



# Connecticut Department of Public Health

## *Public Drinking Water Regulation*

### Local Directors of Health Orientation Workshop

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Drinking Water Section

September 15, 2015

Drinking Water Section



# Presentation Outline

- History of Public Drinking Water Regulation and Drinking Water Section Responsibilities
- Working Together and How We Link to Local Health Departments
- Drinking Water Regulations
- Future Challenges and Initiatives



# History of Public Drinking Water Regulation

- 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



# Environmental Protection Agency Public Water Systems

- What is a Public Water System?
- 155,700 Public Water Systems in United States
- 52,000 community systems – serves residential population
- 286 million people served
- 70% by surface water



# Connecticut Public Water Systems

- 2,550 Public Water Systems
  - 2,000 Non-Community
  - 550 Community
- Largest number of systems of the New England states
- Considered a Medium Size State by the Environmental Protection Agency



# Department of Public Health Drinking Water Section

## Responsibilities



# DPH

## Drinking Water Section

*Healthy People in Healthy  
Connecticut Communities*

- 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

- 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)

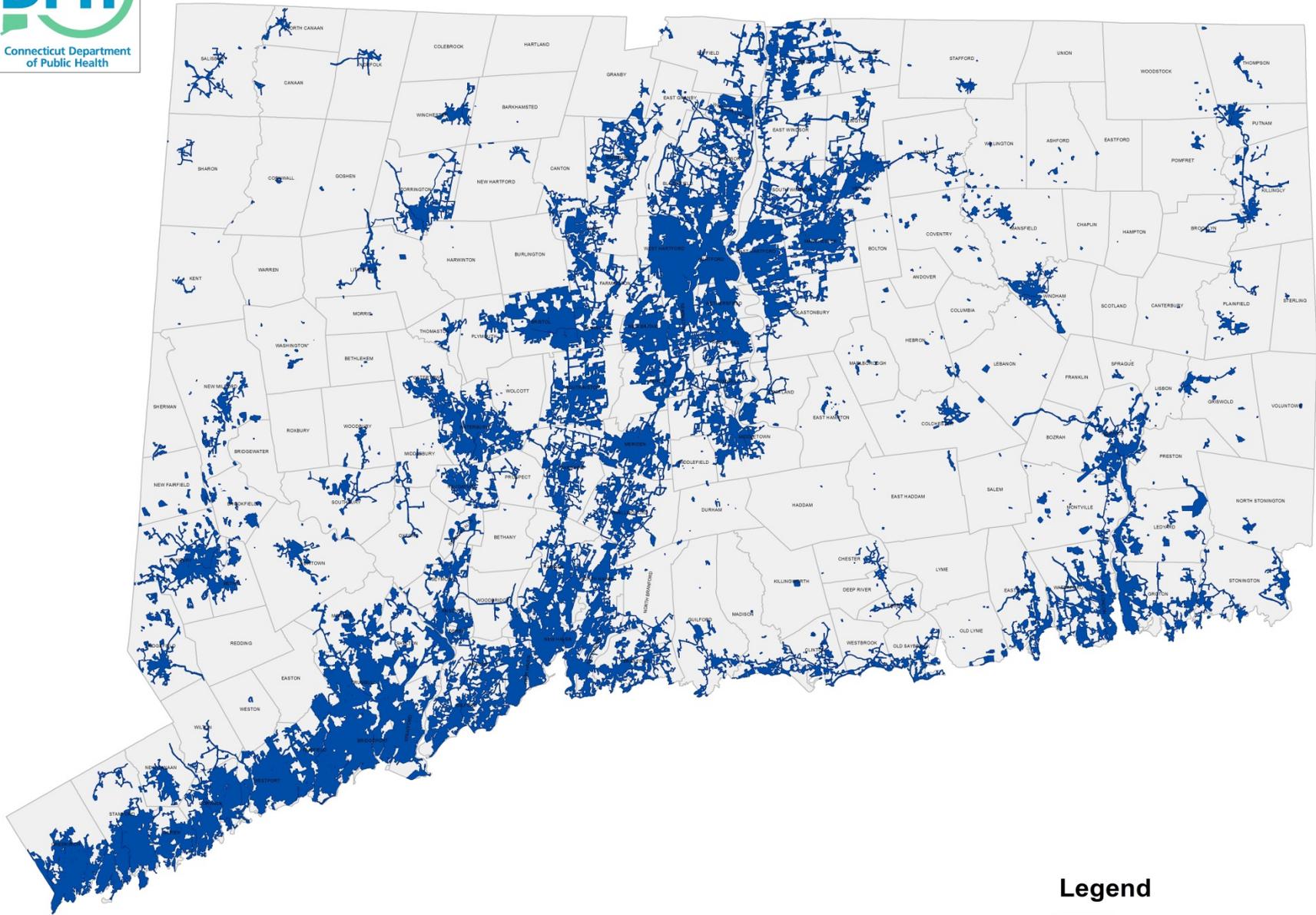


# CT DPH Drinking Water Section Responsibilities

- 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

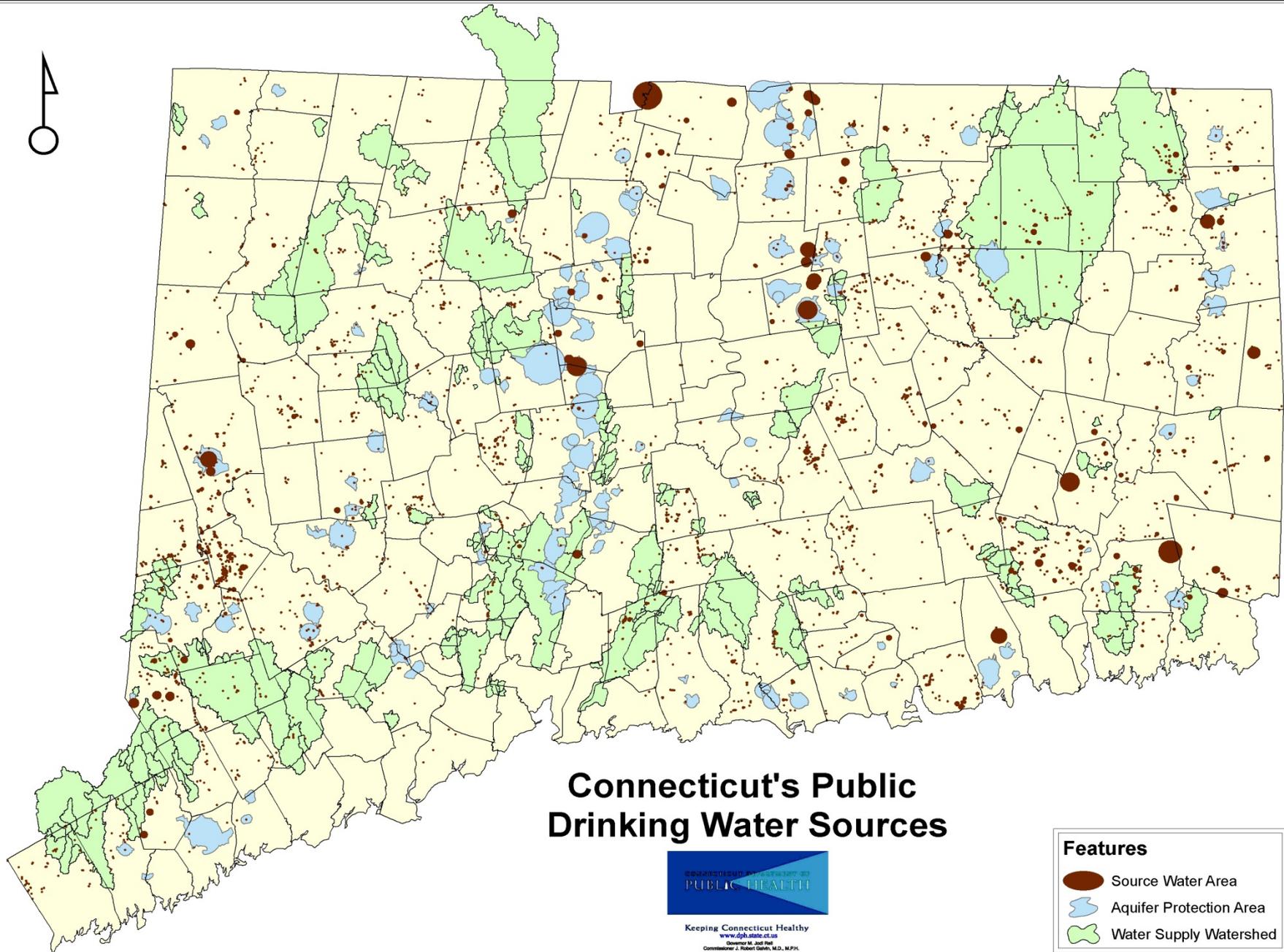


# Public Water Supply Service Area



## Legend

 PWS Service Areas



# Connecticut's Public Drinking Water Sources



Keeping Connecticut Healthy  
[www.dph.state.ct.us](http://www.dph.state.ct.us)  
Governor M. Jodi Rell  
Commissioner J. Robert Gresh, M.D., M.P.H.

**Features**

-  Source Water Area
-  Aquifer Protection Area
-  Water Supply Watershed



# Local Health Maps

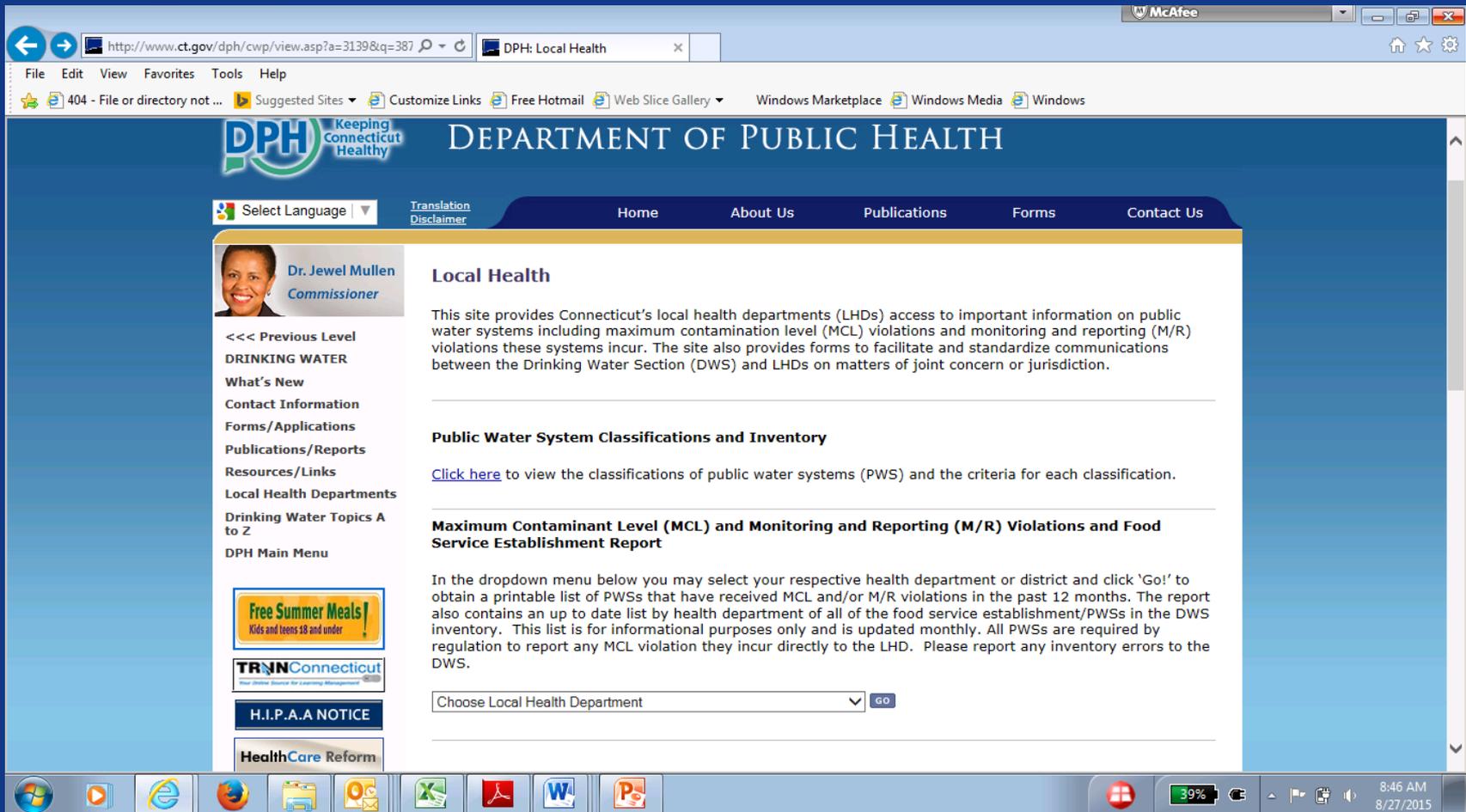
- Public water service areas
- Public water sources
- Ground water well locations
- Surface water reservoirs and watersheds



# **Working Together** *Protect and Improve Health and Safety*

How the Drinking Water Section links to Local  
Health Department

# LHD Resources on DWS website



The screenshot shows a web browser window displaying the Connecticut Department of Public Health (DPH) website. The address bar shows the URL: <http://www.ct.gov/dph/cwp/view.asp?a=3139&q=387>. The page title is "DPH: Local Health".

The website header includes the DPH logo and the text "DEPARTMENT OF PUBLIC HEALTH". Below the header is a navigation menu with links for "Home", "About Us", "Publications", "Forms", and "Contact Us". A "Select Language" dropdown menu is also visible.

The main content area is titled "Local Health". It features a profile picture of Dr. Jewel Mullen, Commissioner. The text states: "This site provides Connecticut's local health departments (LHDs) access to important information on public water systems including maximum contamination level (MCL) violations and monitoring and reporting (M/R) violations these systems incur. The site also provides forms to facilitate and standardize communications between the Drinking Water Section (DWS) and LHDs on matters of joint concern or jurisdiction."

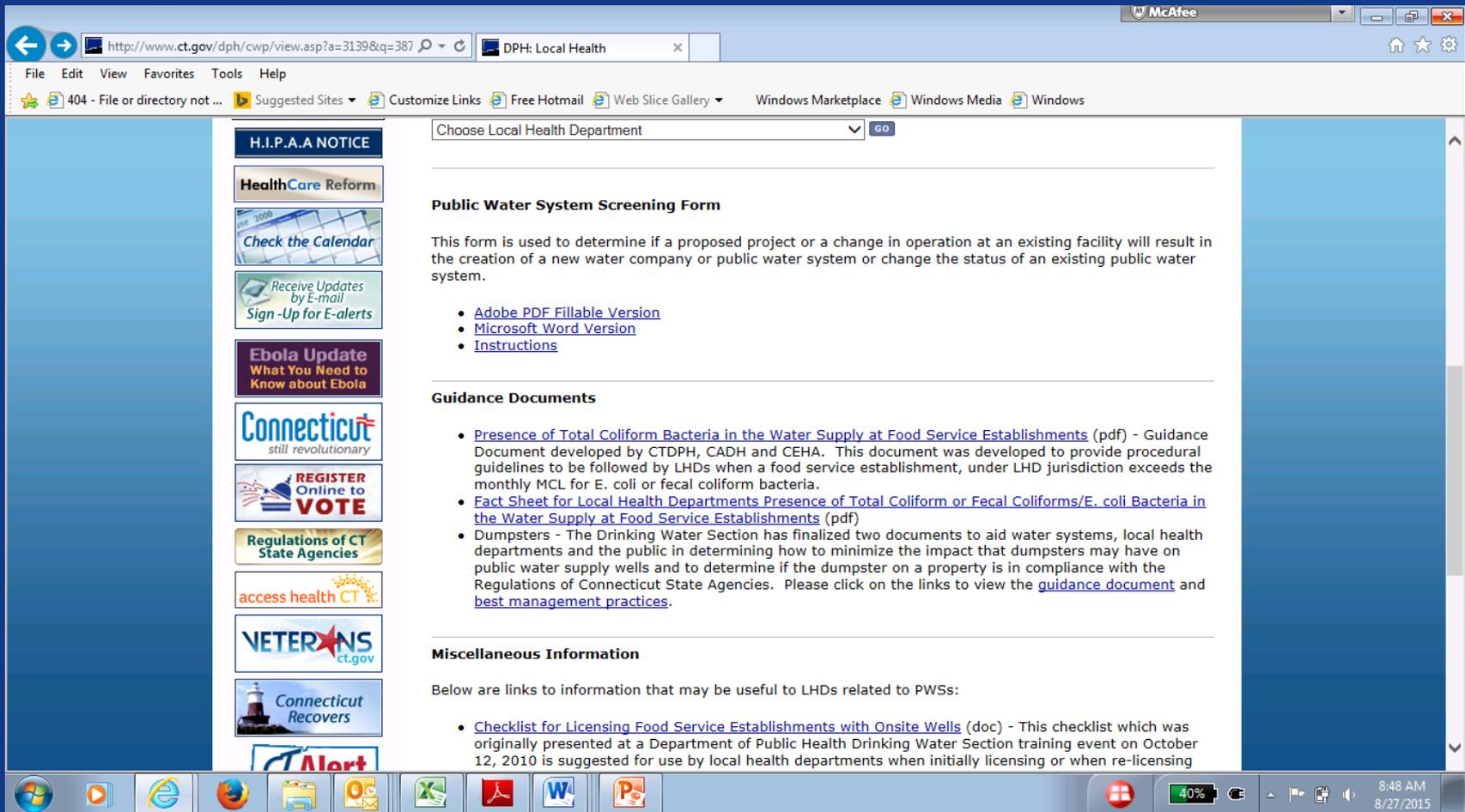
Below this text is a section titled "Public Water System Classifications and Inventory" with a link: "[Click here](#) to view the classifications of public water systems (PWS) and the criteria for each classification."

The next section is "Maximum Contaminant Level (MCL) and Monitoring and Reporting (M/R) Violations and Food Service Establishment Report". It contains a dropdown menu labeled "Choose Local Health Department" and a "GO" button. The text below the dropdown states: "In the dropdown menu below you may select your respective health department or district and click 'Go!' to obtain a printable list of PWSs that have received MCL and/or M/R violations in the past 12 months. The report also contains an up to date list by health department of all of the food service establishment/PWSs in the DWS inventory. This list is for informational purposes only and is updated monthly. All PWSs are required by regulation to report any MCL violation they incur directly to the LHD. Please report any inventory errors to the DWS."

The left sidebar contains a "DPH Main Menu" with links to "Previous Level", "DRINKING WATER", "What's New", "Contact Information", "Forms/Applications", "Publications/Reports", "Resources/Links", "Local Health Departments", "Drinking Water Topics A to Z", and "DPH Main Menu". There are also promotional banners for "Free Summer Meals!" and "H.I.P.A.A NOTICE".

The Windows taskbar at the bottom shows the system tray with the date and time: 8:46 AM, 8/27/2015, and a battery level of 39%.

# LHD Resources on DWS website



The screenshot shows a web browser window with the URL <http://www.ct.gov/dph/cwp/view.asp?a=3139&q=387>. The browser title is "DPH: Local Health". The page content includes:

- H.I.P.A.A NOTICE**
- HealthCare Reform**
- Check the Calendar**
- Receive Updates by E-mail Sign-Up for E-alerts**
- Ebola Update What You Need to Know about Ebola**
- Connecticut still revolutionary**
- REGISTER Online to VOTE**
- Regulations of CT State Agencies**
- access health CT**
- VETERANS ct.gov**
- Connecticut Recovers**
- Alert**

The main content area features a dropdown menu for "Choose Local Health Department" with a "GO" button. Below this is the **Public Water System Screening Form** section, which includes a description of the form's purpose and a list of links:

- [Adobe PDF Fillable Version](#)
- [Microsoft Word Version](#)
- [Instructions](#)

The **Guidance Documents** section contains a list of links:

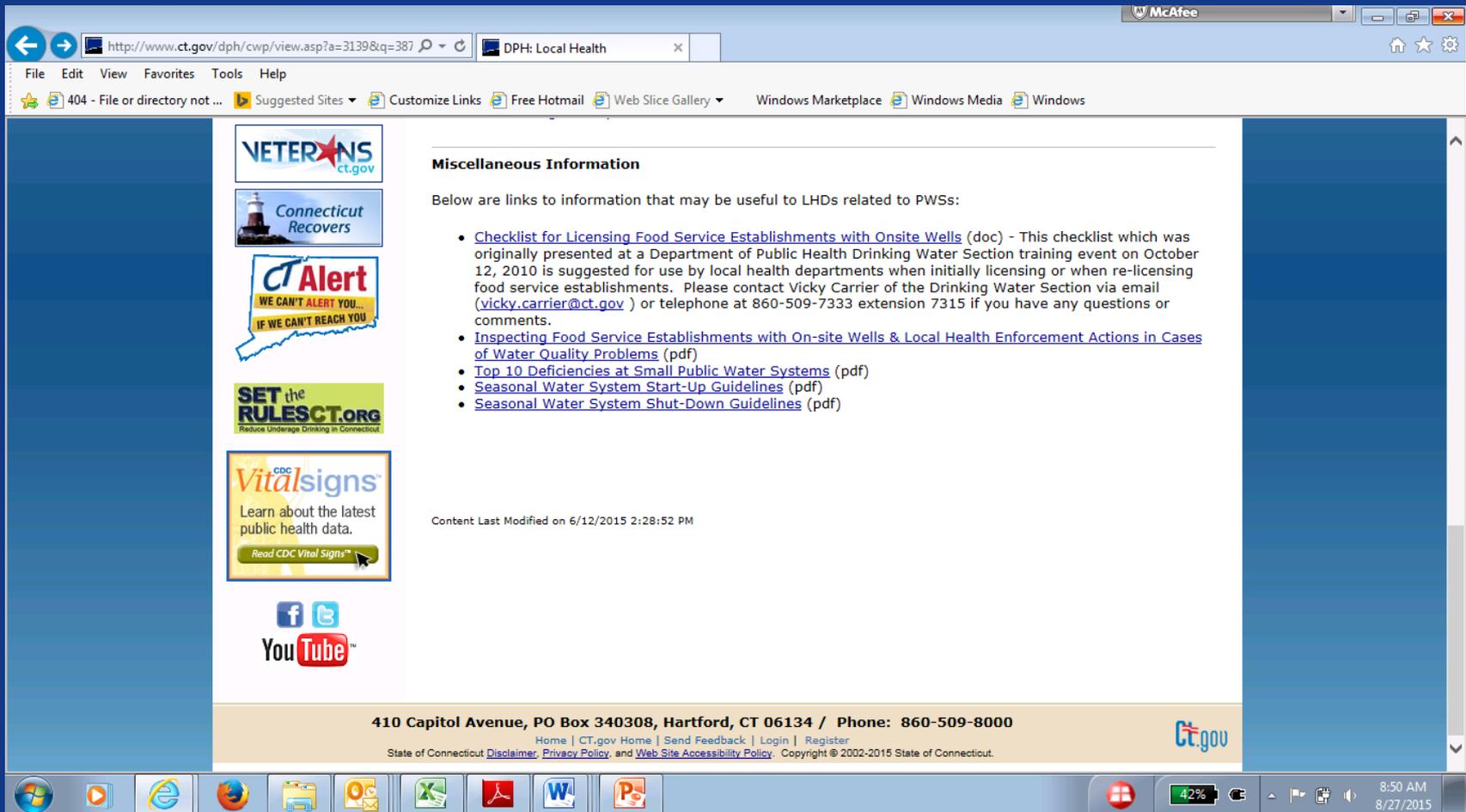
- [Presence of Total Coliform Bacteria in the Water Supply at Food Service Establishments \(pdf\)](#) - Guidance Document developed by CTDPH, CADH and CEHA. This document was developed to provide procedural guidelines to be followed by LHDs when a food service establishment, under LHD jurisdiction exceeds the monthly MCL for E. coli or fecal coliform bacteria.
- [Fact Sheet for Local Health Departments Presence of Total Coliform or Fecal Coliforms/E. coli Bacteria in the Water Supply at Food Service Establishments \(pdf\)](#)
- [Dumpsters - The Drinking Water Section has finalized two documents to aid water systems, local health departments and the public in determining how to minimize the impact that dumpsters may have on public water supply wells and to determine if the dumpster on a property is in compliance with the Regulations of Connecticut State Agencies. Please click on the links to view the \[guidance document\]\(#\) and \[best management practices\]\(#\).](#)

The **Miscellaneous Information** section states: "Below are links to information that may be useful to LHDs related to PWSs:"

- [Checklist for Licensing Food Service Establishments with Onsite Wells \(doc\)](#) - This checklist which was originally presented at a Department of Public Health Drinking Water Section training event on October 12, 2010 is suggested for use by local health departments when initially licensing or when re-licensing

The Windows taskbar at the bottom shows the date as 8/27/2015 and the time as 8:48 AM.

# LHD Resources on DWS website



McAfee

http://www.ct.gov/dph/cwp/view.asp?a=3139&q=387

DPH: Local Health

File Edit View Favorites Tools Help

404 - File or directory not ... Suggested Sites Customize Links Free Hotmail Web Slice Gallery Windows Marketplace Windows Media Windows








### Miscellaneous Information

Below are links to information that may be useful to LHDs related to PWSs:

- [Checklist for Licensing Food Service Establishments with Onsite Wells](#) (doc) - This checklist which was originally presented at a Department of Public Health Drinking Water Section training event on October 12, 2010 is suggested for use by local health departments when initially licensing or when re-licensing food service establishments. Please contact Vicky Carrier of the Drinking Water Section via email ([vicky.carrier@ct.gov](mailto:vicky.carrier@ct.gov)) or telephone at 860-509-7333 extension 7315 if you have any questions or comments.
- [Inspecting Food Service Establishments with On-site Wells & Local Health Enforcement Actions in Cases of Water Quality Problems](#) (pdf)
- [Top 10 Deficiencies at Small Public Water Systems](#) (pdf)
- [Seasonal Water System Start-Up Guidelines](#) (pdf)
- [Seasonal Water System Shut-Down Guidelines](#) (pdf)

Content Last Modified on 6/12/2015 2:28:52 PM

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8:50 AM 8/27/2015



# When to Issue Orders

- E.Coli MCL Violation at Food Service Establishment served by an on-site well
- No Water at Food Service Establishment with an on-site well
- Not necessary for Total Coliform MCL Violation
- Other water quality issues
- Other situations on a case by case basis
- Food Protection has provided sample orders in the past
- Drinking Water Section can verify that applicable code sections are being cited.



# Drinking Water Regulations

# Regulations

- **RCSA Section 19-13-B32:** Broad authorities including sanitation of watersheds
- **RCSA Section 19-13-B37 :** Cross Connections Between Water Supplies Prohibited
- **RCSA Section 19-13-B38a :** Permissible Arrangements For Connections To Public Water Supply Lines (What type of backflow devices
- **RCSA Section 19-13-B46:** Notification by Water Officials in Water Supply Emergencies
- **RCSA Section 19-13-B47:** Disinfection of Water Mains, Valves and Structures
- **RCSA Section 19-13-B80:** Chemical Substances In Public Water Supplies

# RCSA Section 19-13-B51 Water Supply Wells and Springs

- Definitions
- Interconnections
- Location
- Precautions
- Construction
- Covering
- Well Pits
- Well Pit Drains
- Permanent Appurtenances
- Post-Construction
- Testing
- Well Permits



# RCSA Section 19-13-B102 Standards for Quality of Public Drinking Water

- Drinking Water Quality Standards
- Sanitary Surveys
  - Every 3 years for CWS
  - Every 5 years for TNC & NTNC
- Requirements for:
  - Cross-connection surveys
  - 10-year Tank Inspections
  - Adequacy of service
  - Approval before installing new system components
  - Meters and sampling taps
  - Flushing program



# Public Water System

- A water company that provides water service to 15 or more consumers or 25 or more persons per day for at least 60 days of the year
- Residential population determined by design criteria (For each home: 2 persons for 1<sup>st</sup> bedroom and 1 person for each additional bedroom)
- Not typically public water systems: fairgrounds and mass gathering areas



# Public Drinking Water Regulations

## *Who do they affect?*

- 3 Types of PWSs:
  - Community
  - Non-Transient Non-Community
  - Transient Non-Community
- Ongoing water quality monitoring program
- PWS required to report test results to the DPH-Drinking Water Section

# PWS Testing Requirements

Monitoring			
Contaminant	Community	NTNC	TNC
Coliform Bacteria and Physicals	√	√	√
Nitrate & Nitrite Nitrogen	√	√	√
Inorganic Chemicals	√	√	
Oganic Chemicals	√	√	
Pesticides, Herbicides and PCB's	√	√	
Lead & Copper	√	√	
Radioactivity	√		

# Water Quality Basics

- Contaminants fall into 2 groups
  - 1. Chronic – those that cause health effects if consumed over a long period of time (organic chemicals, inorganic chemicals)
  - 2. Acute – those that cause immediate health effects (disease causing organisms & nitrates)

# Monitoring

- The contaminants required to be monitored are based on the amount of exposure
  - CPWS: residential persons
  - NTNC: same non-residential persons
  - TNC: transient persons



# Future Challenges and Initiatives



# RTCR

- Draft Regulation being finalized at DPH
- Held informational session in June 2014
- Increase Public Health Protection
- Establish a “find & fix” approach
- Effective Date: April 01, 2016



# Public Act 14-178 – Bulk Water Hauler License

- Hauler delivering water to PWS must be licensed by DPH
- Application is available on DPH/DWS webpage  
[http://www.ct.gov/dph/lib/dph/drinking\\_water/pdf/DWS\\_Circular\\_2015-03.pdf](http://www.ct.gov/dph/lib/dph/drinking_water/pdf/DWS_Circular_2015-03.pdf)
- Circular letter sent on 01/29/2015
- Guidelines & notification form on webpage



# Generator and emergency contingency and response plan

- Proposed new Section 19-13-B102(w)
- At Legislative Regulation Review Committee 9/22/15 Meeting
- Applicable to CWSs only
- Gen. to be provided or made available at critical facilities
- Comply in 3 yrs for CWSs <10,000 from effective date
- Use of propane or natural gas w/allowances for Liq. Fuel
- Alternative source of backup power is allowed w/DPH approval
- File info on existing Gen. within 8 months of effective date
- CWSs <1000 to prepare & make available emergency contingency & response plan within 8 months of effective date

# QUESTIONS?





# How to contact us

- DPH website:
  - <http://ct.gov/dph/site/default.asp>
- DPH main phone number:
  - 860-509-7333
- Lori Mathieu
  - [Lori.mathieu@ct.gov](mailto:Lori.mathieu@ct.gov)
- Vicky Carrier
  - [Vicky.carrier@ct.gov](mailto:Vicky.carrier@ct.gov)

# THANK YOU

