of public health and well-being; (2) integration of water company plans; (3) ESAs; (4) joint management or ownership of services; (5) satellite management services; (6) interconnections between public water systems; (7) integration of land use and water system plans; (8) minimum design standards; (9) water conservation; (10) the impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues; and (11) acquisition of land surrounding wells proposed to be located in stratified drifts. *Conn. Gen. Stat.* § 25-33g(a).

A coordinated plan is comprised of the individual water supply plans of the public water systems within the PWSMA that serve over 1,000 people or have 250 or more service connections, and an area-wide

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² P.A. 14-163 requires the WPC to, within available appropriations, prepare a state water plan for the management of the water resources of the state by July 1, 2017. In developing such plan, P.A. 14-163 requires the WPC to, among other things, consider individual water supply plans, water quality standards, stream flow classifications, WUCC plans, the State Plan of Conservation and Development, and other planning documents the WPC considers necessary. In addition, P.A. 14-163 requires the state water plan to, *inter alia*, identify water quantities and qualities that are available for public water supply, health, economic, recreation, and environmental benefits on a regional basin scale, considering both surface water and groundwater; identify current and future water demand on a statewide and regional basin scale; recommend using the state's water resources in a manner that balances public water supply, economic development, recreation, and ecological health; recommend major engineering works or special districts, as well as technology and infrastructure upgrades and interconnections; recommend land use and other measures to ensure the desired water quality and quantity, as well as promoting development based on available water resources; and try to incorporate regional and local water use and management plans and programs and water and sewerage facilities plans. The WPC will provide the public an opportunity to review the state water plan after such plan is prepared.

supplement that includes a water supply assessment, delineation of ESA boundaries, an integrated report, and an executive summary. The following provides additional information regarding the components of the coordinated plan:

- 1. Individual Water Supply Plans.³ Each water company that serves more than 1,000 people or 250 service connections is required to prepare an individual water supply pursuant to *Conn. Gen. Stat.* § 25-32d. A water company is required to revise its plan at such time as the water company filing the plan or the Commissioner requires it, or at intervals of not less than six years or more than nine years after the date of the most recently approved plan.
- 2. Area-Wide Supplement. The area-wide assessment is the part of the coordinated plan that addresses area-wide water system concerns pertaining to the PWSMA that are not otherwise included in each water company's individual water supply plan. § 25-33h-1(a)(1) of the Regulations of Connecticut State Agencies. The supplement identifies the present and future water system concerns, analyzes alternatives and sets forth a means for meeting those concerns. The area-wide supplement consists of the WUCC's water supply assessment, ESA boundaries, integrated report, and executive summary.
 - a. Water Supply Assessment. A WUCC, in consultation with the Commissioner and the Commissioner of Energy and Environmental Protection, the Secretary of OPM and PURA, is required to develop a preliminary water supply assessment of water supply conditions and problems within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). The WUCC is required to solicit comments on the preliminary water supply assessment from regional planning agencies, municipalities, state agencies, and other interested persons and to respond to any comments received. <u>Id</u>. It is then required to prepare a final water supply assessment. <u>Id</u>.

The water supply assessment is required to be a factual and concise report that includes the following information as it relates to the PWSMA: description of existing systems, including history of water quality, reliability, service, and supply adequacy, general firefighting capability of the water companies, and identification of major facilities that need to be expanded, altered or replaced, availability and adequacy of any future water source, existing service area boundaries and public water system limits, present and projected growth rates, and status of water system planning, land use planning and coordination between public water systems. Id.

The WUCC prepared a preliminary water supply assessment on September 14, 2016, on which it solicited and responded to comments received thereon. It submitted the final water supply assessment to the Commissioner on December 14, 2016, which was not later than six months after the WUCC's first meeting.

b. ESA Boundaries. An ESA is an area where public water is supplied by one public water system. As part of the planning process, the WUCC is required to establish preliminary and then final ESA boundaries, based on the final water supply assessment, for each public water system within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). In establishing ESA boundaries, the WUCC is required to solicit comments on such boundaries from municipalities, regional councils of government, the Commissioner, the Commissioner of Energy and Environmental Protection, the Secretary of OPM, PURA, and any other interested persons within the PWSMA, and respond to any comment received. Id.

In establishing such ESA boundaries, the WUCC is required to: allow water companies to maintain existing service areas; not leave areas unserviced islands, and not allow new service areas or main extensions that create duplication or an overlap in services. § 25-33h-1(d)(2)(B) of the Regulations

³ Please note that, while the individual water supply plans are part of a WUCC's coordinated plan, the Department has not attached them to this report as they are voluminous. In addition, portions of such individual water supply plans are protected from disclosure pursuant to *Conn. Gen. Stat.*§ 25-32d(e).

of Connecticut State Agencies. In determining such ESA boundaries, the WUCC is required to consider the following factors: existing water 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 the ability of a water system to provide a pure and adequate supply of water now and into the future. <u>Id</u>.

Based on the final water supply assessment, the WUCC established preliminary ESA boundaries within the PWSMA delineating each public water system's future service area. After soliciting and responding to comments received, the WUCC established final ESA boundaries, which it submitted to the Commissioner on June 14, 2017, which is not less than twelve months after the WUCC's first meeting.⁴

- c. Integrated Report. The Integrated Report is a long-term planning tool for the PWSMA. A WUCC is required to develop an integrated report that provides an overview of the individual public water systems within the PWSMA, addresses the area-wide water supply issues, concerns and needs, and promotes cooperation among public water systems. § 25-33h-1(d)(2)(C) of the Regulations of Connecticut State Agencies. The integrated report is required to contain, *inter alia*, an area-wide overview that integrates individual water supply plans, plans for any necessary interconnections between public water systems for both daily and emergency use, a plan for joint use, management or ownership of services, equipment or facilities, a plan for satellite management or transfer of ownership, provisions for minimum design standards, presentation of financial data as related to area-wide issues such as interconnections, and considerations of the potential impacts of the coordinated plan on other uses of water resources, including water quality, flood management, recreation, hydropower, and aquatic habitat issues. <u>Id</u>.
- d. Executive Summary. The WUCC is required to prepare an executive summary to serve as an abbreviated overview of the coordinated plan for the PWSMA. § 25-33h-1(d)(2)(D) of the Regulations of Connecticut Agencies. It is required to be factual and concise, and summarize the major elements of the coordinated plan. <u>Id</u>.

D. Why Approved Coordinated Plans are Needed

Approved coordinated plans for each PWSMA are necessary for state drinking water supply planning success. Public Act 85-535 envisioned the revision of coordinated plans every ten years. The coordinated plans of previously convened WUCCs were not updated primarily due to lack of available state funds. Iterative planning processes require constant vigilance and regular updates to reflect change. Current accurate coordinated plans are needed to reflect changes over the past two decades to the economy, individual public water system plans, local and regional planning, and environmental impacts to supply adequacy. The work that will form these plans continues to be a critical component of the State Water Plan, currently also under development.

The former Southeastern Connecticut management area had a Commissioner-approved plan. The approved coordinated plan led to the construction of a major regional pipeline that now provides cost-effective, reliable water service to several municipalities in the region. The Department hopes to ensure drinking water supply planning is carried out similarly across the state.

In 2011, a WUCC advisory group was convened to discuss historic problems, current shortcomings, and make recommendations for improvements. Recommendations provided were to sizably increase stakeholder and municipal involvement, and to improve coordination between public systems and the

⁴ A WUCC may change ESA boundaries. *See Conn. Gen. Stat.* § 25-33g(a). Pursuant to § 25-33h-1(i)(2) of the Regulations of Connecticut State Agencies, whenever ESA boundaries are revised, the WUCC is required to prepare a revised coordinated plan or an amendment to such plan and distribute in the same manner as the coordinated plan.

municipalities served. PWSMA consolidation was recommended given the costs associated with preparing coordinated plans for the state's small footprint. The group recommended that WUCC consolidation efforts consider the state's regional planning boundaries to encourage increased municipal involvement and that current, accurate technical data be used to demonstrate system adequacy prior to granting state-approved ESA designations.

In an effort to expedite the WUCC process, the Department executed a data collection contract with Milone & MacBroom, a consulting firm in Cheshire, Connecticut in June of 2015. This data collection contract consisted of obtaining, compiling, and organizing water utility data prior to initiating the WUCC process.

Following the initiation of the data collection contract, a Request for Proposals ("RFP") was published to solicit competitive sealed proposals from qualified consulting firms to provide assistance to the three WUCCs to carry out the requirements contained in *Conn. Gen. Stat.* §§ 25-33f through 25-33h, and the regulations promulgated thereunder, and to prepare and produce for the Department a State-Wide Coordinated Water Supply Plan. Proposers were required to attend a mandatory informational conference, submit proposals and present their proposals to the RFP screening committee. On October 27, 2015, the Commissioner selected the proposal submitted by Milone & MacBroom, and contracts were executed on May 10, 2016.

In addition to securing a consultant to provide assistance to the three WUCCs, the Department held several informational and organization meetings in September and December of 2015 to inform water utilities and members of the public of the history and responsibilities of the WUCCs, the rules and procedures applicable to the WUCC process, and future steps. *See* https://portal.ct.gov/-/media/Departments-andAgencies/DPH/dph/drinking_water/pdf/WUCCWPCSCpdf.pdf?la=en

II. Written public comments received by the Department on the Coordinated Plan

In response to the Legal Notice published on August 23, 2018, the Department received comments during the public comment period that ended on September 28, 2018, from the following individuals and entities on the WUCC's final coordinated plan:

- Elizabeth Gara, Executive Director, Connecticut Water Works Association ("CWWA")
- Tiffany Lufkin, Asset Management Engineer, South Central Connecticut Regional Water Authority ("SCRWA")
- Denise Ruzicka, Director, Division of Water Planning & Management, DEEP
- Daniel R. Lawrence, P.E., Director of Engineering and Planning, Aquarion Water Company of Connecticut ("Aquarion")
- Scott Jellison, P.E., Chief Executive Officer, The Metropolitan District Commission ("MDC")
- Michael Maniscalco, Town Manager, East Hampton, CT and Susan Bransfield, First Selectwoman, Portland, CT ("Towns of East Hampton and Portland")
- Margaret Minor, Executive/ Director, and Tony Mitchell, Science and IT Specialist, Rivers Alliance of CT ("Rivers Alliance")

See Exhibit 3.

III. Summary and evaluation of the final coordinated plan

A. Evaluation of Conn. Gen. Stat. § 25-33g(a) factors

As stated above, the WUCC's coordinated plan is required to promote cooperation among public water systems and include, but not be limited to, provisions for: (1) integration of public water systems, consistent with the protection and enhancement of public health and well-being; (2) integration of water company plans; (3) ESAs; (4) joint management or ownership of services; (5) satellite management services; (6) interconnections between public water systems; (7) integration of land use and water system plans; (8) minimum design standards; (9) water conservation; (10) the impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues; and (11) acquisition of land surrounding wells proposed to be located in stratified drifts. *Conn. Gen. Stat.* § 25-33g(a).

The Department has reviewed the WUCC's final coordinated plan and determined that it includes provisions for each of the following factors, as required by *Conn. Gen. Stat.* § 25-33g(a):

- 1. Integration of public water systems, consistent with the protection and enhancement of public health and well-being. This factor is included in the final Integrated Report in chapter 5.
- 2. Integration of water company plans. This factor is included in the final Integrated Report in section 10.1.
- 3. ESAs. This factor is included in the final ESA document.
- 4. Joint management or ownership of services. This factor is included in the final Integrated Report in chapter 6.
- 5. Satellite management services. This factor is included in the final Integrated Report in section 4.1.
- 6. Interconnections between public water systems. This factor is included in the final Integrated Report in chapter 5.
- 7. Integration of land use and water system plans. This factor is included in the final Integrated Report in chapter 10.
- 8. Minimum design standards. This factor is included in the final Integrated Report in chapter 9.
- 9. Water conservation. This factor is included in the final Integrated Report in section 2.2.
- 10. The impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues. This factor is included in the final Integrated Report in chapter 8.
- 11. Acquisition of land surrounding wells proposed to be located in stratified drifts. This factor is included in the final Integrated Report in section 2.1.

B. Evaluation of the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies

In making a decision regarding whether or not to approve or reject a coordinated plan, the Commissioner is required to consider the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies, which are:

(A) Ability to provide pure, adequate and reliable water supplies for present and projected future customers; (B) Potential conflict over the use of such supplies; (C) Adherence to public act 85-535; (D) Extent to which the plan identifies water supply problems within the public

water supply management area and provides solutions to those problems; (E) Consistency with local, regional, and state land use plans and growth policies; (F) Appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries; (G) Integration of public water systems, consistent with the protection and enhancement of public health and wellbeing; (H) Impact on other uses of water resources; (I) Extent to which minimum design standards are sufficient and appropriate; (J) Public comment; (K) Availability of alternate sources of water supplies; (L) Consistency with existing state agency regulatory programs and statutory requirements; (M) Compatibility with plans of other public water supply management areas; (N) Comments received from the department of environmental protection, department of public utility control, the office of policy and management, municipalities, regional planning agencies, local and regional health departments, or other interested persons; and (O) Any other factors deemed relevant.

The following is a summary of the Department's evaluation of each of the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies:

1. Ability to provide pure, adequate and reliable water supplies for present and projected future customers

The WUCC's final coordinated plan addressed the provision of pure, adequate and reliable water supplies for future and projected customers. *See*, e.g., final Integrated Report, chapter 3, pp. 1-38; final ESA document, section 2.5.7. pp. 25-29. In analyzing public water system supply capacity, the WUCC considered existing service populations, demands, and available water to meet Average Daily Demand, and existing service population, demands and available water to meet Maximum Month Average Daily Demand. In addition, the WUCC considered projected future customers, which included town populations and demand projections. The WUCC also considered to town's public water service population and Average Daily Demand projections, as well as ESA holder public water service population and Average Day Demand projections. Finally, the WUCC considered the effect of stream flow standards and regulations⁵ on surface water supplies, which may impact the ability of public water systems to provide adequate and reliable water supplied for future and projected customers.

2. Potential conflict over use of such supplies

The WUCC evaluated the potential conflict over use of supplies. *See, e.g.*, final Integrated Report Chapter 8: Pages 1-8. This evaluation included criteria including water quality, minimum stream flow, flood management, recreation, hydropower, Natural Diversity Data Base ("NDDB") areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change. In addition, areas of consideration in the WUCC plan included potential impacts of projects by Aquarion Water Company, potential impacts of interconnection projects for Active Daily Supply, and potential impacts of interconnection projects for resiliency.

3. Adherence to Public Act 85-535

The WUCC's final coordinated plan adhered to Public Act 85-535. The WUCC met all of the timeframes required, consulted with state agencies, and solicited comments from the Commissioner, the Commissioner of Energy and Environmental Protection, PURA, the Secretary of the OPM, and any municipality, regional council of governments or other interested party and responded to such comments, as required. Finally, as discussed in Paragraph A, the WUCC included in its final coordinated plan all of the required factors in *Conn. Gen. Stat.* § 25-33h(a).

⁵ See §§ 26-141b-1 to 26-141b-8 of the Regulations of Connecticut State Agencies.

4. Extent to which the final coordinated plan identifies water supply problems within the PWSMA and provides solutions to those problems

The WUCC's final coordinated plan identifies water supply problems within the PWSMA, see, e.g., sections 7.1-7.6 of the final Water Supply Assessment, and provides solutions to these problems, see e.g., section 1-12 of the final Integrated Report. The analysis of problems and solutions discussed in the final Integrated Report includes regionalization and interconnections to ensure redundant and environmentally responsible supplies. Also included is the reduction of decentralized growth of small systems and the encouragement to consider consolidations and ensure responsible planning in order to prevent proliferation of adjacent small systems. Finally, the WUCC's coordinated plan goes further to provide solutions to problems through assistance to small public water systems to ensure proper technical, managerial and financial capacity of those systems, water conservation and water efficiency, and reduction of future demands and unnecessary water use.

Other solutions discussed include investment in infrastructure or replacement of aging infrastructure, funding or providing grants and loans for planning projects, drought management, resiliency to storms and climate change, and protection of watersheds and supplies. The plan also identifies the need for improvements to water planning to avoid the development of unnecessary new sources and ensure useful data is developed for multiple planning purposes.

5. Consistency with local, regional, and state land use plans and growth policies

The WUCC's final coordinated plan is consistent with local, regional and state land use plans and growth policies. *See* sections 10-1 to 10-5 of the final Integrated Report. It encourages that a review be conducted of the data requirements to maximize the utility of future data collection and projections by WUCC members for multiple planning efforts. The final coordinated plan indicates that to maintain consistency, utilities should coordinate with local planners during Plans of Conservation Development updates, to identify areas of development in watershed or recharge areas that are incompatible with public water supply. In addition, the WUCC's final coordinated plan suggests that the regional council of governments could assist the WUCC by advising of the timing of Plans of Conservation Development updates to WUCC members and by providing comments related to water planning on local Plans of Conservation Developments. An example of maintaining consistency is specifically designating lands under the custody of DEEP as areas that may not support future water supply expansion.

6. Appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries

The ESA boundaries delineated by the WUCC are appropriate in relation to local, regional, and state growth policies. *See* section 2.5 of the final ESA document. In addition, the WUCC worked to ensure that as few areas as possible were left as islands or areas isolated outside of the ESA boundaries. In section 2.5.2 of the final ESA document, the WUCC considered the appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries. In considering these factors, the WUCC relied on the ESA declaration form, which was used to determine ESA providers. The ESA declaration form requested that each declarant describe the declarant's familiarity with the items listed, as well as the declarant's managerial capacity. The WUCC did not leave any areas in the PWSMA unassigned as part of this process.

7. Integration of public water systems, consistent with the protection and enhancement of public health and well-being

The WUCC's final coordinated plan considered the integration of public water systems, consistent with the protection and enhancement of public health and well-being. *See* chapter 5 of the final Integrated Report. The WUCC's final coordinated plan addressed this factor through the discussion of inter- and intra-regional interconnections as a potential means of supplying water, which may be less expensive than developing additional sources such as groundwater supplies. The plan indicates that interconnections can also provide supply to areas where groundwater or surface water source development is not feasible. Development of infrastructure to allow for two-way transfer of water between interconnected systems is an important resiliency measure, which the WUCC's final coordinated plan suggests should be considered for both existing and new interconnections.

8. Impact on other uses of water resources

The WUCC's final coordinated plan considered the impact on other uses of water resources. *See* sections 3.6, 8.1, 8.2 and 8.3 of the final Integrated Report. The WUCC's final coordinated plan presents information that evaluates the potential impact of developing regionally significant future sources. The evaluation considers the following criteria: water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

In addition, throughout development of WUCC's final coordinated plan, the State Water Plan has been an integral topic. The State Water Plan is intended to serve as a platform for future planning decisions regarding all aspects of water with our State. Similarly, the WUCC's final coordinated plan will serve as a platform for future planning, but with a more refined scope of public water supply.

9. Extent to which minimum design standards are sufficient and appropriate

The WUCC's final coordinated plan considered the extent to which minimum design standards are sufficient and appropriate. *See* sections 9-1 to 9.4 of the final Integrated Report. The WUCC recommends that water companies ensure any local design standards are in a written format, adopted by the water company, and provided to a developer at the beginning of the certificate of public convenience and necessity ("CPCN") process under *Conn. Gen. Stat.* §16-262m. The WUCC plan further indicates that ideally, any local standards would be referenced in a development agreement between the developer and the water company that would eventually own and operate the system.

10. Public comment

The WUCC, throughout the two-year planning process, solicited comments from municipalities, regional councils of governments, state agencies and other interested parties and responded to all comments received, as required by *Conn. Gen. Stat.* §§ 25-33g and 25-33h and §§ 25-33h-1(h) of the Regulations of Connecticut State Agencies. The comments received and the WUCC's responses thereto are found in the following documents on the following pages:

- 1. Water Supply Assessment: Comments the WUCC received on the preliminary water supply assessment and the WUCC's responses thereto are found in Table 1-4 and Appendix E of the WUCC's final water supply assessment.
- 2. ESA Boundaries: Comments the WUCC received on the preliminary ESA boundaries and the WUCC's responses thereto are found on section 1.4, Table 1.4 and Appendix F of the WUCC's final ESA boundaries.

3. Coordinated Plan: Comments the WUCC received on the preliminary coordinated plan and the WUCC's responses thereto are found on section 1.3, Table 1.2 and Appendix A of the WUCC's final coordinated plan.

11. Availability of alternate sources of water supplies

The WUCC's final coordinated plan addresses the availability of alternate sources of water supplies. *See* sections 5.3 to 5.4 and 7.1 to 7.4 of the final Integrated Report. Specifically, the WUCC's final coordinated plan addresses this factor by recommending that when public water systems are proximal to each other, they interconnect as interconnections present a cost-effective solution to meet periodic or regular water needs, including needs during critical or emergency situations such as drought, water quality problems or treatment issues, and during routine maintenance of a water supply source or storage tank. The WUCC plan notes that deterrents to interconnections include water quality (blending concerns), capital improvement costs, fire protection considerations, and operational, maintenance and monitoring requirements. If, however, an evaluation of the benefit of targeted water conservation and water efficiency measures demonstrate that projected deficits either cannot be eliminated or cannot be eliminated even when combined with securing water through an interconnection, or development of an interconnection proves impractical, then development of new water supply sources will be necessary.

In addition, the WUCC's final coordinated plan recommends that water companies coordinate with local planners during Plan of Conservation Development updates to identify areas of development in watershed or recharge areas that are incompatible with public water supply. Also, the regional council of governments could assist the WUCC by advising it of the timing of Plan of Conservation Development updates, and by providing comments related to water planning on local Plans of Conservation Developments.

12. Consistency with existing state agency regulatory programs and statutory requirements

All aspects of the WUCC's final Coordinated Plan are consistent with existing state agency regulatory programs and statutory requirements. Given the differences in data requirements for the three related planning efforts, water supply planning, coordinated water system planning, and state water planning, a review of the data requirements should be conducted to maximize the utility of future data collection and projections by WUCC members for multiple planning efforts. Significant reviews of potential pertinent state agency program requirements were considered, including but not limited to: DEEP's minimum stream flow, aquifer protection area and diversion permitting requirements, OPM's Plan of Conservation and Development, PURA's regulation of water company rates, municipalities' planning and zoning requirements, and the Department's water supply planning requirements.

13. Compatibility with plans of other public water supply management areas

The WUCC's final Coordinated Plan is compatible with plans of other public water supply management areas. To ensure compatibility the Department, through a contractor, developed a statewide plan that bridged the three PWSMAs and analyzed the three WUCC's final coordinated plans on a statewide level. In addition, the Department aided in the facilitation of the development of all three WUCC's coordinated plans simultaneously, to ensure they covered the entire state. Finally, since the Department attended all meetings of all three WUCCs and since WUCC members, who are often a member of more than one WUCC, attended the meetings of one or more WUCCs, the entire WUCC planning process was undertaken with all PWSMAs represented and considered to ensure compatibility.

14. Comments received from the department of environmental protection, department of public utility control, the office of policy and management, municipalities, regional planning agencies, local and regional health departments, or other interested persons.

During the public comment period on the WUCC's final coordinated plan, which began on August 23, 2018 and ended on September 28, 2018, the Department received a number of comments. Specifically, as stated in Part II, above, the Department received comments from CWWA, SCRWA, DEEP, Aquarion, MDC, Towns of East Hampton and Portland, and Rivers Alliance.

The comments the Department received from Aquarion, CWWA, MDC, SCRWA, and the Towns of East Hampton and Portland all expressed support for the Commissioner's approval of the WUCC's final coordinated plan. *See* Exhibit 2, pp. 1 to 6.

The comment the Department received from DEEP stated that, while the WUCC's final coordinated plan specifically addressed "[t]he impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues", which was one of the requirements added to *Conn. Gen. Stat.* § 25-33g(a) by Public Act 14-163, with respect to regionally significant future sources, DEEP believed the intent of the legislation was broader than that. *See* Exhibit 2, p. 7 to 15. The Department disagrees. As stated in subdivision 10, above, the WUCC, in developing its final coordinated plan, considered impacts on water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

In addition, DEEP encouraged the WUCC and the Department to expand the discussion and consideration of the nexus between public water supply and the environmental sustainability of the water resources utilized by public water systems. <u>Id</u>. The Department agrees this is an important concept and will be a central component of WUCC's efforts in implementation of the final coordinated plan.

Finally, the Department received comments from Rivers Alliance. *See* Exhibit 2, pp. 16 to 25. While Rivers Alliance recognized that the WUCC did a major piece of work in pulling together the data required under *Conn. Gen. Stat.* § 25-33h and §25-33h-1(g) of the Regulations of Connecticut State Agencies, it recommended that the WUCC's final coordinated plan not be approved. In support of its recommendation, Rivers Alliance stated that the deadlines in the statutes and regulations that the WUCC was required to meet are unrealistic and recommended that the statute be amended to provide more contemporaneous deadlines. While the deadlines were tight, it is important to note that, as stated in Subdivision 3, above, the WUCC met all of the deadlines and therefore a statutory change is not required.

In addition, Rivers Alliance recommended that the WUCC's final coordinated plan not be approved because "[it] does not provide for uniform and predictable management of water supply". In support of this statement, Rivers Alliance stated that the process for changing ESA boundaries after the final coordinated plan is approved is unclear. As stated above in Footnote 3 in Section I, there is a process by which the WUCC may change an ESA boundary. Specifically, pursuant to § 25-33h-1(i)(2) of the Regulations of Connecticut State Agencies, whenever ESA boundaries are revised, the WUCC is required to prepare a revised coordinated plan or an amendment to such plan and distribute in the same manner as the coordinated plan.

Also, Rivers Alliance stated that the WUCC's final coordinated plan not be approved because "[t]he proper governance of the WUCCs is also unclear in the statute". The Department is not sure to what Rivers Alliance is referring, but various statutes and regulations clearly state what the WUCC's responsibilities are. *See, e.g., Conn. Gen. Stat.* §§ 25-33f through 25-33h and § 25-33h-1 of the Regulations of Connecticut State Agencies. Rivers Alliance also stated that the final coordinated plan

should not be approved because "[m]any of the key provisions of the WUCC law seem to be unenforceable". In support of its claim, Rivers Alliance stated that the exact responsibilities and benefits of ESA providers are not clear and there are no enforcement mechanisms for such responsibilities. Pursuant to *Conn. Gen. Stat.* § 25-33g and § 25-33h-1(d)(2)(B), the WUCC established ESA boundaries to delineate each public water system's future service area. This is a critical part of the planning process. It ensures existing service areas are maintained as well as the orderly and efficient development of public water supplies. To that end, *Conn. Gen. Stat.* § 16-262m(c), which is the statute that provides the requirements for CPCNs, requires ownership of a new system to be assigned to the ESA provider, when one has been determined. This ensures the orderly and efficient development of public water supplied and prevents the proliferation of new public water system owners by requiring the ESA provider to own the system.

Additionally, Rivers Alliance stated that the WUCC's final coordinated plan should not be approved because "90 percent of the WUCC members did not participate in the plan development". As stated above in subdivision 10, the WUCC provided notice of meetings and solicited comments at every stage of the planning process from all WUCC members, as well as state agencies, municipalities, regional council of government, and other interested persons. Accordingly, while all members may not have participated directly, they were provided notice and given an opportunity to participate on numerous occasions.

Finally, Rivers Alliance stated that the final coordinated plan should not be approved because the WUCC, in its final coordinated plan, failed to address adequately the "impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues". As stated above in response to DEEP's comment, the Department disagrees. As stated in subdivision 10, above, the WUCC, in developing its final coordinated plan, considered impacts on water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change..

15. Any other factors deemed relevant

In addition to the factors above, the Department feels it is important to note that the WUCC also considered the following concepts and planning elements: capacity, resiliency, small system management, source protection; conservation and drought response. *See, e.g.*, Section 2.1 and 2.4 of the final Integrated Report.

Recommendation

Based on the consideration of the factors in *Conn. Gen. Stat.* § 25-33h(a) and § 25-33h-1(g)(2) of the Regulation of Connecticut State Agencies, and the written comments received during the public comment period, the Department recommends that the Commissioner approve the WUCC's final coordinated plan.

Attachments

Exhibit 1—Legal Notice

Exhibit 2—WUCC's Final Coordinated Plan

Exhibit 3—Written Public Comments Received by the Department

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

FINAL COORDINATED WATER SUPPLY PLAN OF THE CENTRAL CORRIDOR WATER UTILITY COORDINATING COMMITTEE

Pursuant to *Conn. Gen. Stat.* § 25-33h (a) and § 25-33h-1 (g) of the Regulations of Connecticut State Agencies, I hereby approve the Western Water Utility Coordinating Committee's final coordinated water supply plan, as recommended by the Department of Public Health ("Department") in its report regarding approval of the Central Corridor Water Utility Coordinating Committee's Consolidated Plan Report ("Report"). A copy of the Department's Report is attached hereto.

Raul Pino, MD MPH

Commissioner

Date/

Attachment









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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

REPORT TO THE COMMISSIONER

Prepared Pursuant to Section 25-33h of the Connecticut General Statutes

Regarding

Approval of the Central Water Utility Coordinating Committee's Consolidated Plan

On August 23, 2018, the Department of Public Health ("Department") published legal notice in the Danbury News-Times, Hartford Courant, New Haven Register, New London Day, Norwich Bulletin, La Voz Hispana, and Northeast News newspapers¹ in accordance with § 25-33h of the Connecticut General Statutes (Conn. Gen. Stat.) and § 25-33h-1(g)(1) of the Regulations of the Connecticut State Agencies announcing to the public that the Central Water Utility Coordinating Committee ("WUCC") submitted its final coordinated water system plan ("final coordinated plan") to the Commissioner of Public Health ("Commissioner") on May 22, 2018, for approval, and that such plan was available for public comment, to the extent disclosable by law ("August 23, 2018 Legal Notice"). Exhibit 1. The Department also posted the notice on its Internet webpage.

The Department accepted written comments until September 28, 2018. All of the written comments have been considered. Based on a consideration of the factors in *Conn. Gen. Stat.* § 25-33h(a) and § 25-33h-1(g)(2) of the Regulations of the Connecticut State Agencies, and the written comments received, the Department recommends that the Commissioner of Public Health ("Commissioner") approve the WUCC's final coordinated plan, which is in Exhibit 2. The WUCC's final coordinated plan is also available on the Department's webpage at: https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee.

¹ The Department published notice on its Internet webpage on August 28, 2018. *See https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee.*



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I. Background

A. Public Water Supply Management Areas and Priorities

Connecticut's public water supply planning process was prompted by the state's extended drought in the early 1980s. During the 1985 legislative session, the Connecticut General Assembly passed Public Act 85-535, "An Act Concerning a Connecticut Plan for Public Water Supply Coordination," initiating the first statewide water supply planning program. The Department, in consultation with the Public Utilities Regulatory Authority ("PURA"), the Department of Energy and Environmental Protection ("DEEP"), and the Office of Policy and Management ("OPM"), was given the charge of developing a coordinated approach to long-range water supply planning to assure future supplies. The legislative finding, as reflected in *Conn. Gen. Stat.* § 25-33c, states the following: "In order to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety, and welfare, the [Department] shall administer a procedure to coordinate the planning of public water supply systems".

On March 5, 1986, in accordance with Public Act 85-535 and *Conn. Gen. Stat.* § 25-33e, the Commissioner delineated the final boundaries of the public water system management area ("the 1986 PWSMAs"), which created seven public water supply management areas, and established the first three priorities for the initiation of the WUCC planning process established in *Conn. Gen. Stat.* §§ 25-33f to 25-3h, inclusive. The Commissioner established the last four priorities on October 30, 1995.

From 1987 to 1996, the Commissioner convened four of the seven WUCCs, the Housatonic, the Upper Connecticut River, the South Central and Southeastern. The WUCCs for each of these areas finalized area-wide supplement reports. The Southeastern WUCC was the only WUCC that prepared a final coordinated plan, which the Commissioner approved in 2002.

On April 15, 2014, pursuant to § 25-33h-1 of the Regulations of Connecticut State Agencies, the Commissioner altered the boundaries of the public water supply management areas ("PWSMA") and priorities for initiation of the WUCC planning process. See https://portal.ct.gov/media/Departments-and-Agencies/DPH/dph/drinking_water/pdf/2016AnnualWUCCReportsignedpdf.pdf?la=en. The final altered boundaries of the PWSMAs were delineated such that there were three areas, the Western, Central Corridor and Eastern. The final priorities for initiation of the WUCC planning process were established as follows: the Western PWSMA, the Central Corridor PWSMA and the Eastern PWSMA.

B. WUCC Process

Pursuant to *Conn. Gen. Stat.* § 25-33f, the Commissioner, following the establishment of the final altered priorities pursuant to *Conn. Gen. Stat.* § 25-33e, is required to convene a WUCC for each PWSMA to implement the planning process established by *Conn. Gen. Stat.* §§ 25-33f to 25-33h, inclusive. The Commissioner convened the WUCC on June 15, 2016.

A WUCC consists of one representative from each public water system with a source of water supply or a service area within the PWSMA 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. *Conn. Gen. Stat.* § 25-33(f). Pursuant to § 25-32-1(b)(7) of the Regulations of Connecticut State Agencies, any regional planning agency or public water system that is not included on the membership list for a WUCC may petition the Department to be included. The Department is required to maintain and make available the list of eligible WUCC members. § 25-32-1(b)(7) of the Regulations of Connecticut State Agencies.

Once the WUCC is convened, the WUCC, in consultation with the Commissioner, the Commissioner of DEEP, the Secretary of OPM, and PURA, is required to develop a preliminary assessment of water supply conditions and problems within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). The WUCC is required to solicit comments on the preliminary assessment from municipalities, regional planning agencies, state agencies and other interested parties and respond to any comment received. <u>Id</u>. The WUCC is required thereafter to prepare a final assessment of water supply conditions and problems within the public water supply management area. <u>Id</u>.

Based on the final assessment of water supply conditions and problems within the PWSMA, the WUCC is required to establish preliminary exclusive service area ("ESA") boundaries for each public water system within the PWSMA. In establishing ESA boundaries, the WUCC is required to solicit comments on such boundaries from municipalities, regional planning agencies, the Commissioner, the Commissioner of DEEP, the Secretary of OPM, PURA, and other interested persons within the PWSMA and respond to all comments received.

Pursuant to *Conn. Gen. Stat.* § 25-33h, the WUCC is also required to prepare a coordinated water system plan ("Coordinated Plan") for its PWSMA. A coordinated plan consists of the individual water system plans of each public water system within a PWSMA, filed pursuant to *Conn. Gen. Stat.* § 25-32d, and an area-wide supplement to such plans developed pursuant to *Conn. Gen. Stat.* §25-33h that addresses public water system concerns pertaining to the PWSMA as a whole. *Conn. Gen. Stat.* § 25-33d(f).

A WUCC is required to review and update its coordinated water system plan at least every ten years or sooner. § 25-33-1(i)(1) of the Regulations of Connecticut State Agencies. Any permit issued by the Commissioner of Public Health is required, to the extent feasible, to be consistent with any coordinated plan. *Conn. Gen. Stat.* § 25-33i(a). In addition, Public Act 14-163² required the Water Planning Council ("WPC") to consider WUCC plans in developing the state water plan.

C. Coordinated Water Supply Plan.

The WUCC submitted its Coordinated Plan to the Commissioner for the Commissioner's approval on June 4, 2018, which was not more than two years after the first meeting of the WUCC. The coordinated plan is required to promote cooperation among public water systems and include, but not be limited to, provisions for: (1) integration of public water systems, consistent with the protection and enhancement of public health and well-being; (2) integration of water company plans; (3) ESAs; (4) joint management or ownership of services; (5) satellite management services; (6) interconnections between public water systems; (7) integration of land use and water system plans; (8) minimum design standards; (9) water conservation; (10) the impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues; and

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² P.A. 14-163 requires the WPC to, within available appropriations, prepare a state water plan for the management of the water resources of the state by July 1, 2017. In developing such plan, P.A. 14-163 requires the WPC to, among other things, consider individual water supply plans, water quality standards, stream flow classifications, WUCC plans, the State Plan of Conservation and Development, and other planning documents the WPC considers necessary. In addition, P.A. 14-163 requires the state water plan to, *inter alia*, identify water quantities and qualities that are available for public water supply, health, economic, recreation, and environmental benefits on a regional basin scale, considering both surface water and groundwater; identify current and future water demand on a statewide and regional basin scale; recommend using the state's water resources in a manner that balances public water supply, economic development, recreation, and ecological health; recommend major engineering works or special districts, as well as technology and infrastructure upgrades and interconnections; recommend land use and other measures to ensure the desired water quality and quantity, as well as promoting development based on available water resources; and try to incorporate regional and local water use and management plans and programs and water and sewerage facilities plans. The WPC will provide the public an opportunity to review the state water plan after such plan is prepared.

(11) acquisition of land surrounding wells proposed to be located in stratified drifts. *Conn. Gen. Stat.* § 25-33g(a).

A coordinated plan is comprised of the individual water supply plans of the public water systems within the PWSMA that serve over 1,000 people or have 250 or more service connections, and an area-wide supplement that includes a water supply assessment, delineation of ESA boundaries, an integrated report, and an executive summary. The following provides additional information regarding the components of the coordinated plan:

- 1. Individual Water Supply Plans.³ Each water company that serves more than 1,000 people or 250 service connections is required to prepare an individual water supply pursuant to *Conn. Gen. Stat.* § 25-32d. A water company is required to revise its plan at such time as the water company filing the plan or the Commissioner requires it, or at intervals of not less than six years or more than nine years after the date of the most recently approved plan.
- 2. Area-Wide Supplement. The area-wide assessment is the part of the coordinated plan that addresses area-wide water system concerns pertaining to the PWSMA that are not otherwise included in each water company's individual water supply plan. § 25-33h-1(a)(1) of the Regulations of Connecticut State Agencies. The supplement identifies the present and future water system concerns, analyzes alternatives and sets forth a means for meeting those concerns. The area-wide supplement consists of the WUCC's water supply assessment, ESA boundaries, integrated report, and executive summary.
 - a. Water Supply Assessment. A WUCC, in consultation with the Commissioner and the Commissioner of Energy and Environmental Protection, the Secretary of OPM and PURA, is required to develop a preliminary water supply assessment of water supply conditions and problems within the PWSMA. Conn. Gen. Stat. § 25-33g(a). The WUCC is required to solicit comments on the preliminary water supply assessment from regional planning agencies, municipalities, state agencies, and other interested persons and to respond to any comments received. Id. It is then required to prepare a final water supply assessment. Id.

The water supply assessment is required to be a factual and concise report that includes the following information as it relates to the PWSMA: description of existing systems, including history of water quality, reliability, service, and supply adequacy, general firefighting capability of the water companies, and identification of major facilities that need to be expanded, altered or replaced, availability and adequacy of any future water source, existing service area boundaries and public water system limits, present and projected growth rates, and status of water system planning, land use planning and coordination between public water systems. <u>Id</u>.

The WUCC prepared a preliminary water supply assessment on September 14, 2016, on which it solicited and responded to comments received thereon. It submitted the final water supply assessment to the Commissioner on December 12, 2016, which was not later than six months after the WUCC's first meeting.

b. ESA Boundaries. An ESA is an area where public water is supplied by one public water system. As part of the planning process, the WUCC is required to establish preliminary and then final ESA boundaries, based on the final water supply assessment, for each public water system within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). In establishing ESA boundaries, the WUCC is required to solicit comments on such boundaries from

³ Please note that, while the individual water supply plans are part of a WUCC's coordinated plan, the Department has not attached them to this report as they are voluminous. In addition, portions of such individual water supply plans are protected from disclosure pursuant to *Conn. Gen. Stat.*§ 25-32d(e).

municipalities, regional councils of government, the Commissioner, the Commissioner of Energy and Environmental Protection, the Secretary of OPM, PURA, and any other interested persons within the PWSMA, and respond to any comment received. <u>Id.</u>

In establishing such ESA boundaries, the WUCC is required to: allow water companies to maintain existing service areas; not leave areas unserviced islands, and not allow new service areas or main extensions that create duplication or an overlap in services. § 25-33h-1(d)(2)(B) of the Regulations of Connecticut State Agencies. In determining such ESA boundaries, the WUCC is required to consider the following factors: existing water 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 the ability of a water system to provide a pure and adequate supply of water now and into the future. Id.

Based on the final water supply assessment, the WUCC established preliminary ESA boundaries within the PWSMA delineating each public water system's future service area. After soliciting and responding to comments received, the WUCC established final ESA boundaries, which it submitted to the Commissioner on June 14, 2017, which is not less than twelve months after the WUCC's first meeting.⁴

- c. Integrated Report. The Integrated Report is a long-term planning tool for the PWSMA. A WUCC is required to develop an integrated report that provides an overview of the individual public water systems within the PWSMA, addresses the area-wide water supply issues, concerns and needs, and promotes cooperation among public water systems. § 25-33h-1(d)(2)(C) of the Regulations of Connecticut State Agencies. The integrated report is required to contain, *inter alia*, an area-wide overview that integrates individual water supply plans, plans for any necessary interconnections between public water systems for both daily and emergency use, a plan for joint use, management or ownership of services, equipment or facilities, a plan for satellite management or transfer of ownership, provisions for minimum design standards, presentation of financial data as related to area-wide issues such as interconnections, and considerations of the potential impacts of the coordinated plan on other uses of water resources, including water quality, flood management, recreation, hydropower, and aquatic habitat issues. Id.
- d. Executive Summary. The WUCC is required to prepare an executive summary to serve as an abbreviated overview of the coordinated plan for the PWSMA. § 25-33h-1(d)(2)(D) of the Regulations of Connecticut Agencies. It is required to be factual and concise, and summarize the major elements of the coordinated plan. <u>Id</u>.

D. Why Approved Coordinated Plans are Needed

Approved coordinated plans for each PWSMA are necessary for state drinking water supply planning success. Public Act 85-535 envisioned the revision of coordinated plans every ten years. The coordinated plans of previously convened WUCCs were not updated primarily due to lack of available state funds. Iterative planning processes require constant vigilance and regular updates to reflect change. Current accurate coordinated plans are needed to reflect changes over the past two decades to the economy, individual public water system plans, local and regional planning, and environmental impacts to supply adequacy. The work that will form these plans continues to be a critical component of the State Water Plan, currently also under development.

⁴ A WUCC may change ESA boundaries. *See Conn. Gen. Stat.* § 25-33g(a). Pursuant to § 25-33h-1(i)(2) of the Regulations of Connecticut State Agencies, whenever ESA boundaries are revised, the WUCC is required to prepare a revised coordinated plan or an amendment to such plan and distribute in the same manner as the coordinated plan.

The former Southeastern Connecticut management area had a Commissioner-approved plan. The approved coordinated plan led to the construction of a major regional pipeline that now provides cost-effective, reliable water service to several municipalities in the region. The Department hopes to ensure drinking water supply planning is carried out similarly across the state.

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

In an effort to expedite the WUCC process, the Department executed a data collection contract with Milone & MacBroom, a consulting firm in Cheshire, Connecticut in June of 2015. This data collection contract consisted of obtaining, compiling, and organizing water utility data prior to initiating the WUCC process.

Following the initiation of the data collection contract, a Request for Proposals ("RFP") was published to solicit competitive sealed proposals from qualified consulting firms to provide assistance to the three WUCCs to carry out the requirements contained in *Conn. Gen. Stat.* §§ 25-33f through 25-33h, and the regulations promulgated thereunder, and to prepare and produce for the Department a State-Wide Coordinated Water Supply Plan. Proposers were required to attend a mandatory informational conference, submit proposals and present their proposals to the RFP screening committee. On October 27, 2015, the Commissioner selected the proposal submitted by Milone & MacBroom, and contracts were executed on May 10, 2016.

In addition to securing a consultant to provide assistance to the three WUCCs, the Department held several informational and organization meetings in September and December of 2015 to inform water utilities and members of the public of the history and responsibilities of the WUCCs, the rules and procedures applicable to the WUCC process, and future steps. See https://portal.ct.gov/media/Departments-andAgencies/DPH/dph/drinking_water/pdf/WUCCWPCSCpdf.pdf?la=en

II. Written public comments received by the Department on the Coordinated Plan

In response to the Legal Notice published on August 23, 2018, the Department received comments during the public comment period that ended on September 28, 2018, from the following individuals and entities on the WUCC's final coordinated plan:

- Elizabeth Gara, Executive Director, Connecticut Water Works Association ("CWWA")
- Tiffany Lufkin, Asset Management Engineer, South Central Connecticut Regional Water Authority ("SCRWA")
- Denise Ruzicka, Director, Division of Water Planning & Management, DEEP
- Daniel R. Lawrence, P.E., Director of Engineering and Planning, Aquarion Water Company of Connecticut ("Aquarion")
- Scott Jellison, P.E., Chief Executive Officer, The Metropolitan District Commission ("MDC")
- Michael Maniscalco, Town Manager, East Hampton, CT and Susan Bransfield, First Selectwoman, Portland, CT ("Towns of East Hampton and Portland")

- Margaret Minor, Executive/ Director, and Tony Mitchell, Science and IT Specialist, Rivers Alliance of CT ("Rivers Alliance")
- Ms. Tyler Stober, West Haven, CT ("Ms. Stober")

See Exhibit 3.

III. Summary and evaluation of the final coordinated plan

A. Evaluation of Conn. Gen. Stat. § 25-33g(a) factors

As stated above, the WUCC's coordinated plan is required to promote cooperation among public water systems and include, but not be limited to, provisions for: (1) integration of public water systems, consistent with the protection and enhancement of public health and well-being; (2) integration of water company plans; (3) ESAs; (4) joint management or ownership of services; (5) satellite management services; (6) interconnections between public water systems; (7) integration of land use and water system plans; (8) minimum design standards; (9) water conservation; (10) the impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues; and (11) acquisition of land surrounding wells proposed to be located in stratified drifts. *Conn. Gen. Stat.* § 25-33g(a).

The Department has reviewed the WUCC's final coordinated plan and determined that it includes provisions for each of the following factors, as required by *Conn. Gen. Stat.* § 25-33g(a):

- 1. Integration of public water systems, consistent with the protection and enhancement of public health and well-being. This factor is included in the final Integrated Report in chapter 5.
- 2. Integration of water company plans. This factor is included in the final Integrated Report in section 10.1.
- 3. ESAs. This factor is included in the final ESA document.
- 4. Joint management or ownership of services. This factor is included in the final Integrated Report in chapter 6.
- 5. Satellite management services. This factor is included in the final Integrated Report in section 4.1.
- 6. Interconnections between public water systems. This factor is included in the final Integrated Report in chapter 5.
- 7. Integration of land use and water system plans. This factor is included in the final Integrated Report in chapter 10.
- 8. Minimum design standards. This factor is included in the final Integrated Report in chapter 9.
- 9. Water conservation. This factor is included in the final Integrated Report in section 2.2.
- 10. The impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues. This factor is included in the final Integrated Report in chapter 8.
- 11. Acquisition of land surrounding wells proposed to be located in stratified drifts. This factor is included in the final Integrated Report in section 2.1.

B. Evaluation of the factors in $\S 25-33h-1(g)(2)$ of the Regulations of Connecticut State Agencies

In making a decision regarding whether or not to approve or reject a coordinated plan, the Commissioner is required to consider the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies, which are:

(A) Ability to provide pure, adequate and reliable water supplies for present and projected future customers; (B) Potential conflict over the use of such supplies; (C) Adherence to public act 85-535; (D) Extent to which the plan identifies water supply problems within the public water supply management area and provides solutions to those problems; (E) Consistency with local, regional, and state land use plans and growth policies; (F) Appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries; (G) Integration of public water systems, consistent with the protection and enhancement of public health and well-being; (H) Impact on other uses of water resources; (I) Extent to which minimum design standards are sufficient and appropriate; (J) Public comment; (K) Availability of alternate sources of water supplies; (L) Consistency with existing state agency regulatory programs and statutory requirements; (M) Compatibility with plans of other public water supply management areas; (N) Comments received from the department of environmental protection, department of public utility control, the office of policy and management, municipalities, regional planning agencies, local and regional health departments, or other interested persons; and (O) Any other factors deemed relevant.

The following is a summary of the Department's evaluation of each of the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies:

1. Ability to provide pure, adequate and reliable water supplies for present and projected future customers

The WUCC's final coordinated plan addressed the provision of pure, adequate and reliable water supplies for future and projected customers. See, e.g., final Integrated Report, chapter 3, pp. 1-38; final ESA document, section 2.5.7. pp. 25-29. In analyzing public water system supply capacity, the WUCC considered existing service populations, demands, and available water to meet Average Daily Demands, deficits in available water to meet Average Daily Demand, and existing service population, demands and available water to meet Maximum Month Average Daily Demand. In addition, the WUCC considered projected future customers, which included town populations and demand projections. The WUCC also considered to town's public water service population and Average Daily Demand projections, as well as ESA holder public water service population and Average Day Demand projections. Finally, the WUCC considered the effect of stream flow standards and regulations⁵ on surface water supplies, which may impact the ability of public water systems to provide adequate and reliable water supplied for future and projected customers.

2. Potential conflict over use of such supplies

The WUCC evaluated the potential conflict over use of supplies. See, e.g., final Integrated Report Chapter 8: Pages 1-8. This evaluation included criteria including water quality, minimum stream flow, flood management, recreation, hydropower, Natural Diversity Data Base ("NDDB") areas of environmental concern, aquatic habitat, riparian rights, waste load

⁵ See §§ 26-141b-1 to 26-141b-8 of the Regulations of Connecticut State Agencies.

allocation, and resiliency to climate change. In addition, areas of consideration in the WUCC plan included potential impacts of projects by Aquarion Water Company, potential impacts of interconnection projects for Active Daily Supply, and potential impacts of interconnection projects for resiliency.

3. Adherence to Public Act 85-535

The WUCC's final coordinated plan adhered to Public Act 85-535. The WUCC met all of the timeframes required, consulted with state agencies, and solicited comments from the Commissioner, the Commissioner of Energy and Environmental Protection, PURA, the Secretary of the OPM, and any municipality, regional council of governments or other interested party and responded to such comments, as required. Finally, as discussed in Paragraph A, the WUCC included in its final coordinated plan all of the required factors in *Conn. Gen. Stat.* § 25-33h(a).

4. Extent to which the final coordinated plan identifies water supply problems within the PWSMA and provides solutions to those problems

The WUCC's final coordinated plan identifies water supply problems within the PWSMA, *see*, *e.g.*, sections 7.1-7.6 of the final Water Supply Assessment, and provides solutions to these problems, *see e.g.*, section 1-12 of the final Integrated Report. The analysis of problems and solutions discussed in the final Integrated Report includes regionalization and interconnections to ensure redundant and environmentally responsible supplies. Also included is the reduction of decentralized growth of small systems and the encouragement to consider consolidations and ensure responsible planning in order to prevent proliferation of adjacent small systems. Finally, the WUCC's coordinated plan goes further to provide solutions to problems through assistance to small public water systems to ensure proper technical, managerial and financial capacity of those systems, water conservation and water efficiency, and reduction of future demands and unnecessary water use.

Other solutions discussed include investment in infrastructure or replacement of aging infrastructure, funding or providing grants and loans for planning projects, drought management, resiliency to storms and climate change, and protection of watersheds and supplies. The plan also identifies the need for improvements to water planning to avoid the development of unnecessary new sources and ensure useful data is developed for multiple planning purposes.

5. Consistency with local, regional, and state land use plans and growth policies

The WUCC's final coordinated plan is consistent with local, regional and state land use plans and growth policies. *See* sections 10-1 to 10-5 of the final Integrated Report. It encourages that a review be conducted of the data requirements to maximize the utility of future data collection and projections by WUCC members for multiple planning efforts. The final coordinated plan indicates that to maintain consistency, utilities should coordinate with local planners during Plans of Conservation Development updates, to identify areas of development in watershed or recharge areas that are incompatible with public water supply. In addition, the WUCC's final coordinated plan suggests that the regional council of governments could assist the WUCC by advising of the timing of Plans of Conservation Development updates to WUCC members and by providing comments related to water planning on local Plans of Conservation Developments. An example of maintaining consistency is specifically designating lands under the custody of DEEP as areas that may not support future water supply expansion.

6. Appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries

The ESA boundaries delineated by the WUCC are appropriate in relation to local, regional, and state growth policies. *See* section 2.5 of the final ESA document. In addition, the WUCC worked to ensure that as few areas as possible were left as islands or areas isolated outside of the ESA boundaries. In section 2.5.2 of the final ESA document, the WUCC considered the appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries. In considering these factors, the WUCC relied on the ESA declaration form, which was used to determine ESA providers. The ESA declaration form requested that each declarant describe the declarant's familiarity with the items listed, as well as the declarant's managerial capacity. The WUCC left several areas in the PWSMA unassigned as part of this process because there was no declarant to which to assign the area.

7. Integration of public water systems, consistent with the protection and enhancement of public health and well-being

The WUCC's final coordinated plan considered the integration of public water systems, consistent with the protection and enhancement of public health and well-being. *See* chapter 5 of the final Integrated Report. The WUCC's final coordinated plan addressed this factor through the discussion of inter- and intra-regional interconnections as a potential means of supplying water, which may be less expensive than developing additional sources such as groundwater supplies. The plan indicates that interconnections can also provide supply to areas where groundwater or surface water source development is not feasible. Development of infrastructure to allow for two-way transfer of water between interconnected systems is an important resiliency measure, which the WUCC's final coordinated plan suggests should be considered for both existing and new interconnections.

8. Impact on other uses of water resources

The WUCC's final coordinated plan considered the impact on other uses of water resources. *See* sections 3.6, 8.1, 8.2 and 8.3 of the final Integrated Report. The WUCC's final coordinated plan presents information that evaluates the potential impact of developing regionally significant future sources. The evaluation considers the following criteria: water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

In addition, throughout development of WUCC's final coordinated plan, the State Water Plan has been an integral topic. The State Water Plan is intended to serve as a platform for future planning decisions regarding all aspects of water with our State. Similarly, the WUCC's final coordinated plan will serve as a platform for future planning, but with a more refined scope of public water supply.

9. Extent to which minimum design standards are sufficient and appropriate

The WUCC's final coordinated plan considered the extent to which minimum design standards are sufficient and appropriate. *See* sections 9-1 to 9.4 of the final Integrated Report. The WUCC recommends that water companies ensure any local design standards are in a written format, adopted by the water company, and provided to a developer at the beginning of the certificate of public convenience and necessity ("CPCN") process under *Conn. Gen. Stat.* §16-262m. The WUCC plan further indicates that ideally, any local standards would be referenced

in a development agreement between the developer and the water company that would eventually own and operate the system.

10. Public comment

The WUCC, throughout the two-year planning process, solicited comments from municipalities, regional councils of governments, state agencies and other interested parties and responded to all comments received, as required by *Conn. Gen. Stat.* §§ 25-33g and 25-33h and §§ 25-33h-1(h) of the Regulations of Connecticut State Agencies. The comments received and the WUCC's responses thereto are found in the following documents on the following pages:

- 1. Water Supply Assessment: Comments the WUCC received on the preliminary water supply assessment and the WUCC's responses thereto are found in Table 1-4 and Appendix E of the WUCC's final water supply assessment.
- 2. ESA Boundaries: Comments the WUCC received on the preliminary ESA boundaries and the WUCC's responses thereto are found on section 1.4, Table 1.4 and Appendix F of the WUCC's final ESA boundaries.
- 3. Coordinated Plan: Comments the WUCC received on the preliminary coordinated plan and the WUCC's responses thereto are found on section 1.3, Table 1.2 and Appendix A of the WUCC's final coordinated plan.

11. Availability of alternate sources of water supplies

The WUCC's final coordinated plan addresses the availability of alternate sources of water supplies. *See* sections 5.3 to 5.4 and 7.1 to 7.4 of the final Integrated Report. Specifically, the WUCC's final coordinated plan addresses this factor by recommending that when public water systems are proximal to each other, they interconnect as interconnections present a cost-effective solution to meet periodic or regular water needs, including needs during critical or emergency situations such as drought, water quality problems or treatment issues, and during routine maintenance of a water supply source or storage tank. The WUCC plan notes that deterrents to interconnections include water quality (blending concerns), capital improvement costs, fire protection considerations, and operational, maintenance and monitoring requirements. If, however, an evaluation of the benefit of targeted water conservation and water efficiency measures demonstrate that projected deficits either cannot be eliminated or cannot be eliminated even when combined with securing water through an interconnection, or development of an interconnection proves impractical, then development of new water supply sources will be necessary.

In addition, the WUCC's final coordinated plan recommends that water companies coordinate with local planners during Plan of Conservation Development updates to identify areas of development in watershed or recharge areas that are incompatible with public water supply. Also, the regional council of governments could assist the WUCC by advising it of the timing of Plan of Conservation Development updates, and by providing comments related to water planning on local Plans of Conservation Developments.

12. Consistency with existing state agency regulatory programs and statutory requirements

All aspects of the WUCC's final Coordinated Plan are consistent with existing state agency regulatory programs and statutory requirements. Given the differences in data requirements for the three related planning efforts, water supply planning, coordinated water system

planning, and state water planning, a review of the data requirements should be conducted to maximize the utility of future data collection and projections by WUCC members for multiple planning efforts. Significant reviews of potential pertinent state agency program requirements were considered, including but not limited to: DEEP's minimum stream flow, aquifer protection area and diversion permitting requirements, OPM's Plan of Conservation and Development, PURA's regulation of water company rates, municipalities' planning and zoning requirements, and the Department's water supply planning requirements.

13. Compatibility with plans of other public water supply management areas

The WUCC's final Coordinated Plan is compatible with plans of other public water supply management areas. To ensure compatibility the Department, through a contractor, developed a statewide plan that bridged the three PWSMAs and analyzed the three WUCC's final coordinated plans on a statewide level. In addition, the Department aided in the facilitation of the development of all three WUCC's coordinated plans simultaneously, to ensure they covered the entire state. Finally, since the Department attended all meetings of all three WUCCs and since WUCC members, who are often a member of more than one WUCC, attended the meetings of one or more WUCCs, the entire WUCC planning process was undertaken with all PWSMAs represented and considered to ensure compatibility.

14. Comments received from the department of environmental protection, department of public utility control, the office of policy and management, municipalities, regional planning agencies, local and regional health departments, or other interested persons.

During the public comment period on the WUCC's final coordinated plan, which began on August 23, 2018 and ended on September 28, 2018, the Department received a number of comments. Specifically, as stated in Part II, above, the Department received comments from CWWA, SCRWA, DEEP, Aquarion, MDC, Towns of East Hampton and Portland, Rivers Alliance and Ms. Stober.

The comments the Department received from Aquarion, CWWA, MDC, SCRWA, and the Towns of East Hampton and Portland all expressed support for the Commissioner's approval of the WUCC's final coordinated plan. *See* Exhibit 2, pp. 1 to 6.

The comment the Department received from DEEP stated that, while the WUCC's final coordinated plan specifically addressed "[t]he impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues", which was one of the requirements added to *Conn. Gen. Stat.* § 25-33g(a) by Public Act 14-163, with respect to regionally significant future sources, DEEP believed the intent of the legislation was broader than that. *See* Exhibit 2, p. 7 to 15. The Department disagrees. As stated in subdivision 10, above, the WUCC, in developing its final coordinated plan, considered impacts on water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

In addition, DEEP encouraged the WUCC and the Department to expand the discussion and consideration of the nexus between public water supply and the environmental sustainability of the water resources utilized by public water systems. <u>Id</u>. The Department agrees this is an important concept and will be a central component of WUCC's efforts in implementation of the final coordinated plan.

Finally, the Department received comments from Rivers Alliance. *See* Exhibit 2, pp. 16 to 25. While Rivers Alliance recognized that the WUCC did a major piece of work in pulling together the data required under *Conn. Gen. Stat.* § 25-33h and §25-33h-1(g) of the Regulations of

Connecticut State Agencies, it recommended that the WUCC's final coordinated plan not be approved. In support of its recommendation, Rivers Alliance stated that the deadlines in the statutes and regulations that the WUCC was required to meet are unrealistic and recommended that the statute be amended to provide more contemporaneous deadlines. While the deadlines were tight, it is important to note that, as stated in Subdivision 3, above, the WUCC met all of the deadlines and therefore a statutory change is not required.

In addition, Rivers Alliance recommended that the WUCC's final coordinated plan not be approved because "[it] does not provide for uniform and predictable management of water supply". In support of this statement, Rivers Alliance stated that the process for changing ESA boundaries after the final coordinated plan is approved is unclear. As stated above in Footnote 3 in Section I, there is a process by which the WUCC may change an ESA boundary. Specifically, pursuant to § 25-33h-1(i)(2) of the Regulations of Connecticut State Agencies, whenever ESA boundaries are revised, the WUCC is required to prepare a revised coordinated plan or an amendment to such plan and distribute in the same manner as the coordinated plan.

Also, Rivers Alliance stated that the WUCC's final coordinated plan not be approved because "[t]he proper governance of the WUCCs is also unclear in the statute". The Department is not sure to what Rivers Alliance is referring, but various statutes and regulations clearly state what the WUCC's responsibilities are. See, e.g., Conn. Gen. Stat. §§ 25-33f through 25-33h and § 25-33h-1 of the Regulations of Connecticut State Agencies. Rivers Alliance also stated that the final coordinated plan should not be approved because "[m]any of the key provisions of the WUCC law seem to be unenforceable". In support of its claim, Rivers Alliance stated that the exact responsibilities and benefits of ESA providers are not clear and there are no enforcement mechanisms for such responsibilities. Pursuant to Conn. Gen. Stat. § 25-33g and § 25-33h-1(d)(2)(B), the WUCC established ESA boundaries to delineate each public water system's future service area. This is a critical part of the planning process. It ensures existing service areas are maintained as well as the orderly and efficient development of public water supplies. To that end, Conn. Gen. Stat. § 16-262m(c), which is the statute that provides the requirements for CPCNs, requires ownership of a new system to be assigned to the ESA provider, when one has been determined. This ensures the orderly and efficient development of public water supplied and prevents the proliferation of new public water system owners by requiring the ESA provider to own the system.

Additionally, Rivers Alliance stated that the WUCC's final coordinated plan should not be approved because "90 percent of the WUCC members did not participate in the plan development". As stated above in subdivision 10, the WUCC provided notice of meetings and solicited comments at every stage of the planning process from all WUCC members, as well as state agencies, municipalities, regional council of government, and other interested persons. Accordingly, while all members may not have participated directly, they were provided notice and given an opportunity to participate on numerous occasions.

Finally, Rivers Alliance stated that the final coordinated plan should not be approved because the WUCC, in its final coordinated plan, failed to address adequately the "impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues". As stated above in response to DEEP's comment, the Department disagrees. As stated in subdivision 10, above, the WUCC, in developing its final coordinated plan, considered impacts on water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

Ms. Stober, in her comments, raised concerns regarding the quality of public water. Specifically, she indicated that section 3.0 of the final coordinated plan stated that most of the

violations were reporting violations, but made no mention of what the other violations were or how such violations are being addressed. Also, she asked if anything can be done in areas where arsenic, uranium, radon and other constituents are of concern, and with respect to contaminants that are in drinking water, but not in excess of a maximum contaminant level. Finally, Ms. Stober recommended that instead of taking actions that, for example, require additional funding or the drilling of new wells, the WUCC should educate and encourage the public to conserve water. The Department appreciates Ms. Stober's comments and her interest in the WUCC process. With respect to Ms. Stober's comments regarding violations, constituents of concern and contaminants in drinking water, Connecticut uses only the highest quality sources for drinking water sources. In addition, the department provides technical assistance and uses enforcement when a water company violates one of the department's drinking water regulations and to ensure that water companies are complying with the federal Safe Drinking Water Act regulations and the Department's statutes and regulations regarding drinking water. The Department works hard to ensure that people in Connecticut are drinking safe water. Finally, the Department agrees that public education is an important component of ensuring safe drinking water and it, along with private organizations and water companies, provide such education.

15. Any other factors deemed relevant

In addition to the factors above, the Department feels it is important to note that the WUCC also considered the following concepts and planning elements: capacity, resiliency, small system management, source protection; conservation and drought response. *See*, *e.g.*, Section 2.1 and 2.4 of the final Integrated Report.

Recommendation

Based on the consideration of the factors in *Conn. Gen. Stat.* § 25-33h(a) and § 25-33h-1(g)(2) of the Regulation of Connecticut State Agencies, and the written comments received during the public comment period, the Department recommends that the Commissioner approve the WUCC's final coordinated plan.

Attachments

Exhibit 1—Legal Notice

Exhibit 2—WUCC's Final Coordinated Plan

Exhibit 3—Written Public Comments Received by the Department

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

FINAL COORDINATED WATER SUPPLY PLAN OF THE WESTERN WATER UTILITY COORDINATING COMMITTEE

Pursuant to *Conn. Gen. Stat.* § 25-33h (a) and § 25-33h-1 (g) of the Regulations of Connecticut State Agencies, I hereby approve the Western Water Utility Coordinating Committee's final coordinated water supply plan, as recommended by the Department of Public Health ("Department") in its report regarding approval of the Western Water Utility Coordinating Committee's Consolidated Plan Report ("Report"). A copy of the Department's Report is attached hereto.

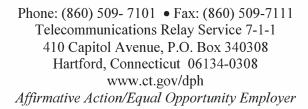
Raul Pino, MD, MPH

Commissioner⁴

Date

Attachment









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



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

REPORT TO THE COMMISSIONER

Prepared Pursuant to Section 25-33h of the Connecticut General Statutes

Regarding

Approval of the Western Water Utility Coordinating Committee's Consolidated Plan

On August 23, 2018, the Department of Public Health ("Department") published legal notice in the Danbury News-Times, Hartford Courant, New Haven Register, New London Day, Norwich Bulletin, La Voz Hispana, and Northeast News newspapers¹ in accordance with § 25-33h of the Connecticut General Statutes (*Conn. Gen. Stat.*) and § 25-33h-1(g)(1) of the Regulations of the Connecticut State Agencies announcing to the public that the Western Water Utility Coordinating Committee ("WUCC") submitted its final coordinated water system plan ("final coordinated plan") to the Commissioner of Public Health ("Commissioner") on May 22, 2018, for approval, and that such plan was available for public comment, to the extent disclosable by law ("August 23, 2018 Legal Notice"). Exhibit 1. The Department also posted the notice on its Internet webpage.

The Department accepted written comments until September 28, 2018. All of the written comments have been considered. Based on a consideration of the factors in *Conn. Gen. Stat.* § 25-33h(a) and § 25-33h-1(g)(2) of the Regulations of the Connecticut State Agencies, and the written comments received, the Department recommends that the Commissioner of Public Health ("Commissioner") approve the WUCC's final coordinated plan, which is in Exhibit 2. The WUCC's final coordinated plan is also available on the Department's webpage at: https://portal.ct.gov/DPH/Drinking-Water/WUCC/Water-Utility-Coordinating-Committee.

¹ The Department published notice on its Internet webpage on August 28, 2018. *See https://portal.ct.gov/DPH/ Drinking - Water/WUCC/Water-Utility-Coordinating-Committee.*



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I. Background

A. Public Water Supply Management Areas and Priorities

Connecticut's public water supply planning process was prompted by the state's extended drought in the early 1980s. During the 1985 legislative session, the Connecticut General Assembly passed Public Act 85-535, "An Act Concerning a Connecticut Plan for Public Water Supply Coordination," initiating the first statewide water supply planning program. The Department, in consultation with the Public Utilities Regulatory Authority ("PURA"), the Department of Energy and Environmental Protection ("DEEP"), and the Office of Policy and Management ("OPM"), was given the charge of developing a coordinated approach to long-range water supply planning to assure future supplies. The legislative finding, as reflected in *Conn. Gen. Stat.* § 25-33c, states the following: "In order to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety, and welfare, the [Department] shall administer a procedure to coordinate the planning of public water supply systems".

On March 5, 1986, in accordance with Public Act 85-535 and *Conn. Gen. Stat.* § 25-33e, the Commissioner delineated the final boundaries of the public water system management area ("the 1986 PWSMAs"), which created seven public water supply management areas, and established the first three priorities for the initiation of the WUCC planning process established in *Conn. Gen. Stat.* §§ 25-33f to 25-3h, inclusive. The Commissioner established the last four priorities on October 30, 1995.

From 1987 to 1996, the Commissioner convened four of the seven WUCCs, the Housatonic, the Upper Connecticut River, the South Central and Southeastern. The WUCCs for each of these areas finalized area-wide supplement reports. The Southeastern WUCC was the only WUCC that prepared a final coordinated plan, which the Commissioner approved in 2002.

On April 15, 2014, pursuant to § 25-33h-1 of the Regulations of Connecticut State Agencies, the Commissioner altered the boundaries of the public water supply management areas ("PWSMA") and priorities for initiation of the WUCC planning process. *See* https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/drinking_water/pdf/2016AnnualWUCCReportsignedpdf.pdf?la=en. The final altered boundaries of the PWSMAs were delineated such that there were three areas, the Western, Central Corridor and Eastern. The final priorities for initiation of the WUCC planning process were established as follows: the Western PWSMA, the Central Corridor PWSMA and the Eastern PWSMA.

B. WUCC Process

Pursuant to *Conn. Gen. Stat.* § 25-33f, the Commissioner, following the establishment of the final altered priorities pursuant to *Conn. Gen. Stat.* § 25-33e, is required to convene a WUCC for each PWSMA to implement the planning process established by *Conn. Gen. Stat.* §§ 25-33f to 25-33h, inclusive. The Commissioner convened the WUCC on June 14, 2016.

A WUCC consists of one representative from each public water system with a source of water supply or a service area within the PWSMA 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. *Conn. Gen. Stat.* § 25-33(f). Pursuant to § 25-32-1(b)(7) of the Regulations of Connecticut State Agencies, any regional planning agency or public water system that is not included on the membership list for a WUCC may petition the Department to be included. The Department is required to maintain and make available the list of eligible WUCC members. § 25-32-1(b)(7) of the Regulations of Connecticut State Agencies.

Once the WUCC is convened, the WUCC, in consultation with the Commissioner, the Commissioner of DEEP, the Secretary of OPM, and PURA, is required to develop a preliminary assessment of water supply conditions and problems within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). The WUCC is required to

solicit comments on the preliminary assessment from municipalities, regional planning agencies, state agencies and other interested parties and respond to any comment received. <u>Id</u>. The WUCC is required thereafter to prepare a final assessment of water supply conditions and problems within the public water supply management area. Id.

Based on the final assessment of water supply conditions and problems within the PWSMA, the WUCC is required to establish preliminary exclusive service area ("ESA") boundaries for each public water system within the PWSMA. In establishing ESA boundaries, the WUCC is required to solicit comments on such boundaries from municipalities, regional planning agencies, the Commissioner, the Commissioner of DEEP, the Secretary of OPM, PURA, and other interested persons within the PWSMA and respond to all comments received.

Pursuant to *Conn. Gen. Stat.* § 25-33h, the WUCC is also required to prepare a coordinated water system plan ("Coordinated Plan") for its PWSMA. A coordinated plan consists of the individual water system plans of each public water system within a PWSMA, filed pursuant to *Conn. Gen. Stat.* § 25-32d, and an area-wide supplement to such plans developed pursuant to *Conn. Gen. Stat.* § 25-33h that addresses public water system concerns pertaining to the PWSMA as a whole. *Conn. Gen. Stat.* § 25-33d(f).

A WUCC is required to review and update its coordinated water system plan at least every ten years or sooner. § 25-33-1(i)(1) of the Regulations of Connecticut State Agencies. Any permit issued by the Commissioner of Public Health is required, to the extent feasible, to be consistent with any coordinated plan. *Conn. Gen. Stat.* § 25-33i(a). In addition, Public Act 14-163² required the Water Planning Council ("WPC") to consider WUCC plans in developing the state water plan.

C. Coordinated Water Supply Plan.

The WUCC submitted its Coordinated Plan to the Commissioner for the Commissioner's approval on May 22, 2018, which was not more than two years after the first meeting of the WUCC. The coordinated plan is required to promote cooperation among public water systems and include, but not be limited to, provisions for: (1) integration of public water systems, consistent with the protection and enhancement of public health and well-being; (2) integration of water company plans; (3) ESAs; (4) joint management or ownership of services; (5) satellite management services; (6) interconnections between public water systems; (7) integration of land use and water system plans; (8) minimum design standards; (9) water conservation; (10) the impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues; and (11) acquisition of land surrounding wells proposed to be located in stratified drifts. *Conn. Gen. Stat.* § 25-33g(a).

A coordinated plan is comprised of the individual water supply plans of the public water systems within the PWSMA that serve over 1,000 people or have 250 or more service connections, and an area-wide

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² P.A. 14-163 requires the WPC to, within available appropriations, prepare a state water plan for the management of the water resources of the state by July 1, 2017. In developing such plan, P.A. 14-163 requires the WPC to, among other things, consider individual water supply plans, water quality standards, stream flow classifications, WUCC plans, the State Plan of Conservation and Development, and other planning documents the WPC considers necessary. In addition, P.A. 14-163 requires the state water plan to, *inter alia*, identify water quantities and qualities that are available for public water supply, health, economic, recreation, and environmental benefits on a regional basin scale, considering both surface water and groundwater; identify current and future water demand on a statewide and regional basin scale; recommend using the state's water resources in a manner that balances public water supply, economic development, recreation, and ecological health; recommend major engineering works or special districts, as well as technology and infrastructure upgrades and interconnections; recommend land use and other measures to ensure the desired water quality and quantity, as well as promoting development based on available water resources; and try to incorporate regional and local water use and management plans and programs and water and sewerage facilities plans. The WPC will provide the public an opportunity to review the state water plan after such plan is prepared.

supplement that includes a water supply assessment, delineation of ESA boundaries, an integrated report, and an executive summary. The following provides additional information regarding the components of the coordinated plan:

- 1. Individual Water Supply Plans.³ Each water company that serves more than 1,000 people or 250 service connections is required to prepare an individual water supply pursuant to *Conn. Gen. Stat.* § 25-32d. A water company is required to revise its plan at such time as the water company filing the plan or the Commissioner requires it, or at intervals of not less than six years or more than nine years after the date of the most recently approved plan.
- 2. Area-Wide Supplement. The area-wide assessment is the part of the coordinated plan that addresses area-wide water system concerns pertaining to the PWSMA that are not otherwise included in each water company's individual water supply plan. § 25-33h-1(a)(1) of the Regulations of Connecticut State Agencies. The supplement identifies the present and future water system concerns, analyzes alternatives and sets forth a means for meeting those concerns. The area-wide supplement consists of the WUCC's water supply assessment, ESA boundaries, integrated report, and executive summary.
 - a. Water Supply Assessment. A WUCC, in consultation with the Commissioner and the Commissioner of Energy and Environmental Protection, the Secretary of OPM and PURA, is required to develop a preliminary water supply assessment of water supply conditions and problems within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). The WUCC is required to solicit comments on the preliminary water supply assessment from regional planning agencies, municipalities, state agencies, and other interested persons and to respond to any comments received. <u>Id</u>. It is then required to prepare a final water supply assessment. <u>Id</u>.

The water supply assessment is required to be a factual and concise report that includes the following information as it relates to the PWSMA: description of existing systems, including history of water quality, reliability, service, and supply adequacy, general firefighting capability of the water companies, and identification of major facilities that need to be expanded, altered or replaced, availability and adequacy of any future water source, existing service area boundaries and public water system limits, present and projected growth rates, and status of water system planning, land use planning and coordination between public water systems. Id.

The WUCC prepared a preliminary water supply assessment on September 14, 2016, on which it solicited and responded to comments received thereon. It submitted the final water supply assessment to the Commissioner on December 12, 2016, which was not later than six months after the WUCC's first meeting.

b. ESA Boundaries. An ESA is an area where public water is supplied by one public water system. As part of the planning process, the WUCC is required to establish preliminary and then final ESA boundaries, based on the final water supply assessment, for each public water system within the PWSMA. *Conn. Gen. Stat.* § 25-33g(a). In establishing ESA boundaries, the WUCC is required to solicit comments on such boundaries from municipalities, regional councils of government, the Commissioner, the Commissioner of Energy and Environmental Protection, the Secretary of OPM, PURA, and any other interested persons within the PWSMA, and respond to any comment received. <u>Id.</u>

In establishing such ESA boundaries, the WUCC is required to: allow water companies to maintain existing service areas; not leave areas unserviced islands, and not allow new service areas or main extensions that create duplication or an overlap in services. § 25-33h-1(d)(2)(B) of the Regulations

³ Please note that, while the individual water supply plans are part of a WUCC's coordinated plan, the Department has not attached them to this report as they are voluminous. In addition, portions of such individual water supply plans are protected from disclosure pursuant to *Conn. Gen. Stat.*§ 25-32d(e).

of Connecticut State Agencies. In determining such ESA boundaries, the WUCC is required to consider the following factors: existing water 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 the ability of a water system to provide a pure and adequate supply of water now and into the future. <u>Id</u>.

Based on the final water supply assessment, the WUCC established preliminary ESA boundaries within the PWSMA delineating each public water system's future service area. After soliciting and responding to comments received, the WUCC established final ESA boundaries, which it submitted to the Commissioner on June 13, 2017, which is not less than twelve months after the WUCC's first meeting.⁴

- c. Integrated Report. The Integrated Report is a long-term planning tool for the PWSMA. A WUCC is required to develop an integrated report that provides an overview of the individual public water systems within the PWSMA, addresses the area-wide water supply issues, concerns and needs, and promotes cooperation among public water systems. § 25-33h-1(d)(2)(C) of the Regulations of Connecticut State Agencies. The integrated report is required to contain, *inter alia*, an area-wide overview that integrates individual water supply plans, plans for any necessary interconnections between public water systems for both daily and emergency use, a plan for joint use, management or ownership of services, equipment or facilities, a plan for satellite management or transfer of ownership, provisions for minimum design standards, presentation of financial data as related to area-wide issues such as interconnections, and considerations of the potential impacts of the coordinated plan on other uses of water resources, including water quality, flood management, recreation, hydropower, and aquatic habitat issues. <u>Id</u>.
- d. Executive Summary. The WUCC is required to prepare an executive summary to serve as an abbreviated overview of the coordinated plan for the PWSMA. § 25-33h-1(d)(2)(D) of the Regulations of Connecticut Agencies. It is required to be factual and concise, and summarize the major elements of the coordinated plan. Id.

D. Why Approved Coordinated Plans are Needed

Approved coordinated plans for each PWSMA are necessary for state drinking water supply planning success. Public Act 85-535 envisioned the revision of coordinated plans every ten years. The coordinated plans of previously convened WUCCs were not updated primarily due to lack of available state funds. Iterative planning processes require constant vigilance and regular updates to reflect change. Current accurate coordinated plans are needed to reflect changes over the past two decades to the economy, individual public water system plans, local and regional planning, and environmental impacts to supply adequacy. The work that will form these plans continues to be a critical component of the State Water Plan, currently also under development.

The former Southeastern Connecticut management area had a Commissioner-approved plan. The approved coordinated plan led to the construction of a major regional pipeline that now provides cost-effective, reliable water service to several municipalities in the region. The Department hopes to ensure drinking water supply planning is carried out similarly across the state.

In 2011, a WUCC advisory group was convened to discuss historic problems, current shortcomings, and make recommendations for improvements. Recommendations provided were to sizably increase stakeholder and municipal involvement, and to improve coordination between public systems and the

⁴ A WUCC may change ESA boundaries. *See Conn. Gen. Stat.* § 25-33g(a). Pursuant to § 25-33h-1(i)(2) of the Regulations of Connecticut State Agencies, whenever ESA boundaries are revised, the WUCC is required to prepare a revised coordinated plan or an amendment to such plan and distribute in the same manner as the coordinated plan.

municipalities served. PWSMA consolidation was recommended given the costs associated with preparing coordinated plans for the state's small footprint. The group recommended that WUCC consolidation efforts consider the state's regional planning boundaries to encourage increased municipal involvement and that current, accurate technical data be used to demonstrate system adequacy prior to granting state-approved ESA designations.

In an effort to expedite the WUCC process, the Department executed a data collection contract with Milone & MacBroom, a consulting firm in Cheshire, Connecticut in June of 2015. This data collection contract consisted of obtaining, compiling, and organizing water utility data prior to initiating the WUCC process.

Following the initiation of the data collection contract, a Request for Proposals ("RFP") was published to solicit competitive sealed proposals from qualified consulting firms to provide assistance to the three WUCCs to carry out the requirements contained in *Conn. Gen. Stat.* §§ 25-33f through 25-33h, and the regulations promulgated thereunder, and to prepare and produce for the Department a State-Wide Coordinated Water Supply Plan. Proposers were required to attend a mandatory informational conference, submit proposals and present their proposals to the RFP screening committee. On October 27, 2015, the Commissioner selected the proposal submitted by Milone & MacBroom, and contracts were executed on May 10, 2016.

In addition to securing a consultant to provide assistance to the three WUCCs, the Department held several informational and organization meetings in September and December of 2015 to inform water utilities and members of the public of the history and responsibilities of the WUCCs, the rules and procedures applicable to the WUCC process, and future steps. *See* https://portal.ct.gov/-/media/Departments-andAgencies/DPH/dph/drinking_water/pdf/WUCCWPCSCpdf.pdf?la=en

II. Written public comments received by the Department on the Coordinated Plan

In response to the Legal Notice published on August 23, 2018, the Department received comments during the public comment period that ended on September 28, 2018, from the following individuals and entities on the WUCC's final coordinated plan:

- Elizabeth Gara, Executive Director, Connecticut Water Works Association ("CWWA")
- Tiffany Lufkin, Asset Management Engineer, South Central Connecticut Regional Water Authority ("SCRWA")
- Denise Ruzicka, Director, Division of Water Planning & Management, DEEP
- Daniel R. Lawrence, P.E., Director of Engineering and Planning, Aquarion Water Company of Connecticut ("Aquarion")
- Scott Jellison, P.E., Chief Executive Officer, The Metropolitan District Commission ("MDC")
- Michael Maniscalco, Town Manager, East Hampton, CT and Susan Bransfield, First Selectwoman, Portland, CT ("Towns of East Hampton and Portland")
- Margaret Minor, Executive/ Director, and Tony Mitchell, Science and IT Specialist, Rivers Alliance of CT ("Rivers Alliance")

See Exhibit 3.

III. Summary and evaluation of the final coordinated plan

A. Evaluation of Conn. Gen. Stat. § 25-33g(a) factors

As stated above, the WUCC's coordinated plan is required to promote cooperation among public water systems and include, but not be limited to, provisions for: (1) integration of public water systems, consistent with the protection and enhancement of public health and well-being; (2) integration of water company plans; (3) ESAs; (4) joint management or ownership of services; (5) satellite management services; (6) interconnections between public water systems; (7) integration of land use and water system plans; (8) minimum design standards; (9) water conservation; (10) the impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues; and (11) acquisition of land surrounding wells proposed to be located in stratified drifts. *Conn. Gen. Stat.* § 25-33g(a).

The Department has reviewed the WUCC's final coordinated plan and determined that it includes provisions for each of the following factors, as required by *Conn. Gen. Stat.* § 25-33g(a):

- 1. Integration of public water systems, consistent with the protection and enhancement of public health and well-being. This factor is included in the final Integrated Report in chapter 5.
- 2. Integration of water company plans. This factor is included in the final Integrated Report in section 10.1.
- 3. ESAs. This factor is included in the final ESA document.
- 4. Joint management or ownership of services. This factor is included in the final Integrated Report in chapter 6.
- 5. Satellite management services. This factor is included in the final Integrated Report in section 4.1.
- 6. Interconnections between public water systems. This factor is included in the final Integrated Report in chapter 5.
- 7. Integration of land use and water system plans. This factor is included in the final Integrated Report in chapter 10.
- 8. Minimum design standards. This factor is included in the final Integrated Report in chapter 9.
- 9. Water conservation. This factor is included in the final Integrated Report in section 2.2.
- 10. The impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues. This factor is included in the final Integrated Report in chapter 8.
- 11. Acquisition of land surrounding wells proposed to be located in stratified drifts. This factor is included in the final Integrated Report in section 2.1.

B. Evaluation of the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies

In making a decision regarding whether or not to approve or reject a coordinated plan, the Commissioner is required to consider the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies, which are:

(A) Ability to provide pure, adequate and reliable water supplies for present and projected future customers; (B) Potential conflict over the use of such supplies; (C) Adherence to public act 85-535; (D) Extent to which the plan identifies water supply problems within the public

water supply management area and provides solutions to those problems; (E) Consistency with local, regional, and state land use plans and growth policies; (F) Appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries; (G) Integration of public water systems, consistent with the protection and enhancement of public health and wellbeing; (H) Impact on other uses of water resources; (I) Extent to which minimum design standards are sufficient and appropriate; (J) Public comment; (K) Availability of alternate sources of water supplies; (L) Consistency with existing state agency regulatory programs and statutory requirements; (M) Compatibility with plans of other public water supply management areas; (N) Comments received from the department of environmental protection, department of public utility control, the office of policy and management, municipalities, regional planning agencies, local and regional health departments, or other interested persons; and (O) Any other factors deemed relevant.

The following is a summary of the Department's evaluation of each of the factors in § 25-33h-1(g)(2) of the Regulations of Connecticut State Agencies:

1. Ability to provide pure, adequate and reliable water supplies for present and projected future customers

The WUCC's final coordinated plan addressed the provision of pure, adequate and reliable water supplies for future and projected customers. *See*, e.g., final Integrated Report, chapter 3, pp. 1-38; final ESA document, section 2.5.7. pp. 25-29. In analyzing public water system supply capacity, the WUCC considered existing service populations, demands, and available water to meet Average Daily Demand, and existing service population, demands and available water to meet Maximum Month Average Daily Demand. In addition, the WUCC considered projected future customers, which included town populations and demand projections. The WUCC also considered to town's public water service population and Average Daily Demand projections, as well as ESA holder public water service population and Average Day Demand projections. Finally, the WUCC considered the effect of stream flow standards and regulations⁵ on surface water supplies, which may impact the ability of public water systems to provide adequate and reliable water supplied for future and projected customers.

2. Potential conflict over use of such supplies

The WUCC evaluated the potential conflict over use of supplies. *See, e.g.*, final Integrated Report Chapter 8: Pages 1-8. This evaluation included criteria including water quality, minimum stream flow, flood management, recreation, hydropower, Natural Diversity Data Base ("NDDB") areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change. In addition, areas of consideration in the WUCC plan included potential impacts of projects by Aquarion Water Company, potential impacts of interconnection projects for Active Daily Supply, and potential impacts of interconnection projects for resiliency.

3. Adherence to Public Act 85-535

The WUCC's final coordinated plan adhered to Public Act 85-535. The WUCC met all of the timeframes required, consulted with state agencies, and solicited comments from the Commissioner, the Commissioner of Energy and Environmental Protection, PURA, the Secretary of the OPM, and any municipality, regional council of governments or other interested party and responded to such comments, as required. Finally, as discussed in Paragraph A, the WUCC included in its final coordinated plan all of the required factors in *Conn. Gen. Stat.* § 25-33h(a).

⁵ See §§ 26-141b-1 to 26-141b-8 of the Regulations of Connecticut State Agencies.

4. Extent to which the final coordinated plan identifies water supply problems within the PWSMA and provides solutions to those problems

The WUCC's final coordinated plan identifies water supply problems within the PWSMA, see, e.g., sections 7.1-7.6 of the final Water Supply Assessment, and provides solutions to these problems, see e.g., section 1-12 of the final Integrated Report. The analysis of problems and solutions discussed in the final Integrated Report includes regionalization and interconnections to ensure redundant and environmentally responsible supplies. Also included is the reduction of decentralized growth of small systems and the encouragement to consider consolidations and ensure responsible planning in order to prevent proliferation of adjacent small systems. Finally, the WUCC's coordinated plan goes further to provide solutions to problems through assistance to small public water systems to ensure proper technical, managerial and financial capacity of those systems, water conservation and water efficiency, and reduction of future demands and unnecessary water use.

Other solutions discussed include investment in infrastructure or replacement of aging infrastructure, funding or providing grants and loans for planning projects, drought management, resiliency to storms and climate change, and protection of watersheds and supplies. The plan also identifies the need for improvements to water planning to avoid the development of unnecessary new sources and ensure useful data is developed for multiple planning purposes.

5. Consistency with local, regional, and state land use plans and growth policies

The WUCC's final coordinated plan is consistent with local, regional and state land use plans and growth policies. *See* sections 10-1 to 10-5 of the final Integrated Report. It encourages that a review be conducted of the data requirements to maximize the utility of future data collection and projections by WUCC members for multiple planning efforts. The final coordinated plan indicates that to maintain consistency, utilities should coordinate with local planners during Plans of Conservation Development updates, to identify areas of development in watershed or recharge areas that are incompatible with public water supply. In addition, the WUCC's final coordinated plan suggests that the regional council of governments could assist the WUCC by advising of the timing of Plans of Conservation Development updates to WUCC members and by providing comments related to water planning on local Plans of Conservation Developments. An example of maintaining consistency is specifically designating lands under the custody of DEEP as areas that may not support future water supply expansion.

6. Appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries

The ESA boundaries delineated by the WUCC are appropriate in relation to local, regional, and state growth policies. *See* section 2.5 of the final ESA document. In addition, the WUCC worked to ensure that as few areas as possible were left as islands or areas isolated outside of the ESA boundaries. In section 2.5.2 of the final ESA document, the WUCC considered the appropriateness of ESA boundaries in relation to local, regional, and state growth policies, and the extent to which any areas are left as islands or areas isolated outside proposed ESA boundaries. The WUCC's final coordinated plan notes that numerous communities in northwestern Connecticut indicated a desire to remain unassigned as part of the WUCC ESA process. In addition, there were no declarants for unserved areas in Watertown. Areas intentionally being left unassigned by the WUCC within the Western PWSMA are summarized in the ESA document.

7. Integration of public water systems, consistent with the protection and enhancement of public health and well-being

The WUCC's final coordinated plan considered the integration of public water systems, consistent with the protection and enhancement of public health and well-being. *See* chapter 5 of the final Integrated Report. The WUCC's final coordinated plan addressed this factor through the discussion of inter- and intra-regional interconnections as a potential means of supplying water, which may be less expensive than developing additional sources such as groundwater supplies. The plan indicates that interconnections can also provide supply to areas where groundwater or surface water source development is not feasible. Development of infrastructure to allow for two-way transfer of water between interconnected systems is an important resiliency measure, which the WUCC's final coordinated plan suggests should be considered for both existing and new interconnections.

8. Impact on other uses of water resources

The WUCC's final coordinated plan considered the impact on other uses of water resources. *See* sections 3.6, 8.1, 8.2 and 8.3 of the final Integrated Report. The WUCC's final coordinated plan presents information that evaluates the potential impact of developing regionally significant future sources. The evaluation considers the following criteria: water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

In addition, throughout development of WUCC's final coordinated plan, the State Water Plan has been an integral topic. The State Water Plan is intended to serve as a platform for future planning decisions regarding all aspects of water with our State. Similarly, the WUCC's final coordinated plan will serve as a platform for future planning, but with a more refined scope of public water supply.

9. Extent to which minimum design standards are sufficient and appropriate

The WUCC's final coordinated plan considered the extent to which minimum design standards are sufficient and appropriate. *See* sections 9-1 to 9.4 of the final Integrated Report. The WUCC recommends that water companies ensure any local design standards are in a written format, adopted by the water company, and provided to a developer at the beginning of the certificate of public convenience and necessity ("CPCN") process under *Conn. Gen. Stat.* §16-262m. The WUCC plan further indicates that ideally, any local standards would be referenced in a development agreement between the developer and the water company that would eventually own and operate the system.

10. Public comment

The WUCC, throughout the two-year planning process, solicited comments from municipalities, regional councils of governments, state agencies and other interested parties and responded to all comments received, as required by *Conn. Gen. Stat.* §§ 25-33g and 25-33h and §§ 25-33h-1(h) of the Regulations of Connecticut State Agencies. The comments received and the WUCC's responses thereto are found in the following documents on the following pages:

- 1. Water Supply Assessment: Comments the WUCC received on the preliminary water supply assessment and the WUCC's responses thereto are found in Table 1-4 and Appendix E of the WUCC's final water supply assessment.
- 2. ESA Boundaries: Comments the WUCC received on the preliminary ESA boundaries and the WUCC's responses thereto are found on section 1.4, Table 1.4 and Appendix F of the WUCC's final ESA boundaries.

3. Coordinated Plan: Comments the WUCC received on the preliminary coordinated plan and the WUCC's responses thereto are found on section 1.3, Table 1.2 and Appendix A of the WUCC's final coordinated plan.

11. Availability of alternate sources of water supplies

The WUCC's final coordinated plan addresses the availability of alternate sources of water supplies. *See* sections 5.3 to 5.4 and 7.1 to 7.4 of the final Integrated Report. Specifically, the WUCC's final coordinated plan addresses this factor by recommending that when public water systems are proximal to each other, they interconnect as interconnections present a cost-effective solution to meet periodic or regular water needs, including needs during critical or emergency situations such as drought, water quality problems or treatment issues, and during routine maintenance of a water supply source or storage tank. The WUCC plan notes that deterrents to interconnections include water quality (blending concerns), capital improvement costs, fire protection considerations, and operational, maintenance and monitoring requirements. If, however, an evaluation of the benefit of targeted water conservation and water efficiency measures demonstrate that projected deficits either cannot be eliminated or cannot be eliminated even when combined with securing water through an interconnection, or development of an interconnection proves impractical, then development of new water supply sources will be necessary.

In addition, the WUCC's final coordinated plan recommends that water companies coordinate with local planners during Plan of Conservation Development updates to identify areas of development in watershed or recharge areas that are incompatible with public water supply. Also, the regional council of governments could assist the WUCC by advising it of the timing of Plan of Conservation Development updates, and by providing comments related to water planning on local Plans of Conservation Developments.

12. Consistency with existing state agency regulatory programs and statutory requirements

All aspects of the WUCC's final Coordinated Plan are consistent with existing state agency regulatory programs and statutory requirements. Given the differences in data requirements for the three related planning efforts, water supply planning, coordinated water system planning, and state water planning, a review of the data requirements should be conducted to maximize the utility of future data collection and projections by WUCC members for multiple planning efforts. Significant reviews of potential pertinent state agency program requirements were considered, including but not limited to: DEEP's minimum stream flow, aquifer protection area and diversion permitting requirements, OPM's Plan of Conservation and Development, PURA's regulation of water company rates, municipalities' planning and zoning requirements, and the Department's water supply planning requirements.

13. Compatibility with plans of other public water supply management areas

The WUCC's final Coordinated Plan is compatible with plans of other public water supply management areas. To ensure compatibility the Department, through a contractor, developed a statewide plan that bridged the three PWSMAs and analyzed the three WUCC's final coordinated plans on a statewide level. In addition, the Department aided in the facilitation of the development of all three WUCC's coordinated plans simultaneously, to ensure they covered the entire state. Finally, since the Department attended all meetings of all three WUCCs and since WUCC members, who are often a member of more than one WUCC, attended the meetings of one or more WUCCs, the entire WUCC planning process was undertaken with all PWSMAs represented and considered to ensure compatibility.

14. Comments received from the department of environmental protection, department of public utility control, the office of policy and management, municipalities, regional planning agencies, local and regional health departments, or other interested persons.

During the public comment period on the WUCC's final coordinated plan, which began on August 23, 2018 and ended on September 28, 2018, the Department received a number of comments. Specifically, as stated in Part II, above, the Department received comments from CWWA, SCRWA, DEEP, Aquarion, MDC, Towns of East Hampton and Portland, and Rivers Alliance.

The comments the Department received from Aquarion, CWWA, MDC, SCRWA, and the Towns of East Hampton and Portland all expressed support for the Commissioner's approval of the WUCC's final coordinated plan. *See* Exhibit 2, pp. 1 to 6.

The comment the Department received from DEEP stated that, while the WUCC's final coordinated plan specifically addressed "[t]he impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues", which was one of the requirements added to *Conn. Gen. Stat.* § 25-33g(a) by Public Act 14-163, with respect to regionally significant future sources, DEEP believed the intent of the legislation was broader than that. *See* Exhibit 2, p. 7 to 15. The Department disagrees. As stated in subdivision 10, above, the WUCC, in developing its final coordinated plan, considered impacts on water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change.

In addition, DEEP encouraged the WUCC and the Department to expand the discussion and consideration of the nexus between public water supply and the environmental sustainability of the water resources utilized by public water systems. <u>Id</u>. The Department agrees this is an important concept and will be a central component of WUCC's efforts in implementation of the final coordinated plan.

Finally, the Department received comments from Rivers Alliance. *See* Exhibit 2, pp. 16 to 25. While Rivers Alliance recognized that the WUCC did a major piece of work in pulling together the data required under *Conn. Gen. Stat.* § 25-33h and §25-33h-1(g) of the Regulations of Connecticut State Agencies, it recommended that the WUCC's final coordinated plan not be approved. In support of its recommendation, Rivers Alliance stated that the deadlines in the statutes and regulations that the WUCC was required to meet are unrealistic and recommended that the statute be amended to provide more contemporaneous deadlines. While the deadlines were tight, it is important to note that, as stated in Subdivision 3, above, the WUCC met all of the deadlines and therefore a statutory change is not required.

In addition, Rivers Alliance recommended that the WUCC's final coordinated plan not be approved because "[it] does not provide for uniform and predictable management of water supply". In support of this statement, Rivers Alliance stated that the process for changing ESA boundaries after the final coordinated plan is approved is unclear. As stated above in Footnote 3 in Section I, there is a process by which the WUCC may change an ESA boundary. Specifically, pursuant to § 25-33h-1(i)(2) of the Regulations of Connecticut State Agencies, whenever ESA boundaries are revised, the WUCC is required to prepare a revised coordinated plan or an amendment to such plan and distribute in the same manner as the coordinated plan.

Also, Rivers Alliance stated that the WUCC's final coordinated plan not be approved because "[t]he proper governance of the WUCCs is also unclear in the statute". The Department is not sure to what Rivers Alliance is referring, but various statutes and regulations clearly state what the WUCC's responsibilities are. *See, e.g., Conn. Gen. Stat.* §§ 25-33f through 25-33h and § 25-33h-1 of the Regulations of Connecticut State Agencies. Rivers Alliance also stated that the final coordinated plan

should not be approved because "[m]any of the key provisions of the WUCC law seem to be unenforceable". In support of its claim, Rivers Alliance stated that the exact responsibilities and benefits of ESA providers are not clear and there are no enforcement mechanisms for such responsibilities. Pursuant to *Conn. Gen. Stat.* § 25-33g and § 25-33h-1(d)(2)(B), the WUCC established ESA boundaries to delineate each public water system's future service area. This is a critical part of the planning process. It ensures existing service areas are maintained as well as the orderly and efficient development of public water supplies. To that end, *Conn. Gen. Stat.* § 16-262m(c), which is the statute that provides the requirements for CPCNs, requires ownership of a new system to be assigned to the ESA provider, when one has been determined. This ensures the orderly and efficient development of public water supplied and prevents the proliferation of new public water system owners by requiring the ESA provider to own the system.

Additionally, Rivers Alliance stated that the WUCC's final coordinated plan should not be approved because "90 percent of the WUCC members did not participate in the plan development". As stated above in subdivision 10, the WUCC provided notice of meetings and solicited comments at every stage of the planning process from all WUCC members, as well as state agencies, municipalities, regional council of government, and other interested persons. Accordingly, while all members may not have participated directly, they were provided notice and given an opportunity to participate on numerous occasions.

Finally, Rivers Alliance stated that the final coordinated plan should not be approved because the WUCC, in its final coordinated plan, failed to address adequately the "impact on other uses of water resources including water quality, flood management, recreation and aquatic habitat issues". As stated above in response to DEEP's comment, the Department disagrees. As stated in subdivision 10, above, the WUCC, in developing its final coordinated plan, considered impacts on water quality, minimum stream flow requirements based on DEEP's stream flow standards and regulations, flood management, recreation, hydropower, NDDB areas of environmental concern, aquatic habitat, riparian rights, waste load allocation, and resiliency to climate change..

15. Any other factors deemed relevant

In addition to the factors above, the Department feels it is important to note that the WUCC also considered the following concepts and planning elements: capacity, resiliency, small system management, source protection; conservation and drought response. *See, e.g.*, Section 2.1 and 2.4 of the final Integrated Report.

Recommendation

Based on the consideration of the factors in *Conn. Gen. Stat.* § 25-33h(a) and § 25-33h-1(g)(2) of the Regulation of Connecticut State Agencies, and the written comments received during the public comment period, the Department recommends that the Commissioner approve the WUCC's final coordinated plan.

Attachments

Exhibit 1—Legal Notice

Exhibit 2—WUCC's Final Coordinated Plan

Exhibit 3—Written Public Comments Received by the Department