





2021 Air Monitoring Network Plan and 5-Year Network Assessment

June 10, 2021 Randall Semagin SIPRAC



Background

- Annual network plan requirements specified in 40 CFR 58.10. These include QA/QC, methodology, network design, probe and monitoring path and siting criteria.
- Plan submitted annually by July 1, with 30 day comment period. Approved by EPA RA.
- Detailed network assessment performed every 5 years, most recently 2020.



Network Design Criteria

- NCore multi-pollutant sites: PM_{2.5}, PM_{10-2.5}, O₃, SO₂,
 CO, NO, NO_y, speciated PM_{2.5}, meteorology.
- Minimal requirements for CO, SO₂, NO₂ (near-road, source/population oriented, regional administrator required).
- SLAMS minimum requirements for PM and O₃ based on ambient levels and population.
- Enhanced monitoring plan (EMP) for ozone allows flexibility to address state's specific O3 problem; may include additional O₃/NO_X/NO_Y monitors, enhanced meteorology, precursors/related species.

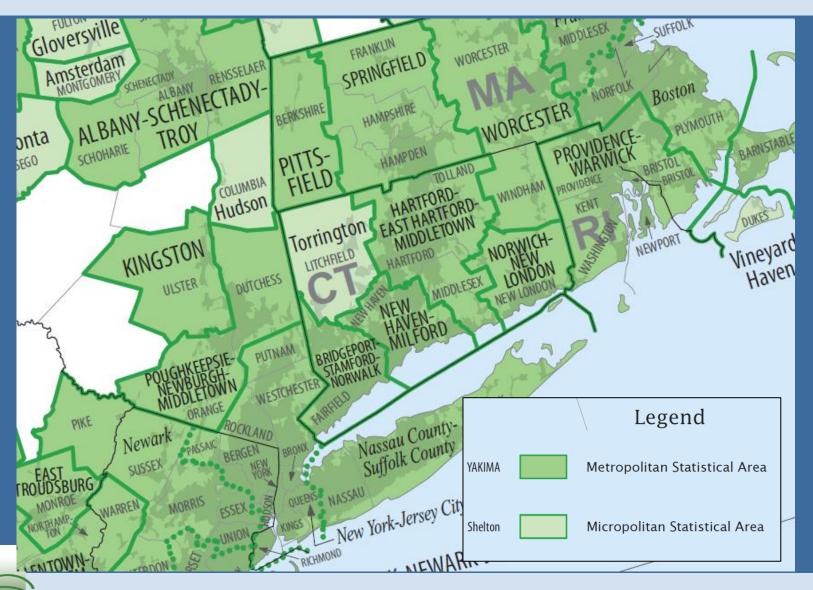


Network Plan

- Provides a description of the air monitoring network and proposed changes through the following year (2021-2022)
- Indicates compliance with 40 CFR 58 App A-E
 - Quality assurance for NAAQS and PSD monitors
 - Monitoring methodology
 - Monitoring network design
 - Probe and monitoring path siting criteria



Core-Based Statistical Areas (CBSAs)

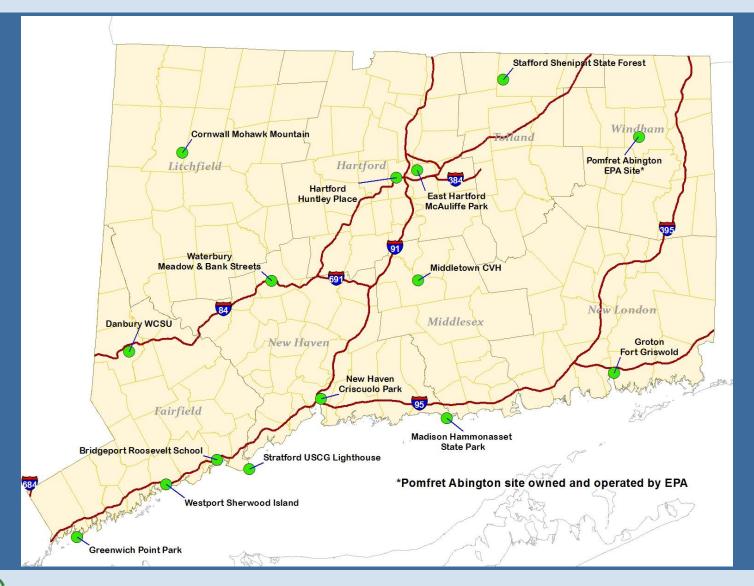


Connecticut CBSAs

CBSA			Population
Code	CBSA Name	Counties included in CBSA	(2019 Estimate)
14860	Bridgeport-Stamford-Norwalk	Fairfield	943,332.00
25540	Hartford-East Hartford-Middletown	Hartford, Middlesex, Tolland	1,204,877.00
35300	New Haven-Milford	New Haven	854,757.00
35980	Norwich-New London	New London	265,206.00
49340	Worcester	Worcester, MA, Windham, CT	947,404.00
45860	Torrington (Micropolitan Statistical Area)	Litchfield	180,333.00



DEEP Current Monitoring Sites





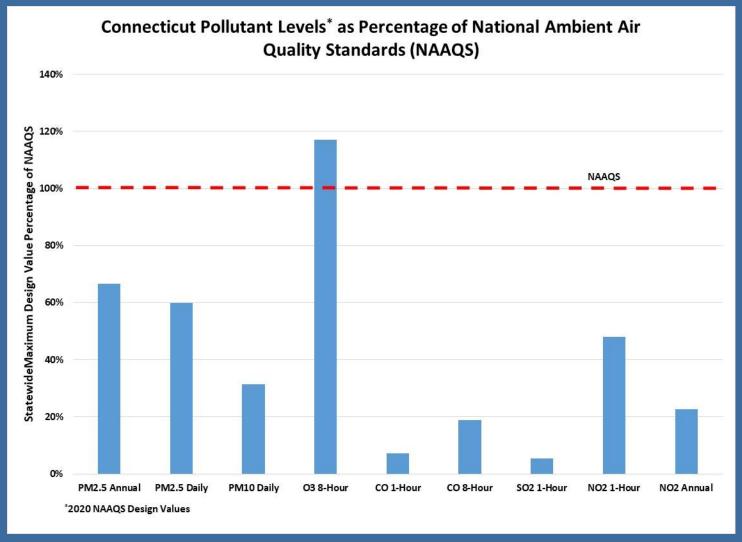
CT DEEP Monitoring Parameters

Town	PM	O ₃	NO ₂	SO ₂	СО	NO _Y	BC 1	PM-SPEC ²	WIND
Bridgeport	*			*					
Cornwall	*	*		*	*	*	*	*	*
Danbury	*	*					*		*
East Hartford	*	*	*				*		*
Greenwich		*							*
Groton	*	*							
Hartford	*		*		*		*		*
Madison		*							*
Middletown		*							*
New Haven	*	*	*	*	*	*	*	*	*
Stafford		*							*
Stratford		*							
Waterbury	*								*
Westport		*	*						*
Pomfret (EPA)		*							

1. Black carbon 2. Fine particulate speciation

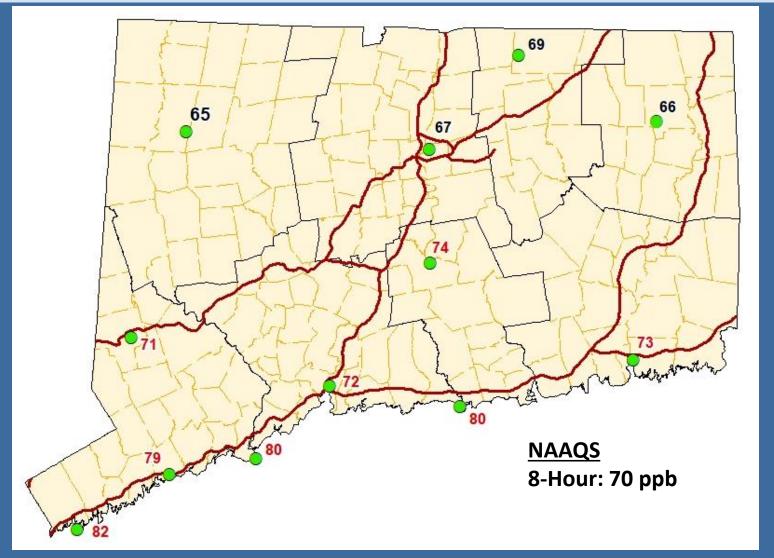


Criteria Pollutant Levels



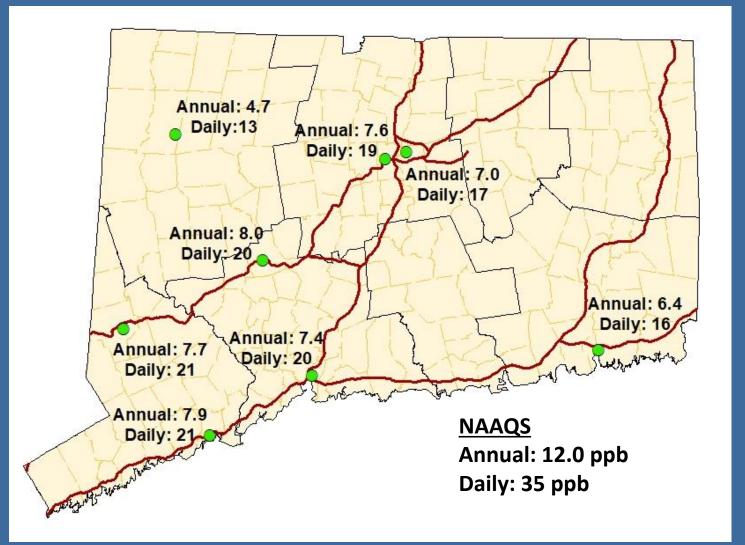


2020 Design Values: Ozone





2020 Design Values: Fine Particulates





Proposed Network Changes for 2020-2021

- Deploy a portable ozone monitor on a ferry operating between Bridgeport and Port Jefferson, NY during the 2022 ozone season. The ferry crosses Long Island Sound several times each day during daytime hours.
- Commence formaldehyde (HCHO) monitoring at Westport in 2022.
- No current monitors are planned for removal during 2020 – 2021.



Questions?

- Draft Network Plan will be posted on DEEP website for public review until July 4
- https://portal.ct.gov/-/media/DEEP/air monitoring/CT2021DraftNetworkPlan.pdf
- Comments to:

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