Connecticut Department of Public Health

Coordinated Water Supply Planning Law
Water Utility Coordinating Committee

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

WUCC Informational Meeting, Willimantic, CT.
September 30, 2015

Presentation Outline
Coordinated Water Supply Planning Process

- History – Connecticut's drinking water regulation
- Department of Public Health's Drinking Water Section
- Coordinated Water System Water Supply Process
  - Statutes and Regulations
  - Current Status
  - Future Plan and Timeline

History – Connecticut's Drinking Water Program

Public Drinking Water Regulation

- History of Public Health & Drinking Water
- US Public Health Service – 1798 & 1912
- Connecticut Health Department - 1880s & 1917
- US Environmental Protection Agency - 1970
- Safe Drinking Water Act (SDWA) – 1974, ‘86 & ‘96
- CT DPH received primacy for the SDWA - 1976

Public Health Concerns Water Supply 19th Century

- Significant public health issue - consuming drinking water
- Waterborne disease
- Gastrointestinal infection
- Typhoid, cholera, dysentery were prevalent
- Microorganisms in 19th century,
- Beginning of 20th century filtration, build technology, disinfection, sanitary protections at source, protection of raw water quality

Water Supply Problems – 19th century

- Industries need water for production, fire safety, consumption
- Population growth in Cities
- Water supply inadequate
- Unfiltered
- Untreated water
- Unprotected, poor distribution systems
- Unsanitary conditions, waste disposal
- 1878 CT State Agency Public Health oversight created

Abundant and Safe Water
CT Laws – early 20th Century

- 25-32 purity and adequacy DPH to assure and responsible for oversight, broad authority
- 25-33 source approval
- 25-34 investigate and order to stop pollution or threat of pollution
- 25-43 no pollution, no one is allowed to pollute
- 19a assure sanitary conditions

Abundant & Safe Public Drinking Water – late 20th Century

- 25-32d water supply plans 1985
- 25-33c to n – Coordinated water system water supply plans
- Updated plans periodically
- 25-32 & 25-37 – Water Company Lands
- 25-32b – Emergency Response
- 25-32 – Certified Operators

Department of Public Health's Drinking Water Section

DPH
Drinking Water Section

- To protect the public health of Connecticut residents and visitors that consume public drinking water in Connecticut
- Responsible for purity and adequacy oversight statewide for all public water systems
- No waterborne disease outbreaks

CT DPH Drinking Water Section Responsibilities

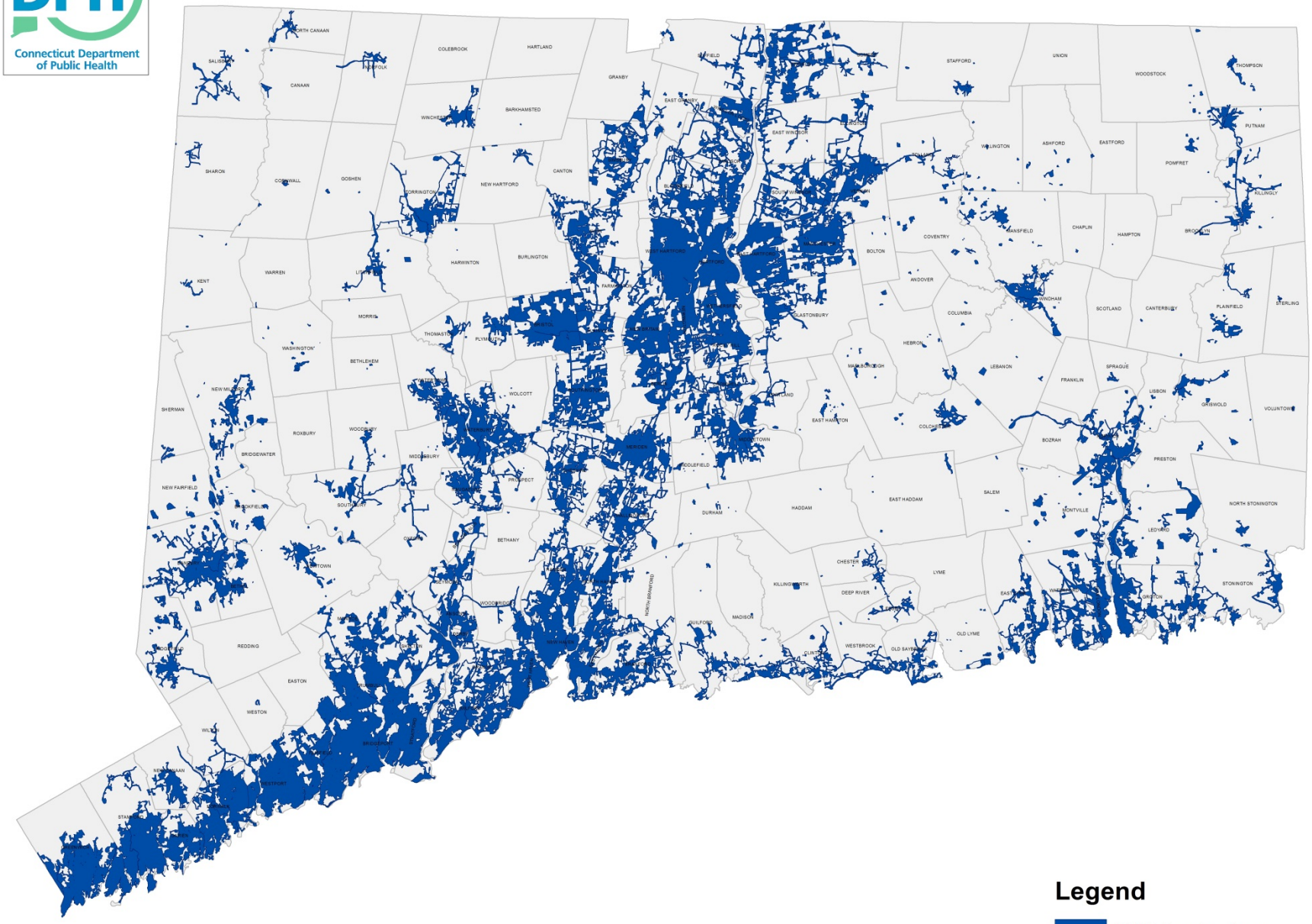
- Regulate 2,550 Public Water Systems
- 2.8 million CT residents served – 3.5 million total population
- 550 community systems
- 2,000 non-community systems
- 150 reservoir systems, over 4,000 ground water sources
- Largest number of systems in New England, considered a medium size state by EPA

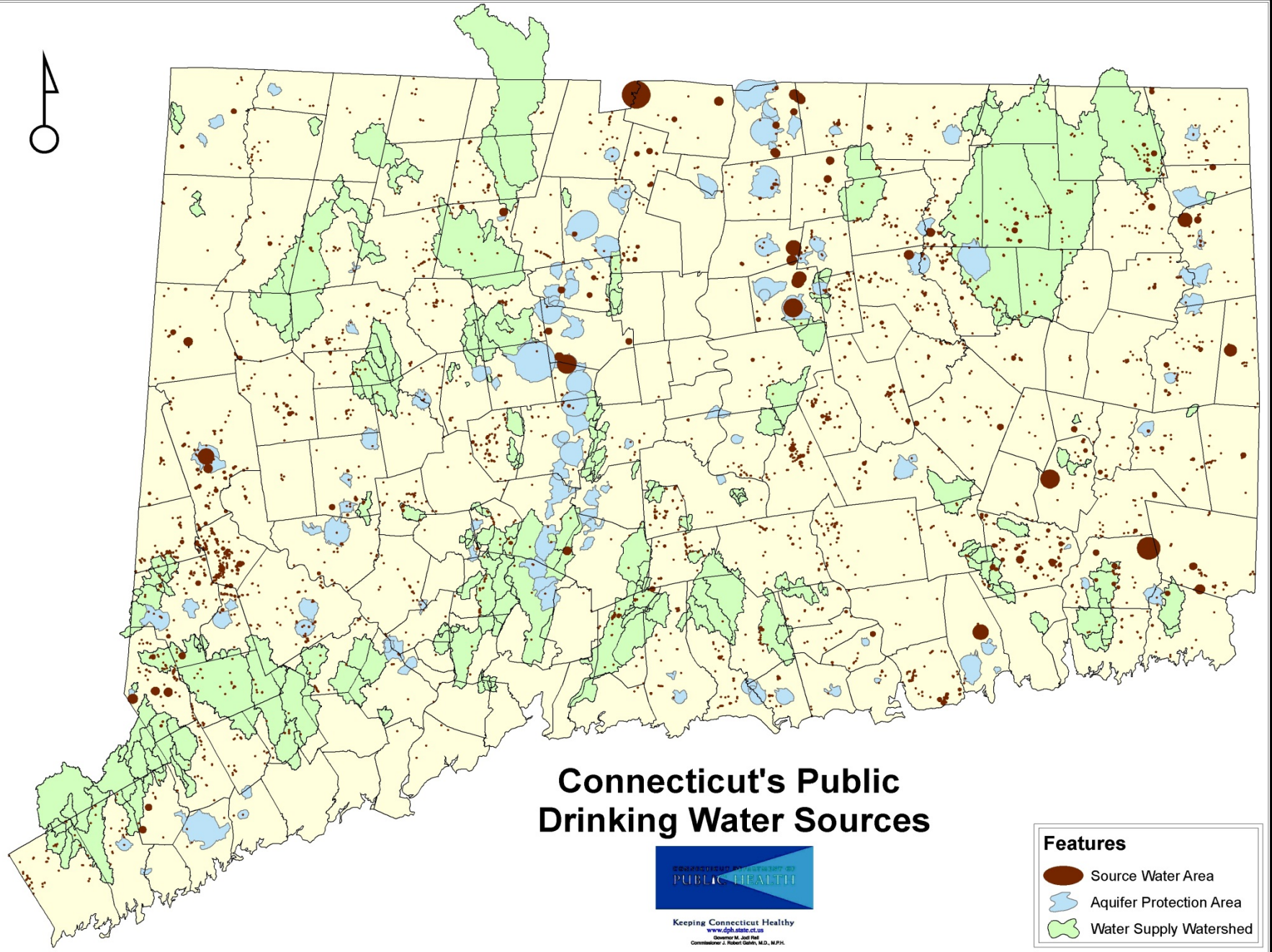
Keeping Connecticut Healthy

DPH

Connecticut Department of Public Health

Public Water Supply Service Area

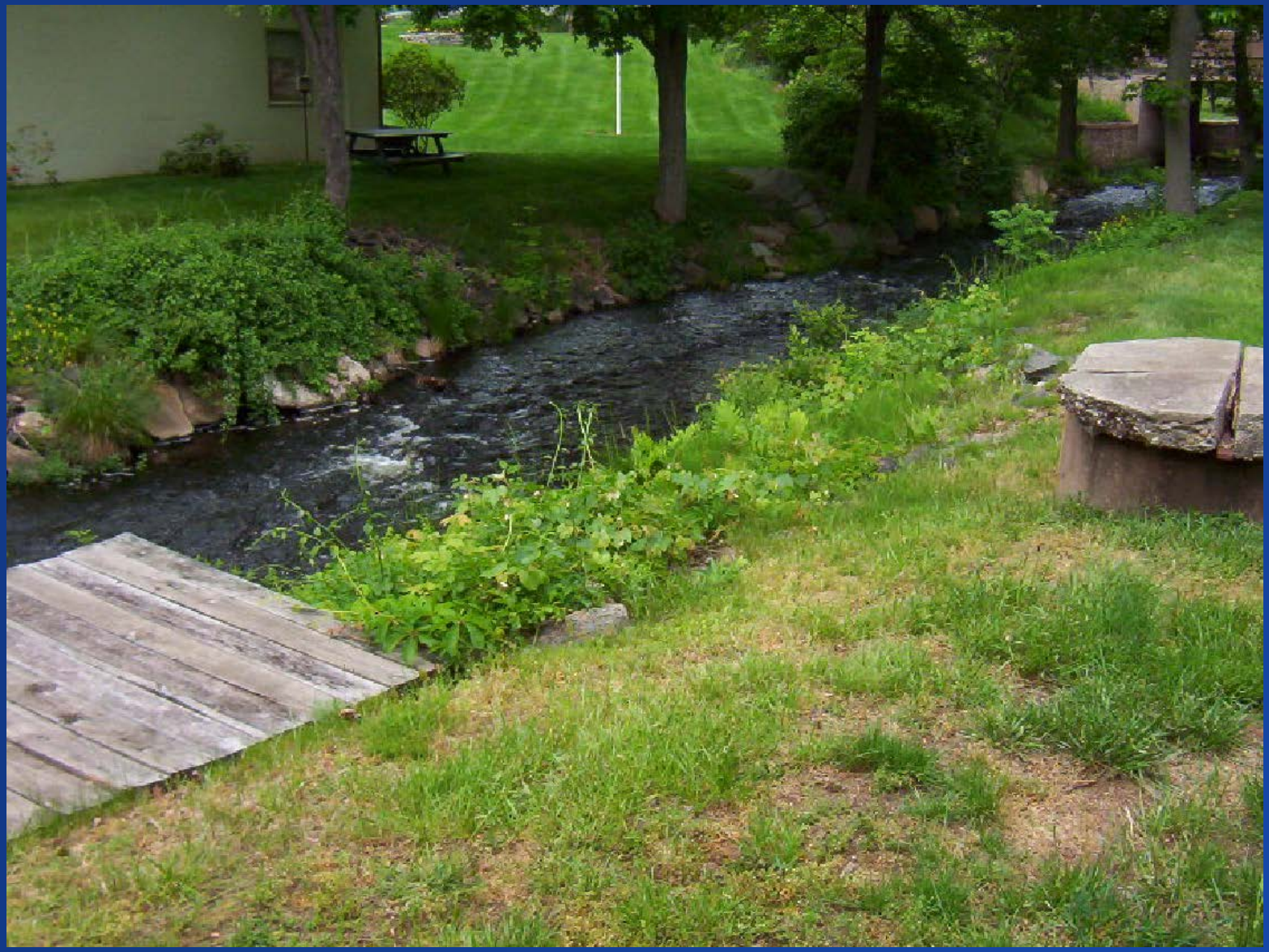



Connecticut's Public
Drinking Water Sources
PUBLIC HEALTH
Keeping Connecticut Healthy
www.dph.state.ct.us
Governor M. Jodi Rell
Commissioner J. Robert Galvin, M.D., M.P.H.
Features
Source Water Area
Aquifer Protection Area
Water Supply Watershed

Reservoir system in Connecticut

Connecticut Department of Public Health

Small public water system well



CT DPH Drinking Water Section

- Primacy of Safe Drinking Water Act - EPA
  - system engineering reviews
  - treatment/source review & approval
  - Drinking Water State Revolving Loan Fund
  - drinking water quality – oversight of monitoring and reporting
  - ground water rule
  - revised total coliform rule
- State Statutory Oversight
  - purity and adequacy of public drinking water
  - water company land regulation
  - recreation permitting, sale of excess water, certified operators, enforcement
  - water supply planning and regional planning (WUCC)

Top Causes
Public Drinking Water Outbreaks

- Giardia
- Legionella
- Norovirus
- Shigella
- Campylobacter
- Salmonella
- Hepatitis A
- Cryptosporidium
- E. Coli

Importance of an Abundant Supply of Safe and Pure Water for a Community

- Public health protection
- Preservation of public trust
- Allows for community growth
- Allows for a community to plan for future growth
- Assure sanitary conditions for multiple facilities, schools, nursing homes, restaurants, hospitals, town facilities
- Provides sustainability and viability for community
- Public safety, fire protection
- Economic growth
- Priceless

Connecticut Department of Public Health

Coordinated Water System Water Supply Planning Process

Coordinated Water System Plans (CWSP)

1. What is it – CT General Statutes Section 25-32d & 25-33h
2. Why does it exist
3. How does it operate
4. When convened
5. What is the present status
6. Why is it important
7. What is the future vision/thinking
8. How to accomplish this vision

CWSP - What is it? & Why does it exist?

- 1981 Drought
- Water Resources Task Force Report
- Legislature created water supply planning – CGS Section 25-32d & Sections 25-33c – 25-33i - 1985
- Regulations – 25-33h-1
- CGS Section 25-33c – Legislative Intent – …adequate supply of potable water is vital, readily available water for use is limited and should be developed with a minimum of loss and waste, DPH administer a process to coordinate water supply planning

CWSP Statutes

- 25-33d - Definitions
- 25-33e – Delineation of public water supply management areas, including the eight factors.
- 25-33f – WUCC Membership, includes representatives of public water systems and councils of government.
- 25-33g – Assessment of water supply conditions and problems & exclusive service areas.
- 25-33h – Coordinated water system plan.
- 25-33i – Consistency with the coordinated plan adopted pursuant to section 25-33h.

CWSP Regulations

- 25-33h-1
  - (b) – Initiation of the Planning Process
  - (c) – Responsibilities of the WUCC
  - (d) – Contents of the Coordinated Water System Plan
    - (A) – Water Supply Assessment
    - (B) – Exclusive Service Area Boundaries
    - (C) – Integrated Report
    - (D) – Executive Summary
  - (e) – Plan Preparation
  - (f) – Plan Submission
  - (g) – Plan Approval
  - (h) – Plan Distribution
  - (i) – Plan Updates
  - (j) – Alteration of Public Water Supply Management Area Boundaries and Priorities
  - (k) – Plan Implemented

Public Water Supply Management Areas

WUCC – When were they convened?

- Housatonic WUCC – plan completed 1988
- Upper CT River WUCC – plan completed 1989
- South Central CT WUCC – plan completed 1991
- Southeast WUCC – plan completed and approved 2001
- Northeast WUCC – not convened
- North West WUCC – not convened
- South West WUCC – not convened

2014 WUCC Boundary Revisions

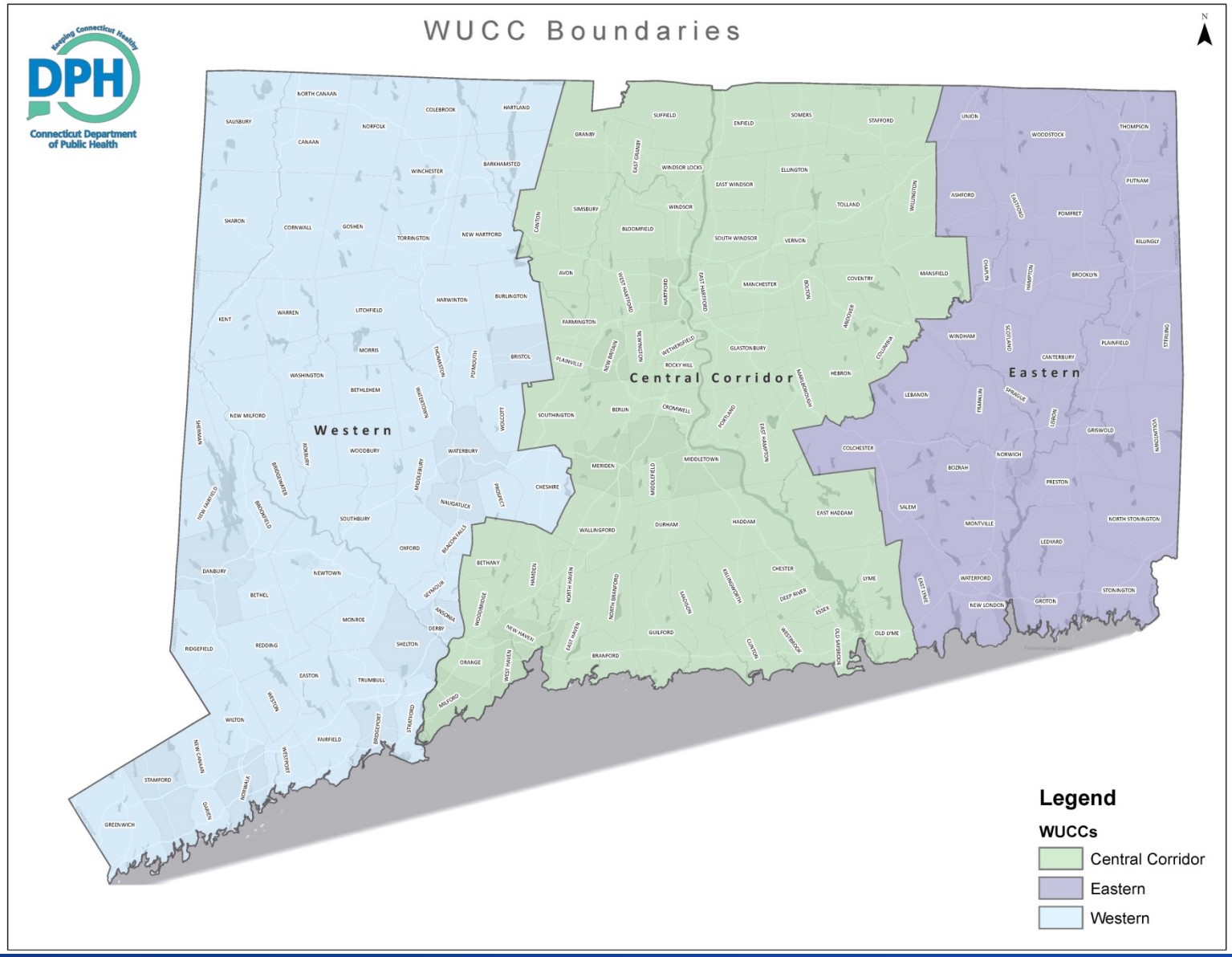
- Held three public hearings
- Reviewed all comments
- Followed law in the revision of the boundaries
- Reviewed 8 factors while considering all comments
- WUCC boundaries assured that Town and Council of Government boundaries are upheld
- Report to Commissioner Mullen October 2014

Delineation of Public Water Supply Management Areas

In delineating the final boundaries the following eight factors were considered consistent with CGS Section 25-33e:

- Similarity of water supply problems among water companies
- Population density and distribution
- Locations of existing sources of public water supply, services areas or franchise areas
- Existing interconnections between public water systems
- Municipal and Councils of Government boundaries
- Natural drainage basins
- Topographic and geologic characteristics
- Any other factor the Commissioner deems relevant

New WUCC Area Map



WUCC – Why are they important?

- Discussion of water supply issues
- Regional planning effort
- Use of plan as a guide
- Certificate process
- Bring together CEOs, LHD, COGs, Town Planners, and public water systems
- Highlight on regional water supply needs
- Forum to resolve issues locally
- Guide for water system growth and individual water supply plans – set Exclusive Water Service Areas

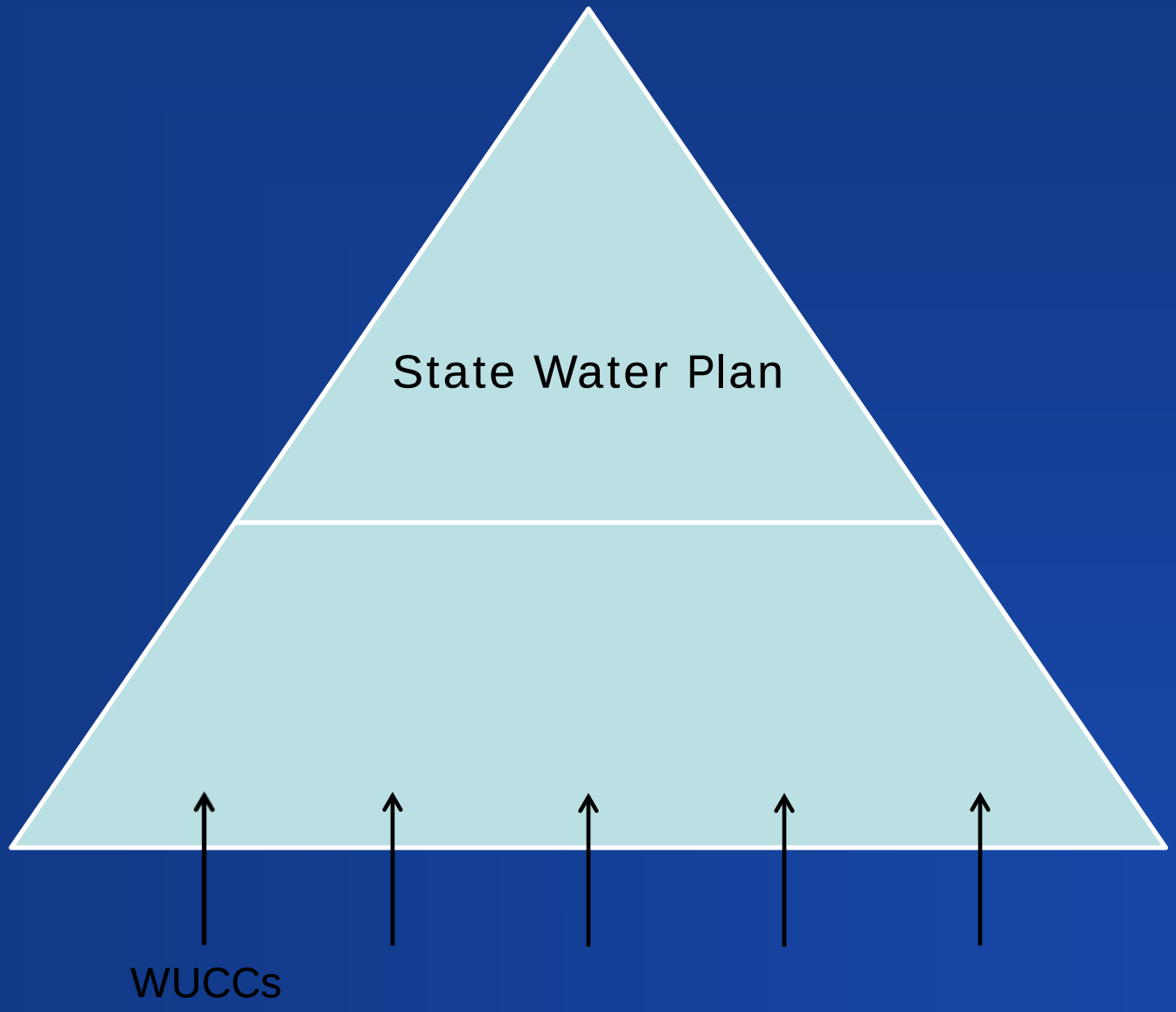
WUCC – Moving forward

- Fall 2015 data gathering
- Fall 2015 WUCC informational meetings
- Develop & follow standard procedures
- Early 2016 DPH to hire a consultant to assist the three WUCCs
- Convene three WUCCs in early 2016

Need to Complete Statewide Water Supply Planning

- Understand water supply needs and excess capacity
- Plan to meet future supply needs
- Include partners and stakeholders
- Additional focus on water conservation and emergency preparedness
- Completion of a State wide Coordinated Water Supply Plan
- Dynamic Plan

The Big Picture



Connecticut Department of Public Health

Thank you