

CT Interagency PFAS Task Force

Remediation Committee
September 12, 2019
DEEP, Gina McCarthy Auditorium
9:00-11:00 am

DEPARTMENT of PUBLIC HEALTH
DEPARTMENT of ENERGY AND ENVIRONMENTAL PROTECTION



CONNECTICUT DEPARTMENT of PUBLIC HEALTH



Agenda

- Welcome & Introductions
- Recap of August Meeting
- Presentation
- Additional Discussion Items
- Proposed Action Items
- Next Steps
- Public Comment

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Welcome & Introductions

Mission:
**Identify, assess, and clean up
historical releases of PFAS to the
environment.**

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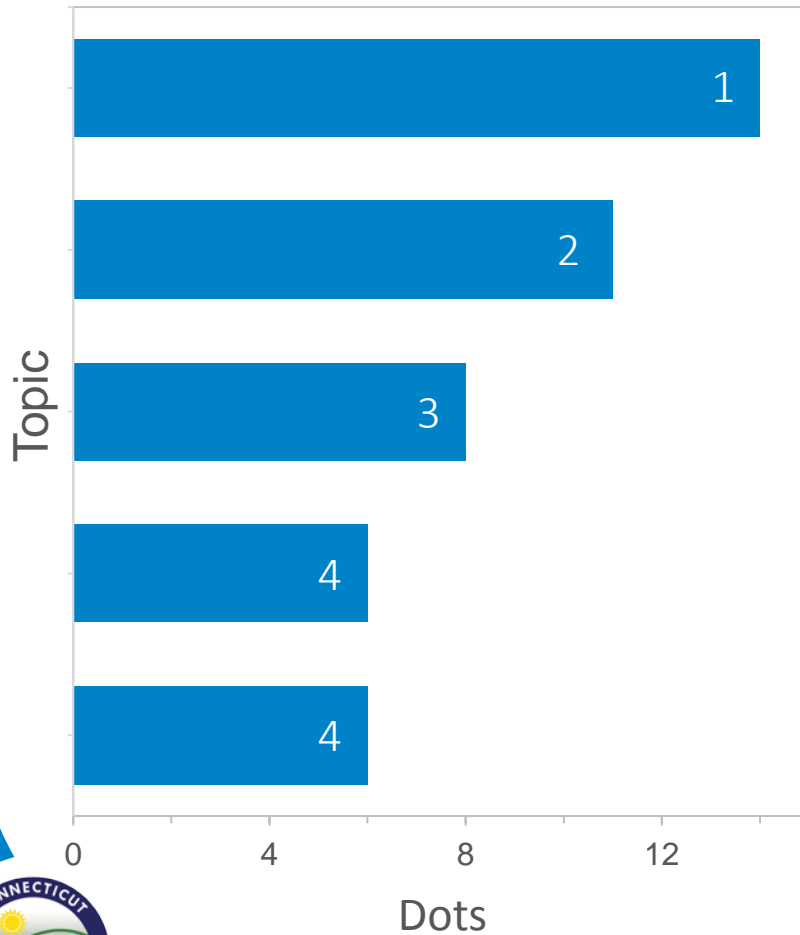
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Remediation - Dot poll results



- ① Determine universe of potential sites (firefighting training areas, airports, landfills, PFAS industries, etc.) [14 votes]
- ② Cleanup standards and Significant Environmental Hazard Notice [11 votes]
- ③ Education, outreach, and communication [8 votes]
- ④ Evaluate background concentrations in our environment: surface water, groundwater, air, soil, sewage (influent/treated effluent) [6 votes]
Evaluate cleanup options for environmental media [6 votes]

Sampling Strategy Subcommittee Update

- Met on 8/21 and 8/28 to discuss conceptual statewide sampling strategies for determining background and assessing ambient conditions
- CAES, USGS, LEPs, DEEP
- Possible drainage basin approach
- Leverage existing sampling infrastructure – USGS monitoring stations and DEEP Air Monitoring locations

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Presentation

Joe Ayotte

USGS PFAS-related work: National,
regional, and local research

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Additional Discussion Items

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Public Drinking Water Source Protection Measures

The 82 Public Water Systems that prepare Individual water supply plans are required to evaluate the land tributary to their sources of supply for uses are of **immediate concern to water quality**, or have a **significant potential to contaminate** a public drinking water supply, as determined by a public water system.

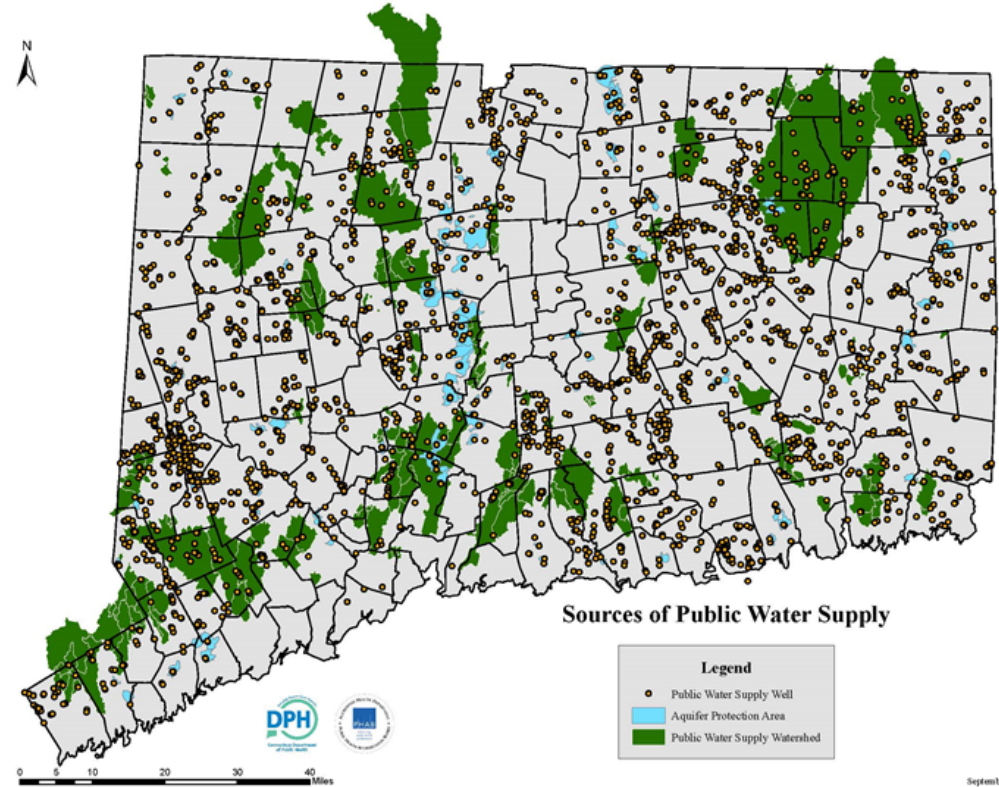
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Public Drinking Water Source Protection Areas

- 18% of the state
- Reservoirs and their watersheds
- Large gravel-packed wells and their aquifer protection areas
- Bedrock wells with their source water protection areas



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Land Use Assessments

- [Circular Letter 2018-20](#) sent on September 27, 2018 directed these PWS to update their land use assessment to include potential PFAS Generators
- Form developed by the CT Section of the American Water Works Association's Source Protection Committee which includes representatives from DPH and DEEP
- Used the [PFAS Fact Sheet](#) series developed by the Interstate Technology Regulatory Council for reference material

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Source Water PFAS¹ Vulnerability Assessment Form

This form is intended to be used to assess and inventory land use activities that are of immediate concern to water quality, or have a significant potential to contaminate a public drinking water supply, for delineated source water protection areas, as required by section 25-32d-3(i)(3) of the Regulations of Connecticut State Agencies (RCSA).

SYSTEM: _____ AQUIFER/WATERSHED: _____
 PWSID#: _____ SANITARY RADIUS: _____
 LOCATION: _____ DATE FORM COMPLETED: _____
 NO POTENTIAL PFAS SOURCES IDENTIFIED FORM COMPLETED BY: _____

Potential Contaminant Source (insert additional rows as needed)	Site Address	Description	Distance to Drinking Water Source ²	Past History
Tier 1 Risk		High risk potential; Sites that use AFFF firefighting foams; Landfills (all types); Industries that use PFAS ³ (metal plating, etching, textiles/leather/carpeting, paper and cardboard products, wire manufacturing, industrial cleaning products, surface coatings/paints/ varnishes/inks, plastics/resins/rubber, adhesives, electronics, semiconductors, photolithography, cosmetics/personal care).		
Military Base				
Airport				
Fire Training Area				
Landfill				
PFAS Industry ³				
Tier 2 Risk		Moderate risk potential; Fire Departments that store AFFF firefighting foams; Wastewater discharges from car washes; Groundwater discharges from major septic systems permitted by DPH or DEEP; Water Pollution Control Facility (WPCF - public sewer system); Sites of significant fires where AFFF firefighting foams were applied (car crash, tanker truck roll-over, gasoline/diesel released to the ground, etc.); AFFF fire suppression systems (possible in large industrial buildings, oil terminals); Application or use of biosolids on agricultural fields.		
Fire Department				
Car Wash				
Major Septic System (>2,000 gal) or Institutional Septic				

Source Water PFAS Vulnerability Assessment Form 01 24 2019

Remediation Standard Regulations

From June 20, 2017
Remediation
Roundtable Meeting

- If PFAS are COCs based on site history/ operations, they should be included in site characterization.
- PFAS must be addressed as Additional Polluting Substances at Remediation Sites.
 - Utilize EPA's RfD of 0.00002 mg/kg/day
 - Soil Direct Exposure Criteria – use equations in RSR Section 22a-133k-2(b)(5)
 - Groundwater Protection – Adopts CT DPH's DWAL of 70 ppt for Σ PFOA, PFOS, PFHxS, PFNA, and PFHpA
- OR Calculate Site-Specific Criteria for DEEP review and approval

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**Is this sufficient, or is additional guidance needed?
Should testing be mandated for certain industry sectors?**

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Significant Environmental Hazards

CGS Section 22a-6u(c) – Drinking Water Well has Contamination Detected at Any Level

After July 1, 2015, if a TEP in the course of investigating and remediating pollution on or emanating from a parcel determines pollution has affected a public or private drinking water supply well...with any substance from the release for which there is no RSR criterion,

TEP shall notify client and owner of property within 7 days.

Owner of parcel that is source of pollution to a drinking water well shall:

1. Notify Commissioner in writing within 30 days, and
2. Perform confirmatory sampling of well and submit report to Commissioner with a plan for further action within 30 days.

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GP for Groundwater Remediation Wastewater

Issued 2/21/18, includes Emerging Contaminants

Authorization Sec. 3(b)(1)(B)(xii) – Requires:

- 1) **Complete and sufficient registration**, AND
- 2) Commissioner issues an **Approval of Registration** if the commissioner determines **ECs “are present at levels that require development of site specific monitoring requirements and/or discharge limitations.”**

Conditions Sec. 5(a) **Screening Analysis Requirements**

Sec. 5(a)(2)(F) – **Requires screening analysis for ECs with Clean Water Act approved methods. On-going screening or effluent monitoring required if directed in writing by Commissioner.**

Sec. 5(a)(2)(G) – **Requires analysis of wastewater for any pollutant “toxic, hazardous, or detrimental” or “having the potential to bioaccumulate, bioconcentrate or adversely affect aquatic life” that has been “handled, stored, released, or disposed of at or adjacent to the site where wastewater originates.”**

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Update on remediation technologies

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Proposed Action Items

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Universe of Sites – GIS Analysis

- Create GIS layers to incorporate:
 - List of potential sites compiled during 8/16 meeting, industries with SIC codes flagged by NH
 - Groundwater and surface water classifications
 - Public water distribution areas
 - Aquifer Protection Areas

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Landfills

- PFAS testing needed—one-time sampling of all landfills, schedule based on prioritization of risk to receptors
- Consider ways to make PFAS testing affordable for municipalities

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Ambient Environmental Sampling

- First, focus on surface water and groundwater – leverage USGS monitoring system and DPH data for public water systems
- Prioritize areas of greatest risk to receptors (fish/shellfish, swimming)
- Additional sampling as resources allow and as prompted by initial sampling results

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Biosolids

- Identify whether PFAS-containing biosolids imported from other states are being applied to agricultural fields
- Keep abreast of research on best practices for disposal

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Education/outreach/communication

- Adopt best practices for risk communication, draw on lessons learned from prior incidents in CT and prior investigations in neighboring states
- Establish clear chains of command/points of contact

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Need for Standards

- Continue to follow recommendations of DPH Environmental Health Section for Groundwater Protection Criteria, Direct Exposure Criteria, and Pollutant Mobility Criteria
- Need for Surface Water Protection Criteria to facilitate cleanup in GB areas
- Coordinated sampling of surface water, sediment, and aquatic biota to develop bioaccumulation factors
- Consider promulgated standards?

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Possible Legislation

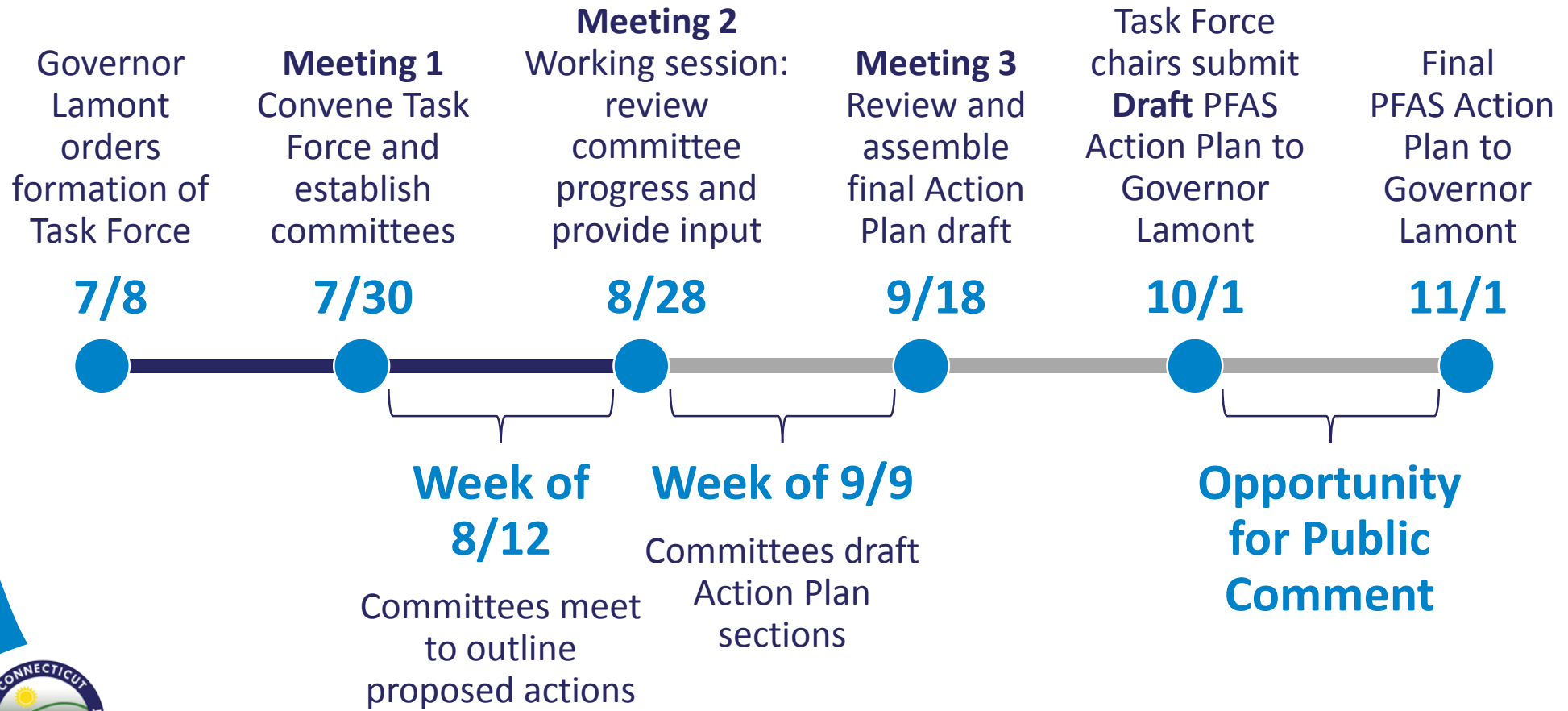
- Can we designate PFAS as a hazardous substance or CT-regulated waste?
- Promulgate standards?

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Task Force & Committee Actions



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Upcoming Meetings

- **Task Force Meeting: 9/18/19, Hearing Room 1-D, Legislative Office Building**

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PUBLIC COMMENT

Please identify yourself and speak into
the microphone

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