



Connecticut Department of Energy and Environmental Protection



2019 Air Monitoring Network Plan

June 6, 2019

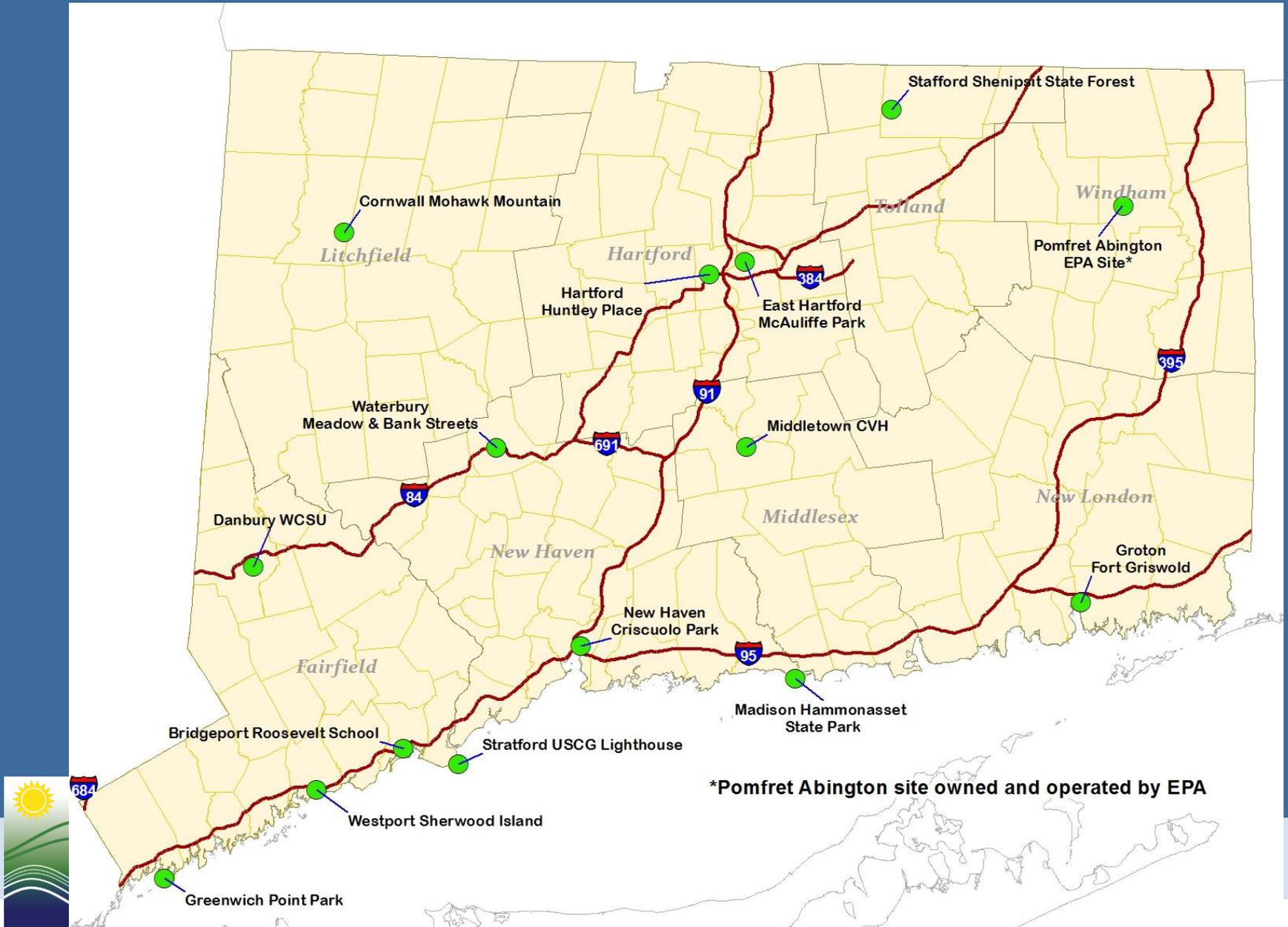
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SIPRAC



Connecticut Department of Energy and Environmental Protection

DEEP Current Monitoring Sites



2018 Design Values

Site	PM2.5 Annual μg/m ³	PM2.5 Daily μg/m ³	O3 8-Hour ppb	CO 1-Hour ppm	CO 8-Hour ppm	SO2 1-Hour ppb	NO2 Daily ppb	NO2 Annual ppb	PM10 Daily μg/m ³
Pomfret			71						
Bridgeport	8.1	20		2.4	1.4	4			30
Cornwall	4.2	13	71	0.4	0.3	2			30
Danbury	7.7	21	76						
East Hartford	6.5	18	69				43	8	20
Greenwich			79						
Groton	5.4	15	75						
Hartford	7.5	18		1.4	1		50	13	50
Madison			81						
Middletown			78						
New Haven	6.8	19	74	2	1.2	3	55	12	30
Stafford			71						
Stratford			82						
Waterbury	7.2	20							
Westport			82				40*	9	
CT Minimum	4.2	13	69	0.4	0.3	2	43	8	20
CT Maximum	8.1	21	82	2.4	1.4	4	55	13	50
NAAQS	12	35	70	35	9	75	100	53	150

*Westport Daily NO2 DV based on 1 year of data (2018)

Proposed Network Changes for 2019-2020

- Discontinue CO monitoring in Bridgeport (Jan 1, 2020).
- Discontinue manual PM₁₀ monitoring in East Hartford (Jan 1, 2020).
- Discontinue manual PM_{2.5} monitoring at East Hartford, Groton and Waterbury sites (Jan 1, 2020).
- Reduce PM_{2.5} sampling frequency from 1/3 day to 1/6 day at Hartford (Jan 1, 2020).



Proposed Network Changes (cont.)

- Commence operation of a collocated continuous FEM $PM_{2.5}/PM_{10}$ monitoring at New Haven (Fall 2018).
- Begin mixing height monitoring at Westport (during 2020).
- Begin continuous formaldehyde monitoring at Westport (during 2020).



Ozone Enhanced Monitoring

- Upper air mixing height measurements.
- Continuous HCHO.
- Additional O₃ and NO₂ monitoring.
- Portable O₃ monitor on Long Island Sound (Bridgeport-Port Jefferson ferry?)
- Long Island Sound Tropospheric Ozone Study (LISTOS) continuation – column NO₂ and HCHO.



Continuous PM_{2.5}/PM₁₀ Monitoring

- Teledyne API T640X Federal Equivalent Method (FEM) samplers deployed 2017-2018
- Provide high time resolution data
- Method based on Lorentz-Mie optical scattering, particle size characterization.
- “Calibration” algorithm may be modified by manufacturer based on FRM-FEM comparisons in differing environments.



Teledyne T640X



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- Draft Network Plan will be posted on DEEP website for public review until June 15
- http://www.ct.gov/deep/cwp/view.asp?a=2684&Q=321798&deepNav_GID=1744Submit
- Comments to:
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