



Monthly Meeting #19

Coordinated Water System Plan Eastern Region

Southeastern Connecticut Council of Governments, Norwich, CT | December 13, 2017

Agenda



1. Welcome & Roll Call (5 minutes)
2. Approval of November Meeting Minutes (5 minutes)
3. Formal Correspondence (5 minutes)
4. Public Comment Period (10 minutes)
5. ESA Modifications Discussion / Update (30 minutes)
 - Town of Lebanon – WUCC Recommendation for New TNC System at 894 Exeter Road
6. Integrated Report Topics (60 minutes)
 - Draft Integrated Report and Schedule
 - Current and Projected Water Demands
 - Discussion of Issues to Resolve
 - Prioritization of Strategies and Actions
7. Other Business (5 minutes)



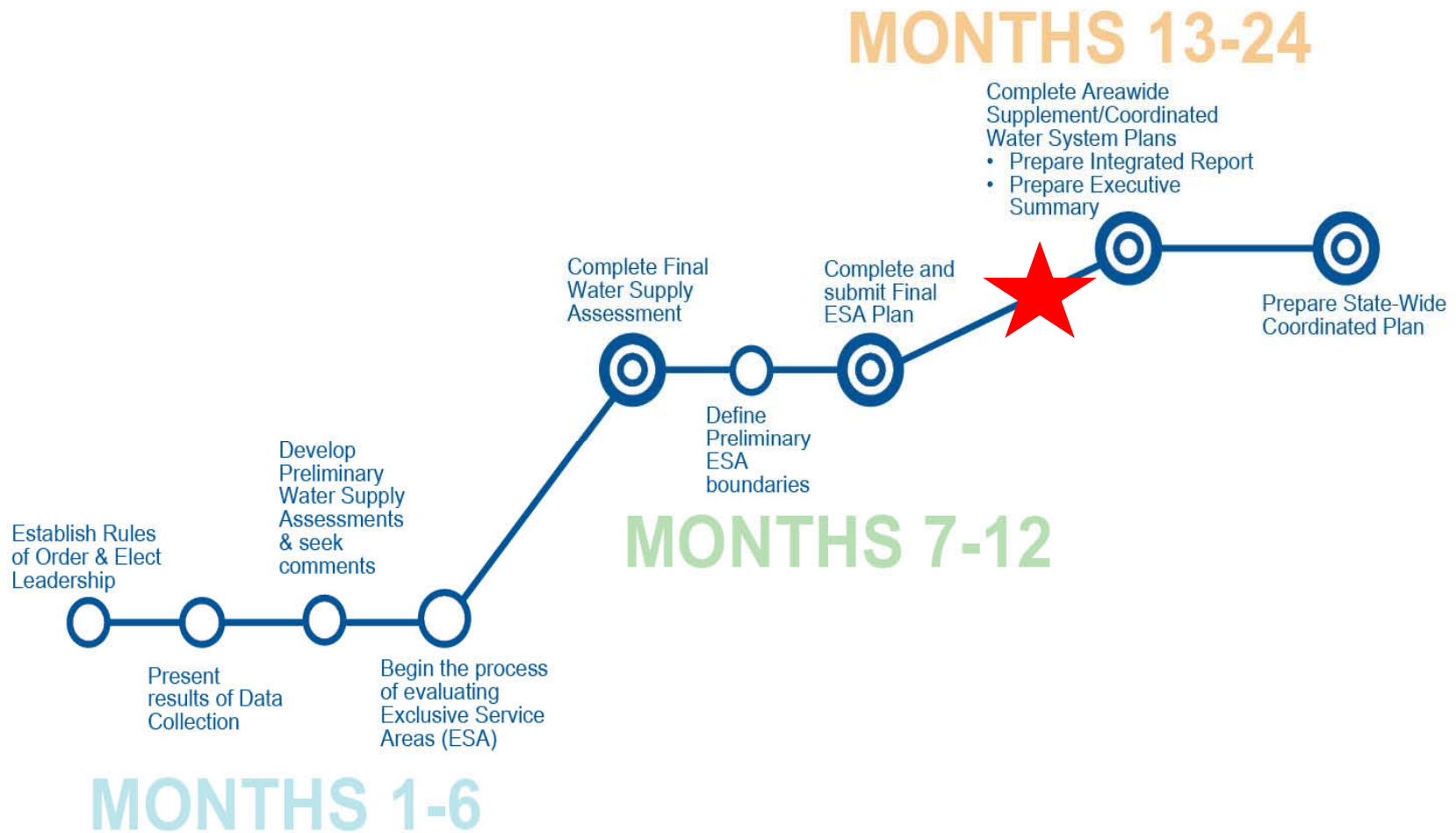
1. Welcome and Roll Call

Taking Stock



- ***What Have We Accomplished?***
 - ✓ Discussed Integrated Report Modules
- ***What Are We Doing Today?***
 - ✓ Providing a WUCC Recommendation for a New System in Lebanon
 - ✓ Discussing Integrated Report Topics
- ***What's Next?***
 - ✓ Review Draft Integrated Report

WUCC Time Frame



2. Approval of Meeting Minutes

3. Formal Correspondence

Formal Correspondence

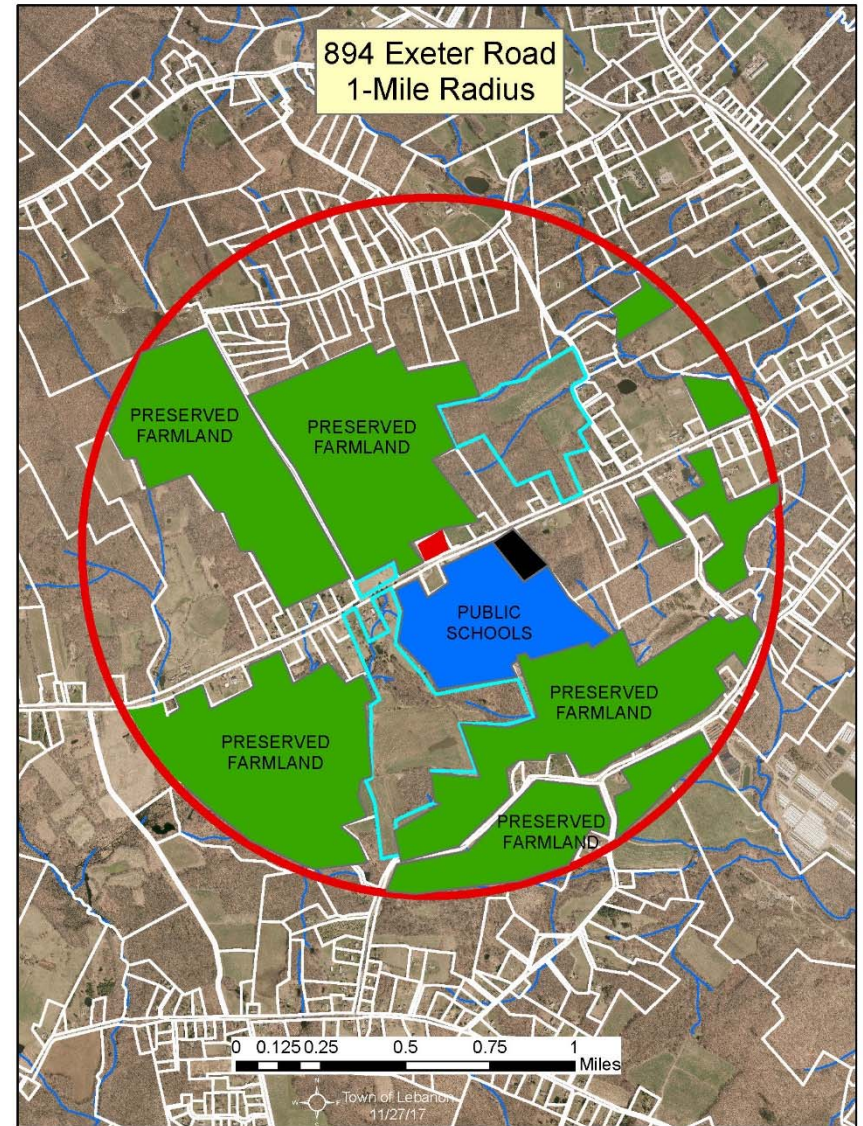
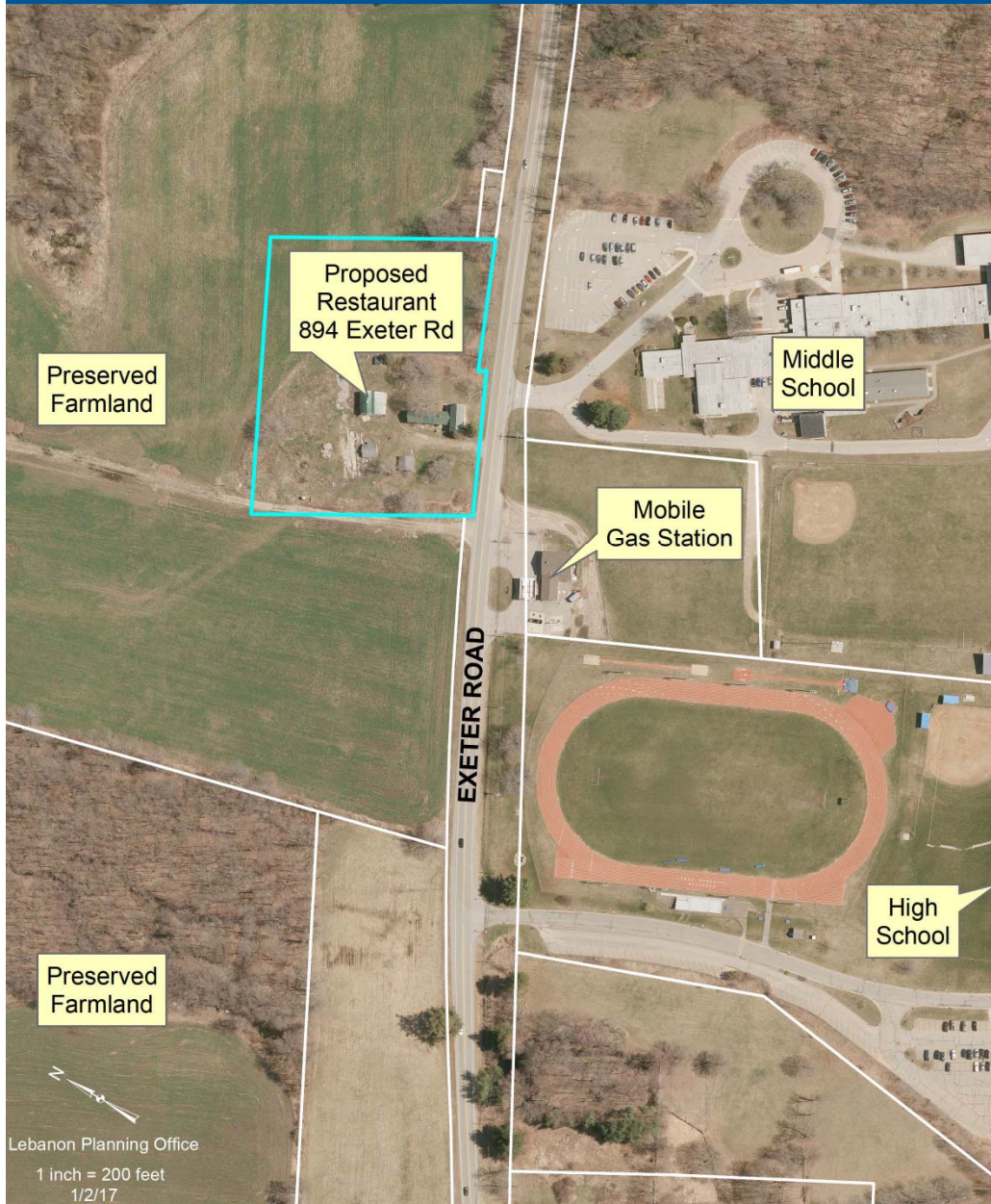


Date	From	To	Main Topic(s)
11/9/2017	Eastern WUCC	Certain Water System Contacts	Request to NTNC and TNC systems nearby 894 Exeter Road in Lebanon to Attend December WUCC Meeting
11/14/2017	Eastern WUCC	Town of Lebanon	Response to 11/2/17 request to modify ESA in favor of new TNC system at 894 Exeter Road, which would occur automatically once the new system is approved by DPH; requested Town attendance at December WUCC meeting
11/14/2017	Connecticut Water Company	MMI	Requested data for Integrated Report
11/30/2017	Groton Utilities	MMI	Requested data for Integrated Report
12/11/2017	Norwich Public Utilities	WUCC	Request to modify ESA boundary in Franklin and affirmative response from Town of Franklin
12/12/2017	Noank Fire District	WUCC	Requested data and projections for Integrated Report

4. Public Comment Period

5. ESA Modifications Discussion / Updates

ESA Map



WUCC Recommendation



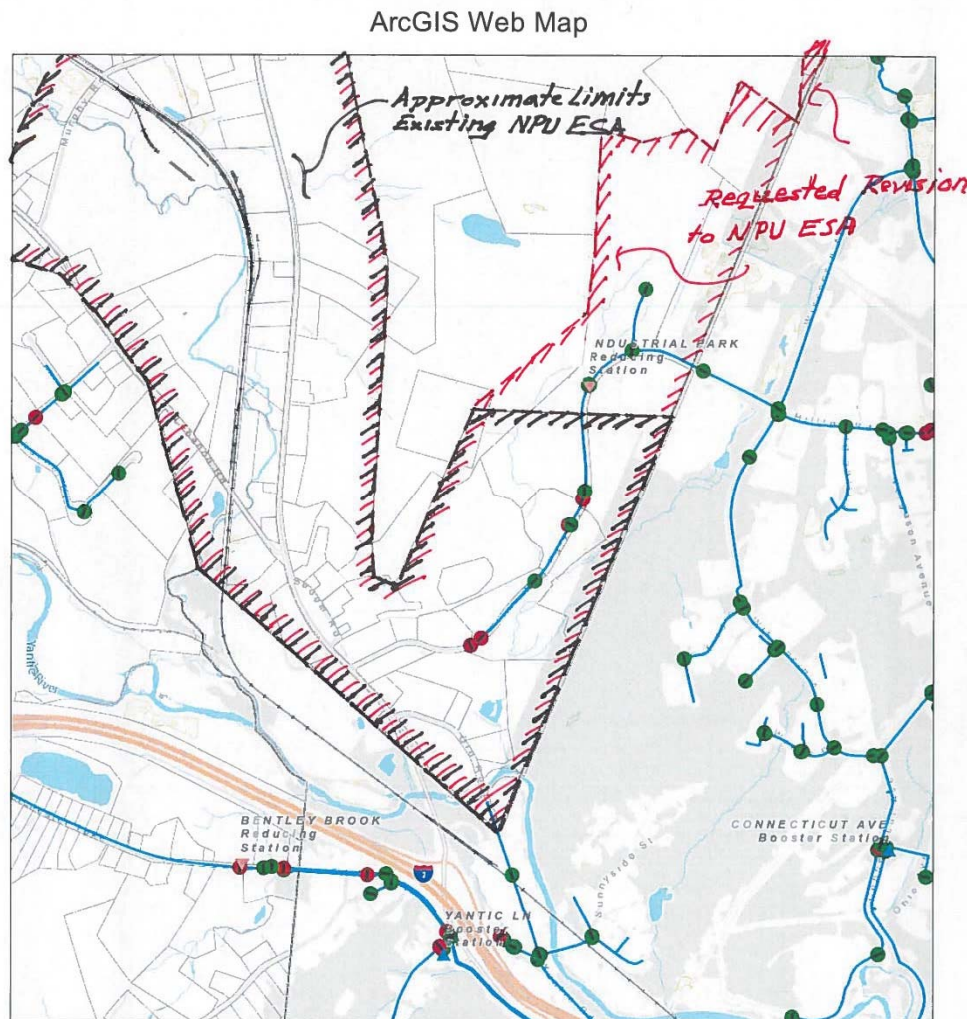
The applicant named on this form has applied to the WUCC to create a new public water system, within an existing Exclusive Service Area (ESA). The following is to be filled out by the presiding WUCC to provide their recommendation in this matter to the Department of Public Health, Drinking Water Section, as required by 16-262m-5(g) of the Regulations of Connecticut State Agencies. Attach additional comments as necessary.

Name of WUCC:	Date of WUCC meeting: (if applicable)
Name of Applicant:	
Name of Project:	DPH project #:
Property address (include city):	
ESA provider information	
Name & PWSID:	
Name of ESA Provider representative:	
Has the "Offer of Service" form been completed by the ESA provider? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Has the "Offer of Service" form been provided to the WUCC? <input type="checkbox"/> Yes <input type="checkbox"/> No	
WUCC recommendation for water supply to serve project (check <u>one</u> that applies) Attach additional comments as necessary	
<input type="checkbox"/> Water main extension from ESA provider	
<input type="checkbox"/> Create new PWS under satellite ownership (provide name of existing PWS that will provide satellite ownership if different from ESA provider.)	
<input type="checkbox"/> Create new PWS under satellite management (Applicable to Non-Transient Non-Community public water systems only)	
<input type="checkbox"/> Create new PWS to be owned and operated by the property owner (Applicable to Transient Non-Community public water systems only)	
<input type="checkbox"/> Does not recommend creation of new water company/public water system	
<input type="checkbox"/> Other (comments)	



Other ESA Modification Updates

- Norwich and Town of Franklin requested starting public comment period for the following ESA modification between two ESA holders:



- Correcting boundary based on actual service area
- Type A modification approved by Town 11/15/17
- 30-Day Public Comment period per Work Plan
- Requires notification to affected Town
- Discuss any comments to date at next meeting; finalize at February meeting

6. Integrated Report Topics

CWSP Schedule



Action	Timeline
• Issue draft Preliminary CWSP	By January 2, 2018
• Discuss draft Preliminary CWSP	January 10, 2018 meeting
• Issue final draft Preliminary CWSP	January 31, 2018
• Approve Preliminary CWSP for Public Comment	February 14, 2018 meeting
• Min. 30-Day Public Comment period	February to March 2018
• Final prioritization of recommendations, discuss public comments	March 14, 2018 meeting
• Issue draft Final CWSP	March 31, 2018
• Review draft Final CWSP	April 11, 2018 meeting
• Issue final draft Final CWSP for review	April 30, 2018
• Approve Final CWSP for Submission to DPH	May 9, 2018 meeting

Integrated Report Layout



1. Introduction
2. Evaluation of Issues, Needs, and Deficiencies in the Region
3. Population, Consumption, and Available Water Projections
4. Existing and Potential Future Interconnections
5. Analysis and Prioritization of Potential Future Water Supplies
6. Joint Use, Management, Or Ownership of Services, Equipment, and Facilities
7. Satellite Management and Transfer of Ownership
8. Minimum Design Standards
9. Potential Impact on Other Uses of Water Resources
10. Relationship and Compatibility with Other Planning Documents
11. Summary of Estimated Costs for Implementation
 - Executive Summary to condense pertinent information into 50 pages or so

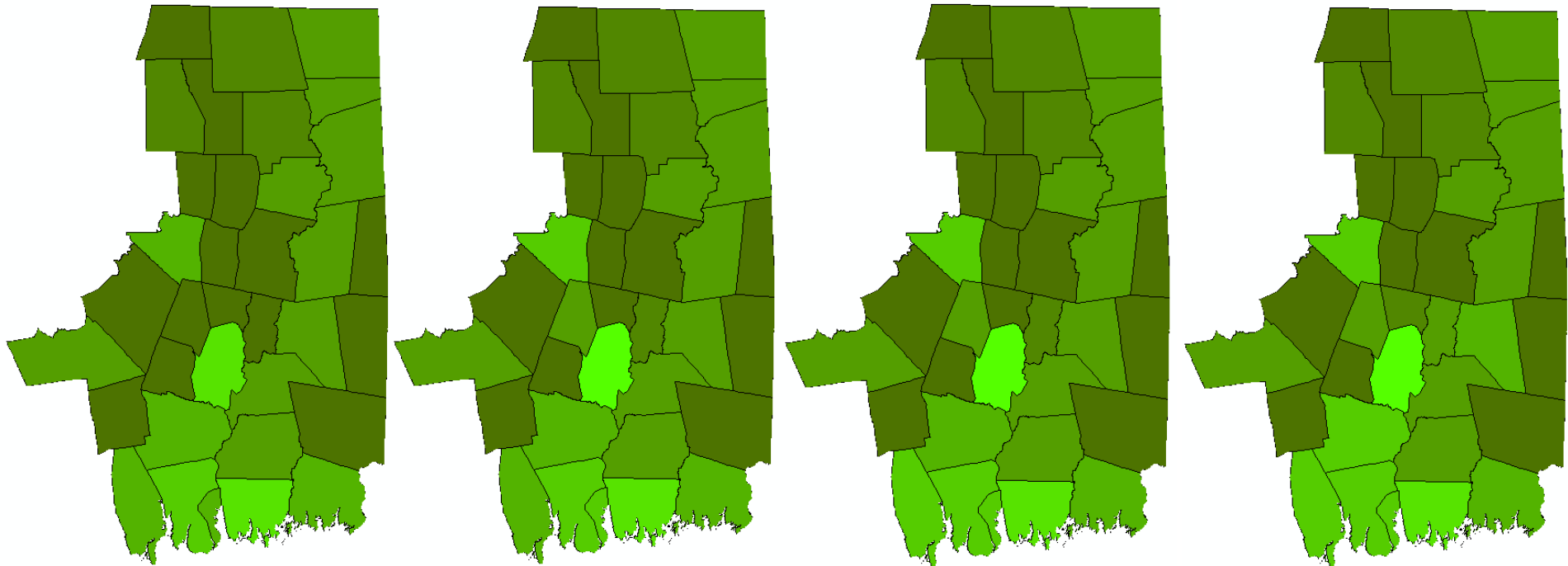
Current and Projected Water Demands



- Projections have been trickling in – Thank you!
- **Please send them if you haven't!**
- For current demands, we have 2015 (or 2016) data for most systems
 - Estimating from older demands as needed
 - User Categories include Residential, Non-Residential, and Unaccounted
 - Using existing Available Water to determine surplus or deficit
 - Sales are subtracted from Total ADD to create "System ADD"
 - Available Water adjusted for commitments

CWSP regulations require "projected population, historical and projected water demand by user category for 5, 20, and 50 year planning periods for the PWSMA as a whole and for each municipality within the area", and by user category for each ESA
RCSA 25-33h-1(d)(C)(i)(aa-cc)

Residential Water Demands – By Town

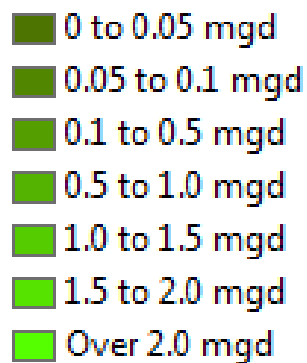


2016

2023

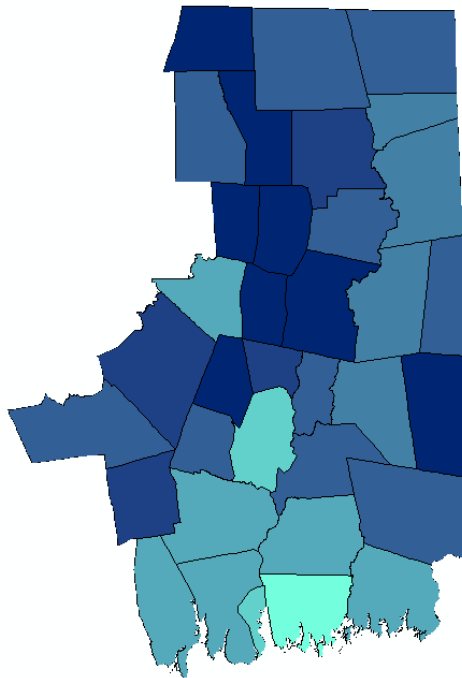
2030

2060

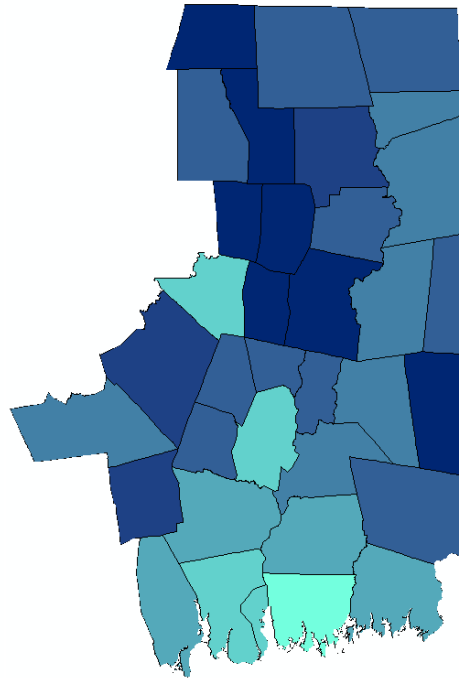


- Residential public water demand increasing in some towns
- Working on methodology to account for organic growth of new public water systems

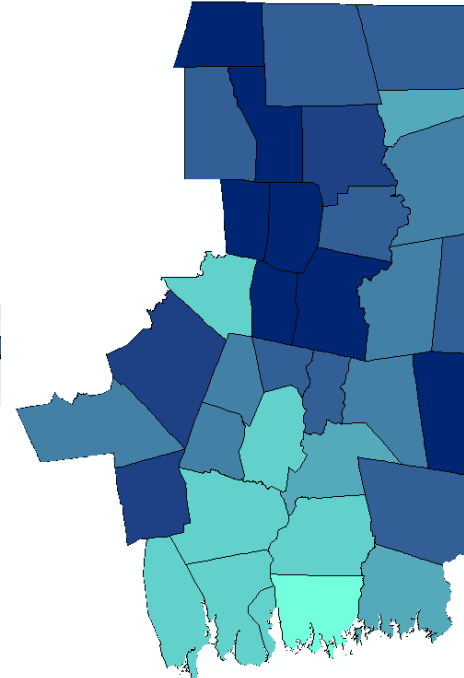
Total Water Demands – By Town



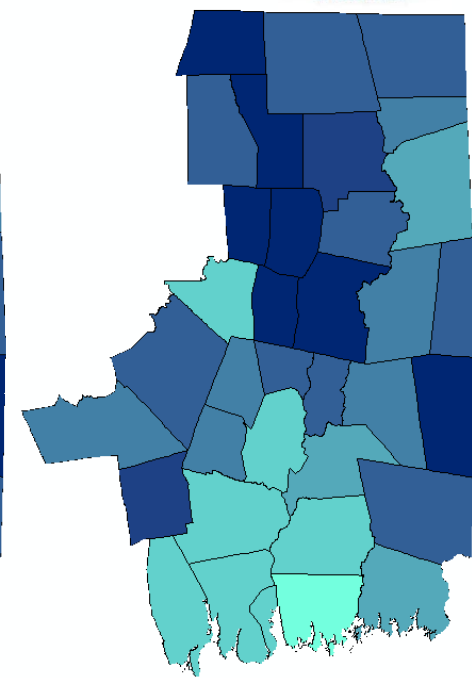
2016



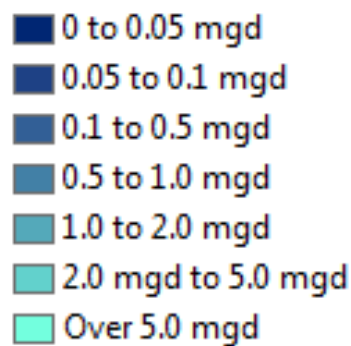
2023



2030



2060



- Total public water demand increasing in some towns
- Working on methodology to account for organic growth of new public water systems

Total PWS Demands – By ESA (mgd)



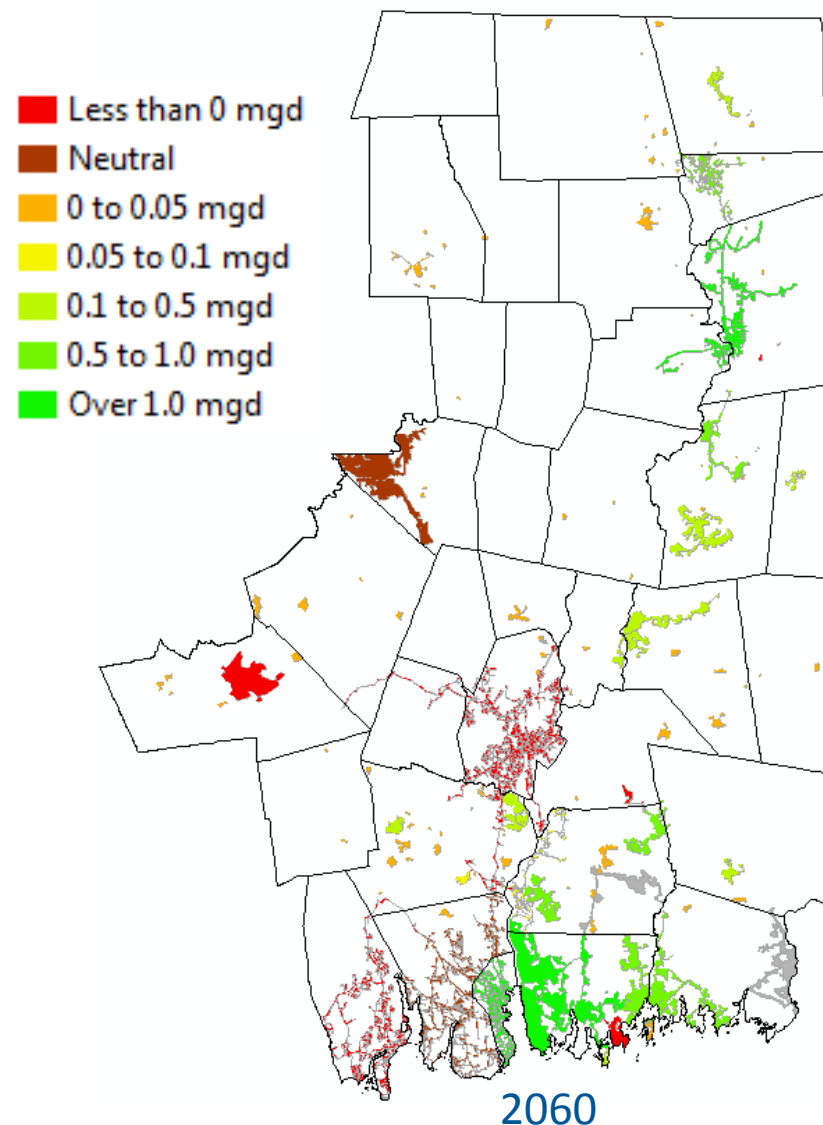
ESA Holder	Current Total PWS Demand in ESA	2023 Demand	2030 Demand	2060 Demand
Aquarion Water Company	1.60	1.61	1.67	1.82
Colchester Sewer & Water Commission	0.41	0.53	0.65	0.95
Connecticut Water Company	2.29	2.25	2.30	2.40
East Lyme Water & Sewer Commission	1.82	1.88	2.29	3.11
ESA Unassigned	0.00	0.00	0.00	0.00
Groton Long Point Association	0.12	0.13	0.14	0.14
Groton Utilities	5.77	5.76	4.11	4.40
Jewett City Water Company	0.63	0.64	0.74	0.82
Ledyard WPCA	1.71	1.83	2.20	2.21
Montville WPCA	1.50	1.47	1.73	2.27
New London Dept. of Public Utilities	3.35	3.24	3.34	3.53
Noank Fire District	0.20	0.25	0.26	0.26
Norwich Public Utilities	4.20	5.13	6.65	6.86
Putnam WPCA	0.97	0.98	1.01	0.99
Southeastern Connecticut Water Authority	0.38	0.39	0.39	0.39
Sprague Water & Sewer Authority	0.07	0.15	0.15	0.15
Sterling WPCA	0.21	0.21	0.21	0.21
Town of Lebanon	0.08	0.08	0.08	0.08
Town of North Stonington	0.15	0.18	0.18	0.18
Town of Preston	0.11	0.13	0.16	0.21
Town of Stonington	0.52	0.52	0.52	0.52
Waterford WPCA	1.74	2.94	3.16	3.61
Windham Water Works	1.97	2.01	2.35	2.44

- Potential demands in unassigned areas assumed to be minimal (state lands, small coastal islands)

Surplus Available Water – System ADD



- “If no one developed any new sources for Community systems, where would we be in 2060?”
 - Some systems may need to develop new sources or interconnections to meet ADD and commitments, or rescind commitments
 - Some small systems will continue to exist with very little surplus available water to meet ADD
 - Some systems will be in good shape for ADD with current sources and commitments



Current and Projected Water Demands



- Integrated Report will have ADD data for C, NTNC, and TNC systems by general user category in tabular format
- Still need to evaluate potential declines in Available Water for reservoir systems (more on this later)
- While the majority of systems can meet ADD in 2060, MMADD (and perhaps PDD) demands will drive need for new sources and interconnections
 - Peaking data is unavailable for NTNC and TNC systems, and for most small C systems – focus will be on the larger systems where data is available
 - Projected available water estimates will be used

Issues to Resolve



- Long-term impacts of Streamflow regulations
 - Safe yield analyses need to be updated to account for releases, drought triggers, etc.
 - Most utilities haven't done that level of analysis yet
 - Hard data is largely not available
 - Will use initial estimates in Integrated Report, and straight percentage where unknown – what percentage is appropriate?
 - MDC exempt, but estimates a 9.4 mgd reduction in safe yield (12.2%) – System Margin of Safety declines below 1.15
 - Wallingford estimates a potential 30% reduction to safe yield
 - Aquarion's analysis estimates overall 10%-11% decrease
 - Use 15%? 20%?

Prioritization of Strategies and Actions



- Looking at a regional level – what will benefit more than one system?
 - Expected sequence of prioritization to improve water supply:
 1. New Emergency Interconnections * - \$\$\$
 2. Reactivation of Inactive Supplies - \$
 3. New Active Interconnections * - \$\$\$\$
 4. Development of Ground Water Sources - \$\$\$
 5. Development of New Surface Water Sources - \$\$\$\$\$
- *Potential for small system consolidations*
- Presently proposed projects will be given more discussion as there is more information available (i.e. generally 5-20 year projects)

Recommendations – Interconnections



- New or Enhanced Interconnections
- Examples:
 - Windham Water Works with Connecticut Water Company (Mansfield) or Norwich Public Utilities (via Franklin)
 - Additional water committed from Groton Utilities to Montville / New London / Norwich
- Reasons could include drought and climate change resiliency, needing more water for organic growth, to offset Streamflow Regulations, or to support expansion to address contamination in areas served by private wells



Windham Water Works

Recommendations – “New” Sources



- Active or Semi-Regular use of Inactive or Emergency Sources
 - NPU: Could change emergency well to active use
 - CWC: Environmental studies to support additional withdrawals from permitted wellfield
- New Sources:
 - Potential yields from Yantic and Shetucket aquifers
- Reasons are the same as interconnection reasons (*drought and climate change resiliency, needing more water for organic growth, to offset Streamflow Regulations, or to support expansion to address contamination in areas served by private wells*)

Recommendations – Source Challenges



- WUCC assistance to solve long-term challenges of regional significance
 - Continue to support resiliency through regionalization via Groton Utilities
 - Interconnecting two Ledyard WPCA systems would reduce impact of Thames Basin Regional Interconnection going offline (two entry points from Groton)
 - Redundant supply for Norwich Public Utilities / Montville / Mohegan Tribe through Preston
 - Redundant interconnection for Groton Long Point
 - Support interconnections between large systems with only one wellfield or reservoir (Windham; Connecticut Water Company in Plainfield)

Recommendations – Small System Bins

- Options for small systems to become more resilient / improve capacity:
 - A: Seek resources for internal improvements
 - B: Pursue interconnection
 - C: Pursue acquisition and remain a satellite
 - D: Pursue acquisition and consolidation
 - E: Seek new management



Recommendations – New Systems



- WUCC could provide a framework for monitoring the situations where new systems are needed
 - What thresholds make sense? Population, density, etc.?
 - Who should monitor? DPH, WUCC, Town, or Health District?

- Examples:
 - Chaplin (Route 6 to Natchaug Village, Sherman's Corner)
 - Franklin water main extension

Recommendations – State Water Plan



- By necessity, the WUCCs will be involved with the State Water Plan recommendation to “Encourage regional water solutions where they are practical and beneficial”
- WUCCs could help implement other aspects of the State Water Plan *if asked by the WPC and the WPCAG*. Examples:
 - Identifying existing or new customers who could use Class B waters and free up Class A treated water
 - Show leadership in drought planning, reducing peaking factors, and setting new drought response thresholds
 - Show leadership in source protection strategies

Recommendations – Policies or Regs



- Address planning scales and look for streamlining opportunities:
 - Water Supply Planning Regulations are system specific
 - Coordinated Water System Planning Regulations are municipally and regionally specific
 - State Water Plan encourages basin-level planning
- Better guidance/regulations regarding the calculation of Available Water
 - Address appropriate methods of calculating MMADD and PDD available water (especially MMADD for surface water supplies)
 - Ensure that sales to other utilities are not double counted for MOS
 - Ensure that emergency interconnections do not count against available water

Upcoming Meetings



- ✓ Take a more detailed look at projections
- ✓ Review Draft Integrated Report
- ✓ Continued Discussion of How to Resolve Issues
- ✓ Prioritization of Strategies and Actions

7. Other Business

Potential Agenda for January 10, 2018



1. Welcome & Roll Call (5 minutes)
2. Approval of Meeting Minutes (5 minutes)
3. Formal Correspondence (5 minutes)
4. Public Comment Period (10 minutes)
5. ESA Modifications Discussion / Update (10 minutes)
6. Integrated Report Discussion (80 minutes)
 - May include DPH speakers
7. Other Business (5 minutes)