

Progress Toward a Resilient Connecticut

DRINKING WATER SECTION

Connecticut Department of Public Health Drinking Water Section
November 12, 2019

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CONNECTICUT DEPARTMENT *of* PUBLIC HEALTH





Our Mission....

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

Work to proactively prevent impacts to health



Our Focus....

Primacy of Safe Drinking Water Act – EPA

- Ground Water Rule
- Revised Total Coliform Rule
- Lead & Copper Rule
- Drinking Water State Revolving Loan Fund
- Drinking water quality – oversight of monitoring and reporting (500,000 samples/yr.)
- Sanitary surveys and system engineering reviews



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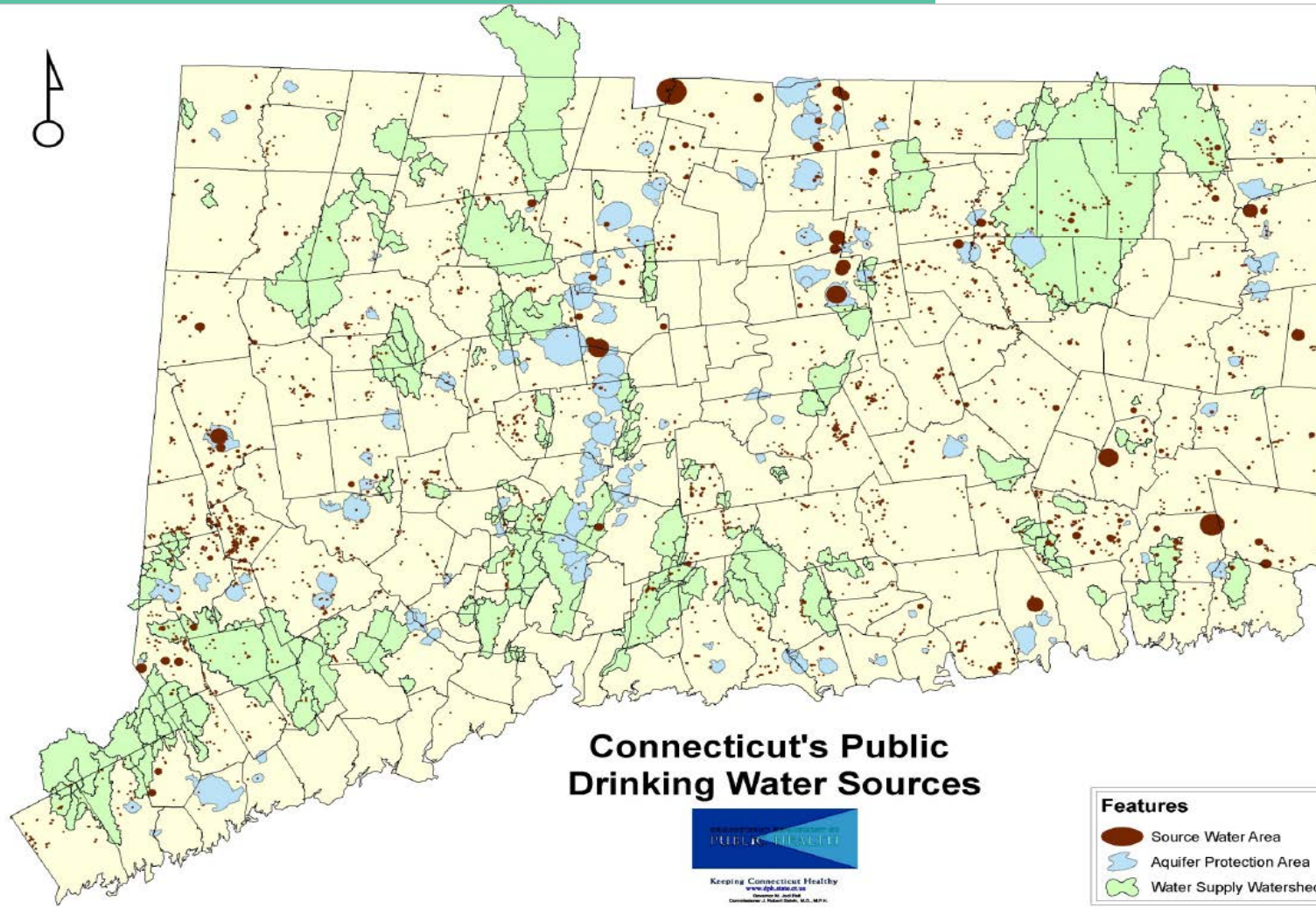
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Our Focus....





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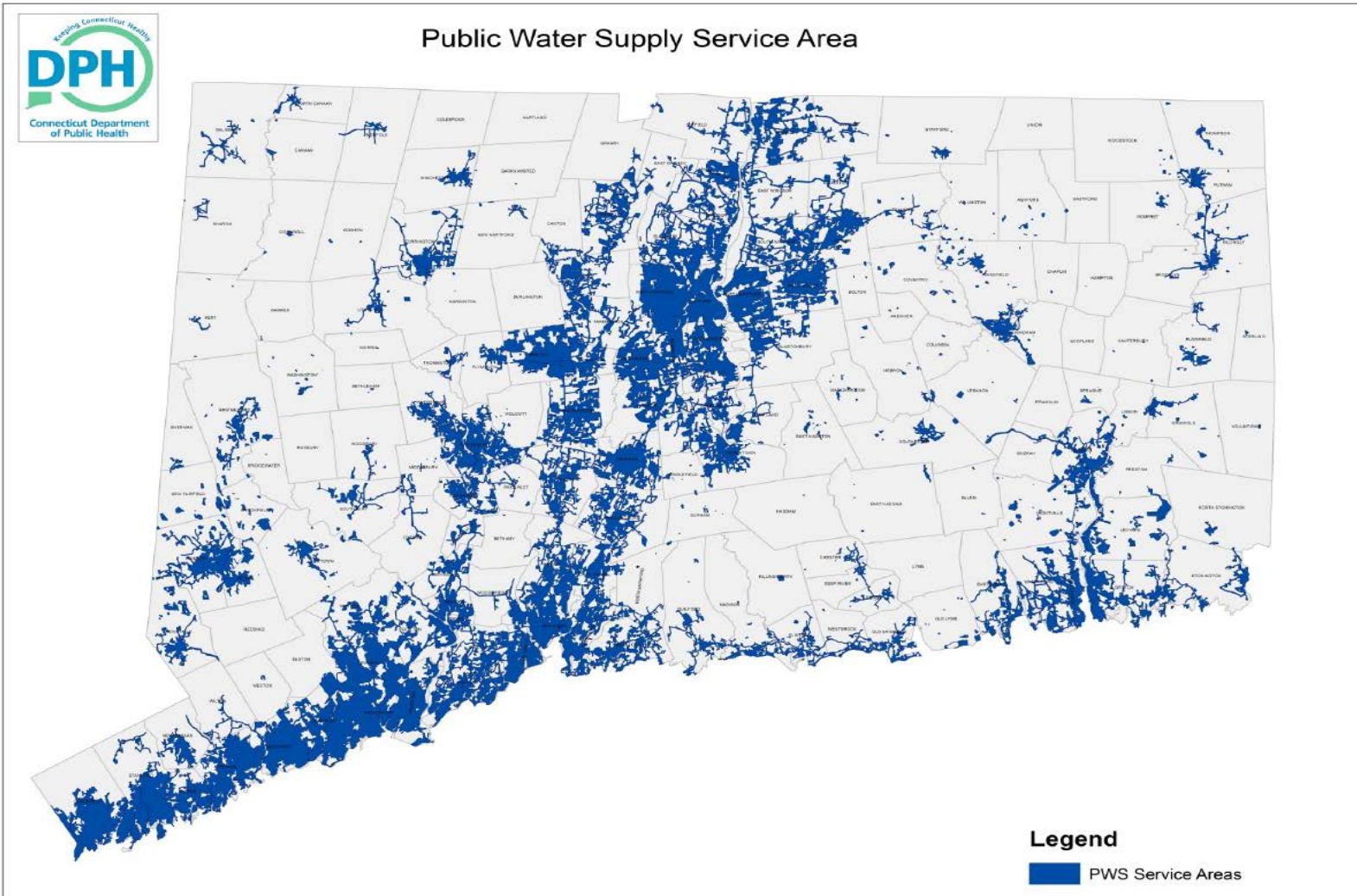
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Our Focus....





Drinking Water Resilience - History

Many Small Public Water Systems were effected by storms Irene, Alfred & Sandy

Triggered over 200 Boil Water Advisories

Threats remain (i.e. extreme weather events, drought, effects of climate change)

Asset Management & emergency response contingency plans needed for small Community Water Systems

Resulted in need for Generator Regulations

Developed a streamlined DWSRF Generator Loan Program





Drinking Water Resilience – DWVAR Plan

The Disaster Relief Appropriations Act of 2013 (Pub. L. 113–2) allocated Community Development Block Grant Disaster Recovery (CDBG–DR) funds for the purpose of assisting recovery in the most impacted and distressed areas declared a major disaster due to Superstorm Sandy.

The Drinking Water Section received federal funding from Tranche 2 of the CDBG-DR administered by the Connecticut Department of Housing, to help prepare a Drinking Water Vulnerability Assessment and Resilience Plan (DWVAR Plan).



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Drinking Water Resilience – Irene



Storm Irene
August 28, 2011

Over 200 PWS
issue boil water
advisory

21,487 people
affected

Final BWA lifted
October 11, 2011





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Drinking Water Resilience – Irene



Storm Irene

**August 28,
2011**

**Bristol – Farrell
Ave Washout
during Irene**



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Drinking Water Resilience – Irene



Storm Irene
August 28, 2011

Bristol – Farrell
Ave Repairs
(2013)



Drinking Water Resilience – Alfred

October 2011



Storm Alfred
October 29, 2011

121 small CWS on boil
water advisory

20,212 people affected

98% of CT Residents
retained their community
public water



Drinking Water Resilience – Alfred



October 2011

Storm Alfred

Majority of large CWS north of I-84 lost street power,

Operations not affected due to emergency power capacity

street power restored slowly some large CWS without street power for 8 to 9 days



Drinking Water Resilience – Sandy



October 2012

Hurricane Sandy

October 29,
2012

DWS used **lessons learned** from past storms to **improve** before, during, and after - **storm response**

109 Small CWS on BWA
14,740 people affected



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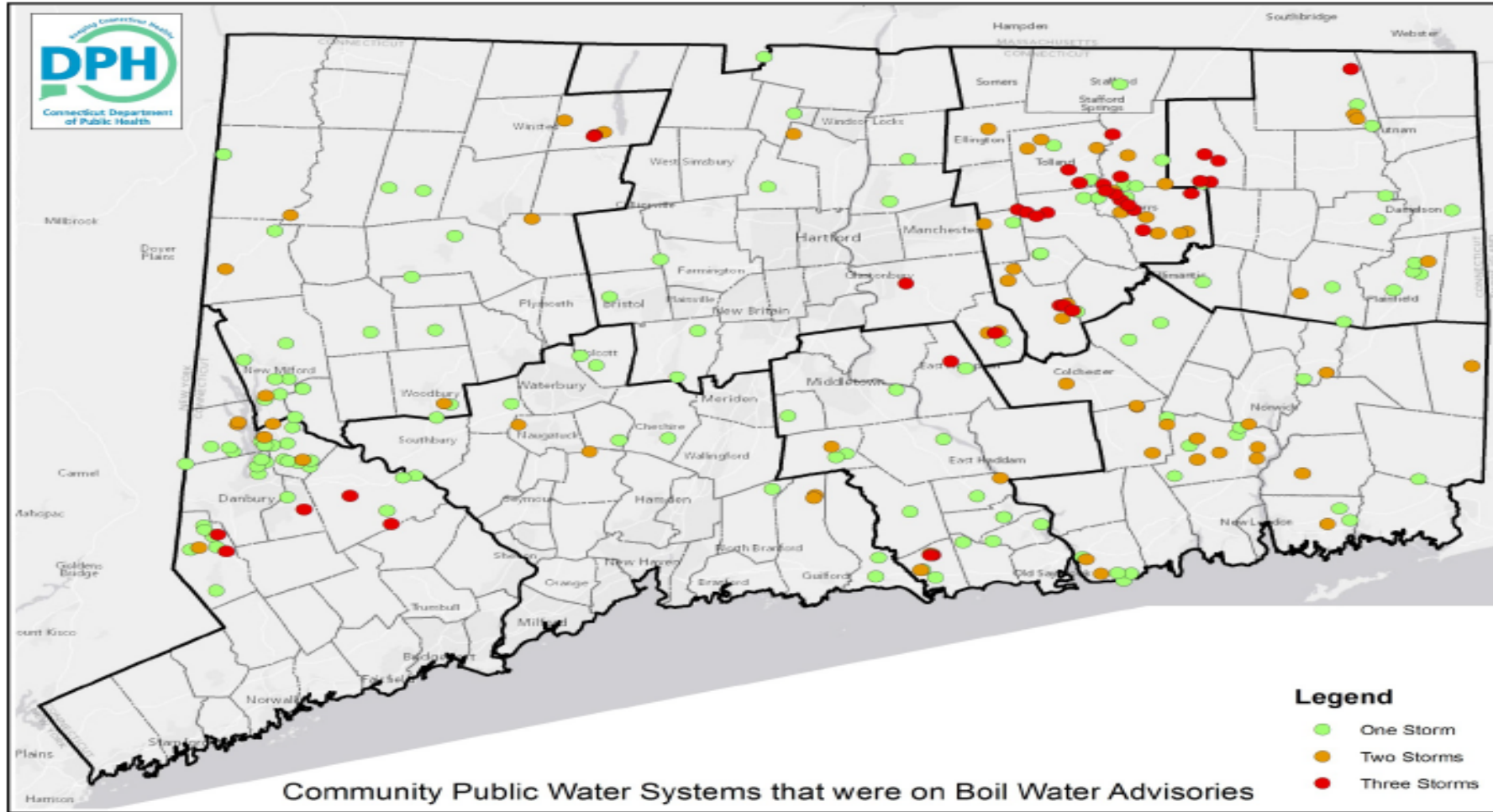
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Drinking Water Resilience – Three Storm Summary





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Drinking Water Resilience – Drought



**2016/2017
Drought**





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Drinking Water Resilience – Drought



**Drought
2016/2017**

**November 30,
2016**

Governor
Malloy issued
Drought
Watch for 6
counties in CT.
(Two counties
remained on
Drought
Advisory)





Drinking Water Resilience - resilience initiatives - Projects

- Assure resilient and sustainable public water systems
 - Capacity building to ensure continuous operation of system and maintain supply of potable water
 - Infrastructure replacement/upgrade
 - Sources of water supply
 - Drinking water treatment facilities
 - Treated water storage facilities
 - Water pump stations
 - Water main replacements
 - Emergency power generators
 - Planning - including all hazard emergency/vulnerability assessment & resiliency planning
 - Compliance with drinking water laws
- Emphasis on drinking water system Asset Management and Fiscal Management
- Reduce the risk to human health through safe and adequate public drinking water for over 2.8 million people in CT
- Regional Water Authority – generators at water pump stations
- Norwalk First Taxing District – improvements to Spring Hill to provide more resilient service to Norwalk Hospital





Drinking Water Resilience - resilience initiatives - Funding

- Drinking Water State Revolving Fund (DWSRF)
 - Focused on human health improvements through drinking water infrastructure replacement; maintaining the social environment through the built environment
 - Emergency Power Generator Program: Focused effort to assure emergency power generation capability for all community public water systems
 - Emphasis on projects serving distressed communities
 - Eligibility limited to rehab/improve existing infrastructure; cannot be used for growth or new development





Drinking Water Resilience - CDBG relevant initiatives

- Examples of projects that are most relevant to addressing HUD's priorities to serve the most vulnerable populations:
 - Reducing Health Disparities and improving health through multi-sector approach
 - Collaborated on a grant with the CT Public Health Association to engage policymakers, public health practitioners, and CT Chapter of the American Planners Association on the built environment, and its influence on the health status of CT residents
 - Broadening use of Health Impact Assessments (HIA), where relevant, to address built environment and community related factors that increase the risk of chronic disease, unintentional injuries, exposure to toxins and thereby contribute further to existing health disparities
 - HIA conducted for Weatherization Policy and its intersection with Healthy Homes
 - Directive from Commissioner's Office for DPH staff to seek out ongoing opportunities
 - Drinking water infrastructure projects that assure system resiliency and ability to provide for public water supply during and immediately following a major storm event
 - DWSRF awards additional project priority ranking points to projects serving a Distressed Community





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Drinking Water Resilience - DPH Initiatives

State Water Plan

**Water Utility Coordinating Committees' Coordinated
Water System Plans**

Connecticut Source Water Collaborative

State Health Assessment





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Thank You!

QUESTIONS & ANSWERS



DPH

Connecticut Department
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