



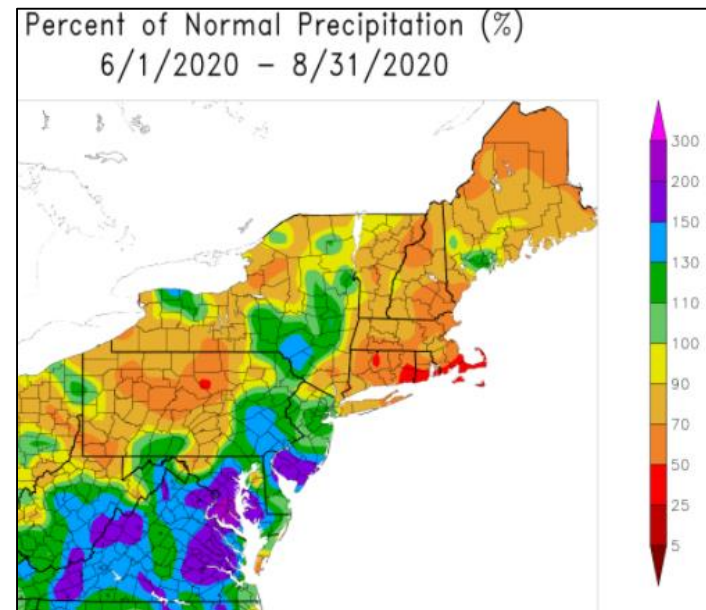
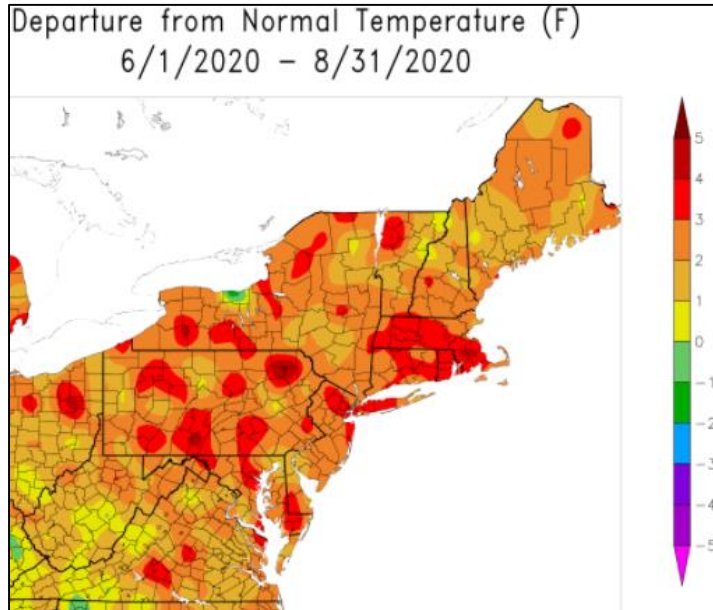
2020 Ozone Season Update Through 10/30/2020

Tom Downs, CCM
Chief Meteorologist
Maine DEP Bureau of Air Quality

2020 Ozone Season Statistics for the Ozone Transport Region (OTR)

- 1997-2019 final certified data are from EPA's Air Quality System (AQS) database
- 2020 preliminary (not yet certified) data are from EPA's AIRNOW-TECH website and AQS
 - All states have 1st and 2nd quarter (up to June 30) preliminary data in AQS
 - Many states have partial or full 3rd quarter (up to September 30) data in AQS
 - AIRNOW-TECH data are hourly polling data reported by monitoring staff for each state

June 1 to August 31 Temperature and Precipitation statistics

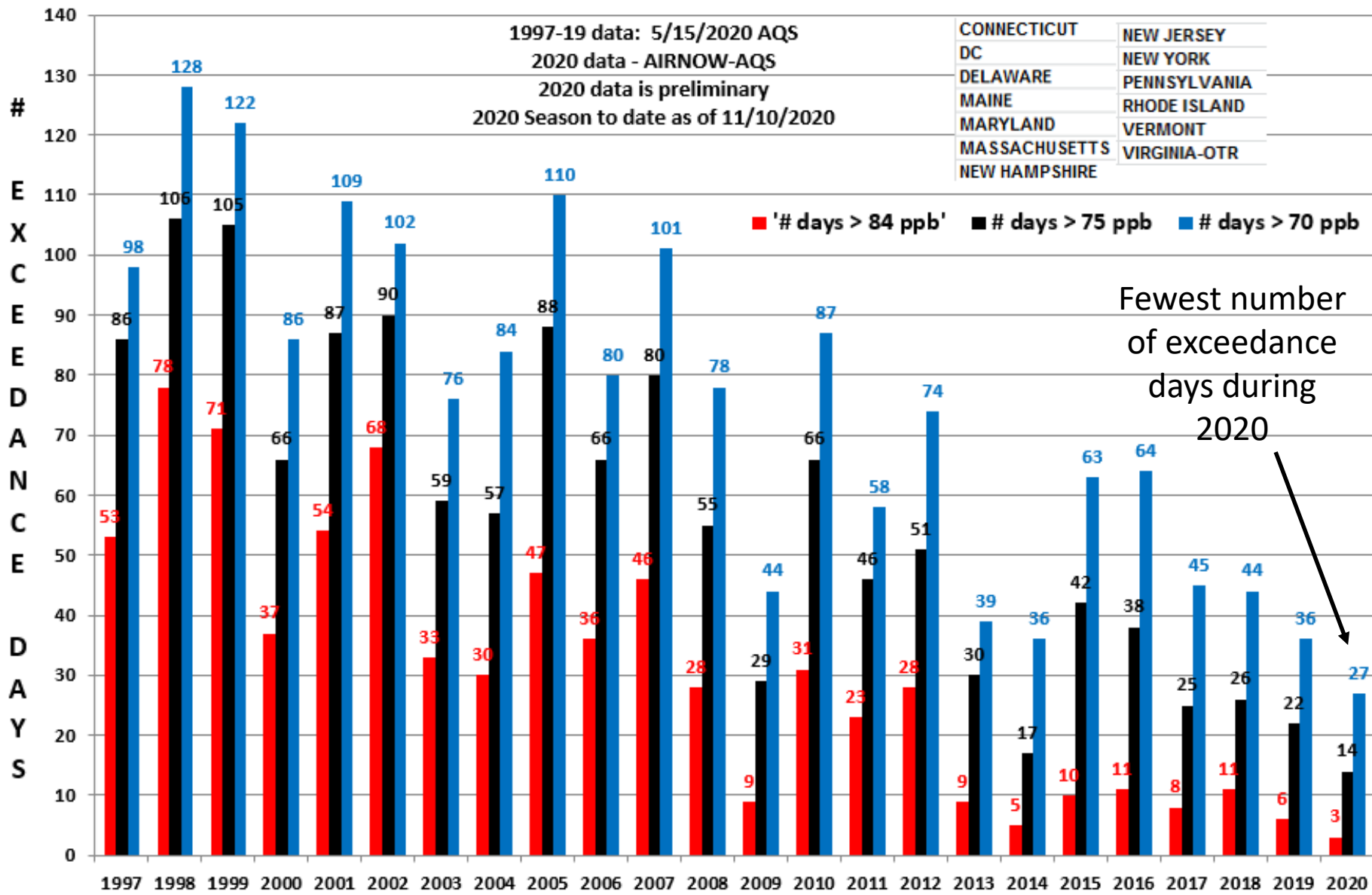


Number of days with maximum temperatures 90 degrees or higher								only years shown with at least 3 sites within the 5 highest since 1980
	1983	1988	1995	2002	2010	2016	2020	
PORTLAND JETPORT, ME	3	14	3	9	7	7	13	1980-2020 MAXIMUM 1980-2020 top 5 highest
BOSTON, MA	24	25	17	24	21	19	14	
CONCORD, NH	17	25	18	21	21	22	24	
HARTFORD BRADLEY INTERNATIONAL AIRPORT, CT	29	30	22	30	28	24	39	
JFK INTERNATIONAL AIRPORT, NY	21	13	15	20	29	14	12	
PHILADELPHIA INTERNATIONAL AIRPORT, PA	34	47	45	39	46	38	36	
BALTIMORE WASHINGTON INTERNATIONAL AIRPORT, MD	39	51	43	44	47	39	45	
WASHINGTON REAGAN NATIONAL AIRPORT, VA	46	55	44	48	52	51	44	

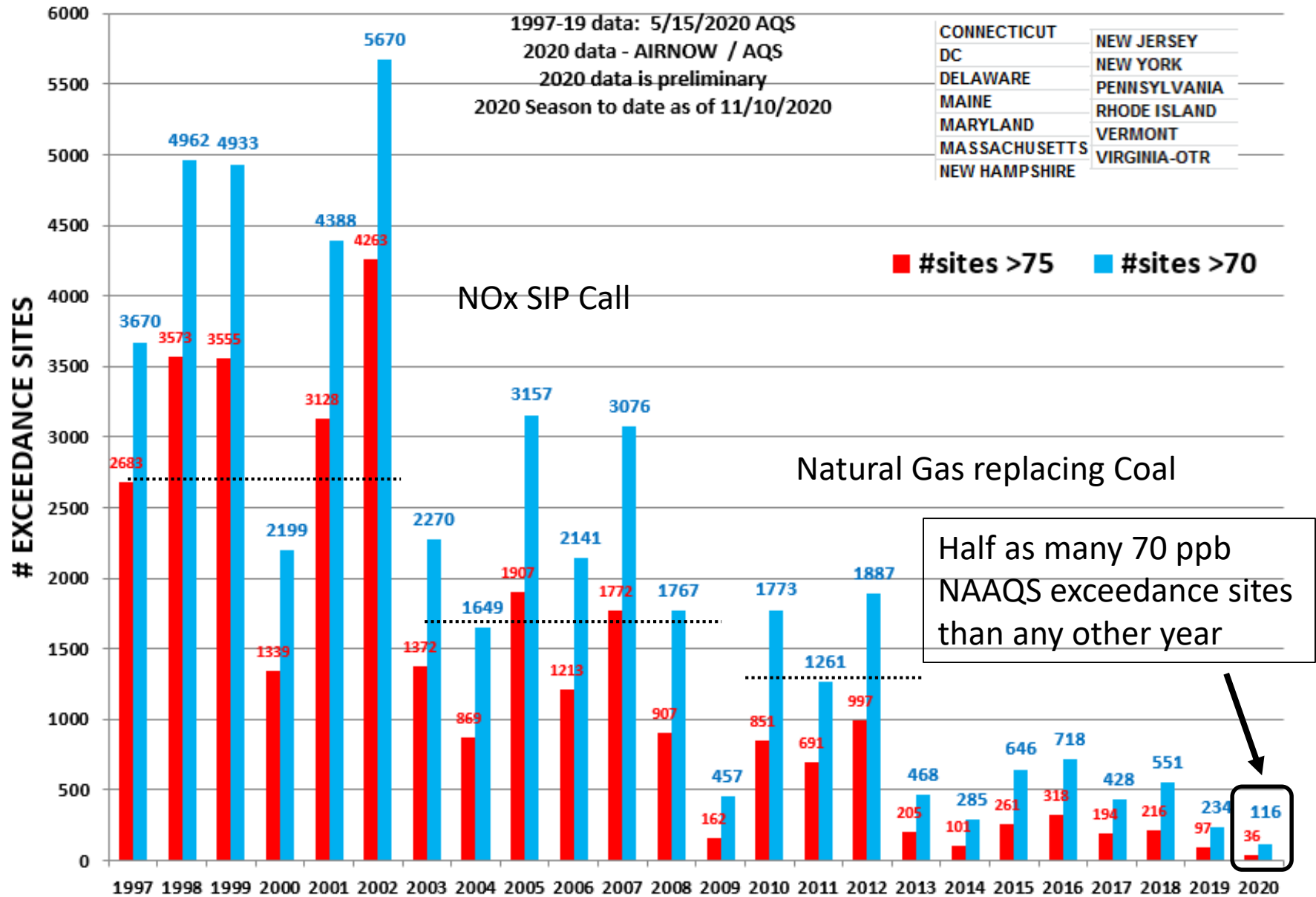
- Very dry in many areas in the Ozone Transport Region (OTR) except for southern OTR areas
- Much warmer than normal everywhere in the OTR (warmest on record for some areas)
- Number of days 90 degrees or higher similar to years with higher ozone levels in the OTR



OTR 70, 75 and 84 ppb NAAQS 8-hour Ozone Trends



OTR 70 ppb and 75 ppb NAAQS 8-hour Ozone Trends



Exceedance days in Ozone Transport Region (OTR) 2015 Ozone NAAQS nonattainment areas

27 OTR Ozone Exceedance days		6/4/2020	6/9/2020	6/26/2020	6/27/2020	7/6/2020	7/7/2020	7/8/2020	7/9/2020	7/13/2020	7/18/2020	7/19/2020	7/20/2020	7/21/2020	7/22/2020	7/25/2020	7/26/2020	7/27/2020	7/28/2020	7/29/2020	7/30/2020	8/3/2020	8/5/2020	8/9/2020	8/10/2020	8/21/2020	8/22/2020	8/24/2020			
		Greater Connecticut, CT (Marginal) 2015 Ozone NAAQS Nonattainment Area																													
CT	Groton Fort Griswold									71											76			94		77				4 days	
		New York-Northern New Jersey-Long Island, NY-NJ-CT (Moderate)																													
CT	Greenwich	75	83								81		77																	74	
CT	Danbury		71																												
CT	Stratford		73								83							80									71			73	
CT	Westport		73								83		72		77		73														
CT	Middletown										79																	71			
CT	New Haven-B										82																			78	
CT	Madison		71							75	71	75			71	71	88	80												71	
NJ	Leonia					73								74																	
NJ	Rutgers U		74																												
NY	NYBG-Bronx		73																												
NY	NYC-CCNY														73																
NY	NYC-Queens														71								82								
NY	Fresh Kills		71																												
NY	Babylon			73									80																		
NY	Riverhead																														
NY	Suffolk County											80																			
NY	White Plains														72																
		Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE (Marginal) 2015 Ozone NAAQS Nonattainment Area																													
DE	Wilmington-MLK Blvd														72																
NJ	Clarksboro														71																
NJ	Rider U		74													73												71			
PA	Bristol		71																												
PA	Chester															79															
PA	NEA		71														76														
PA	NEW																														
		Baltimore, MD (Marginal) 2015 Ozone NAAQS Nonattainment Area																													
MD	GLEN BURNIE																														
MD	Padonia		72																												
MD	Essex																														
MD	Edgewood																														
		Washington, DC-MD-VA (Marginal) 2015 Ozone NAAQS Nonattainment Area																													
MD	Prince Georges Co. Equestrian Ctr																														
MD	Beltsville																														
VA-OTC	ASHBURN																														

20 days
(60 sites)

5 days
(16 sites)

3 days
(5 sites)

2 days
(2 sites)



Exceedance days in Ozone Transport Region (OTR) 2015 Ozone NAAQS attainment areas

27 OTR Ozone Exceedance days		6/4/2020	6/9/2020	6/26/2020	6/27/2020	7/6/2020	7/7/2020	7/8/2020	7/9/2020	7/13/2020	7/18/2020	7/19/2020	7/20/2020	7/21/2020	7/22/2020	7/25/2020	7/26/2020	7/27/2020	7/28/2020	7/29/2020	7/30/2020	8/3/2020	8/5/2020	8/9/2020	8/10/2020	8/21/2020	8/22/2020	8/24/2020		
ME	Cadillac Mt Summit				72																									1 day
MA	Martha's Vineyard																	78												3 days (7 sites)
MA	Truro																	73	71											
MA	Fall River																				71									
MA	Fairhaven2																	76	72											
RI	W Greenwich																					80								4 days (7 sites)
RI	E Providence																					73	74							
RI	Narragansett																	77	74											
RI	East Matunuck																	87	71											
PA	Lawrenceville (BAPC)							71																						8 days (14 sites)
PA	South Fayette					71																		71						
PA	Harrison Township					74	77	71																		74				
PA	Kittanning						75				72															77				
PA	LAN1		72																											
PA	HOLB					71																								
PA	Strongstown					74																								
PA	Farrell								72																					

2020 exceedance days by state:

CT – 17 days NY - 8-days DE – 1 day MA – 3 days NJ – 5 days
 MD – 3-days RI – 4 days PA – 11 days VA-OTC – 1-day ME – 1-day

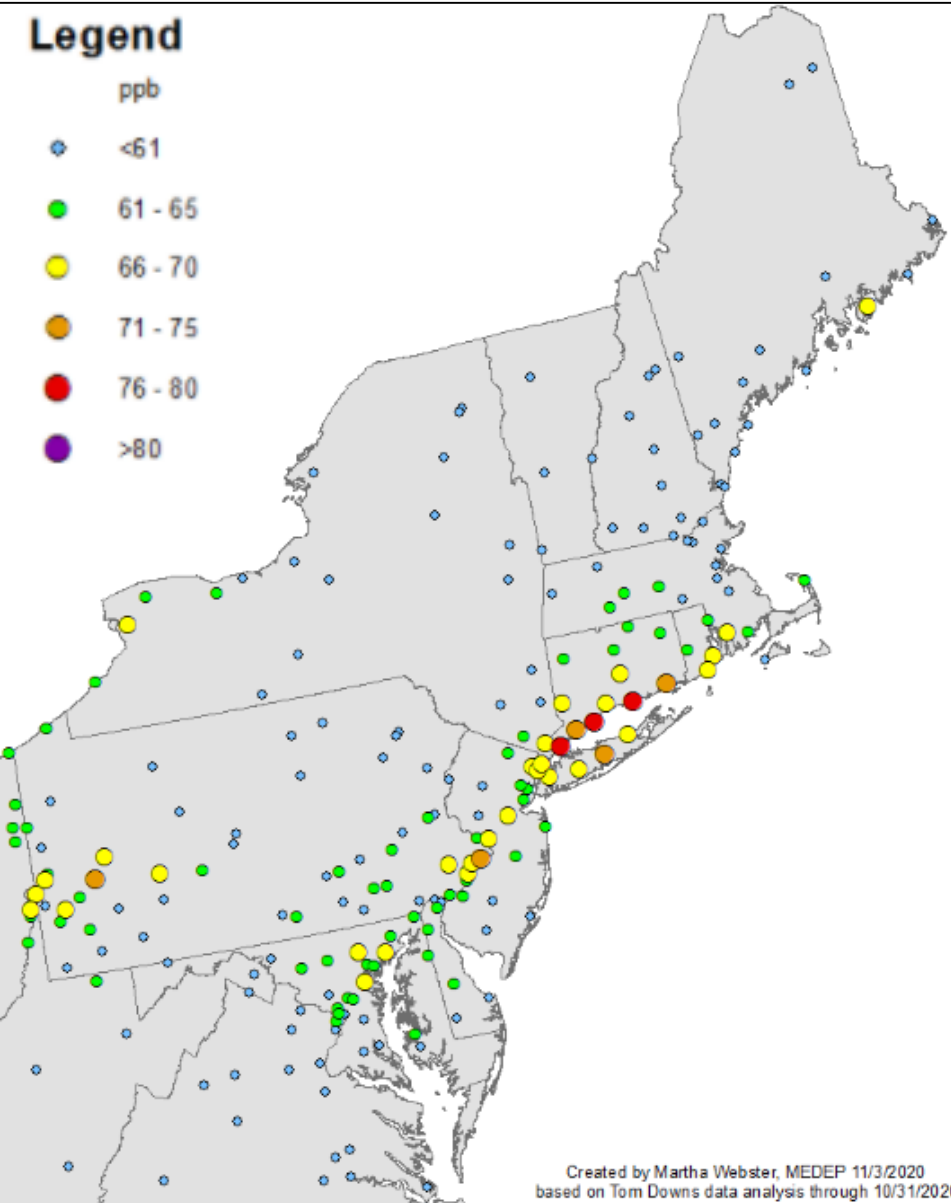
- No 2020 exceedances in New Hampshire (**1st time**), District of Columbia (**1st time**) and Vermont.
- No 2020 OTR exceedances in April (**2015, 2019 and 2020**), May (**2019 and 2020**) or September (**1st time**).
- Fewest number of OTR exceedances in June 2020.



Legend

ppb

- <61
- 61 - 65
- 66 - 70
- 71 - 75
- 76 - 80
- >80

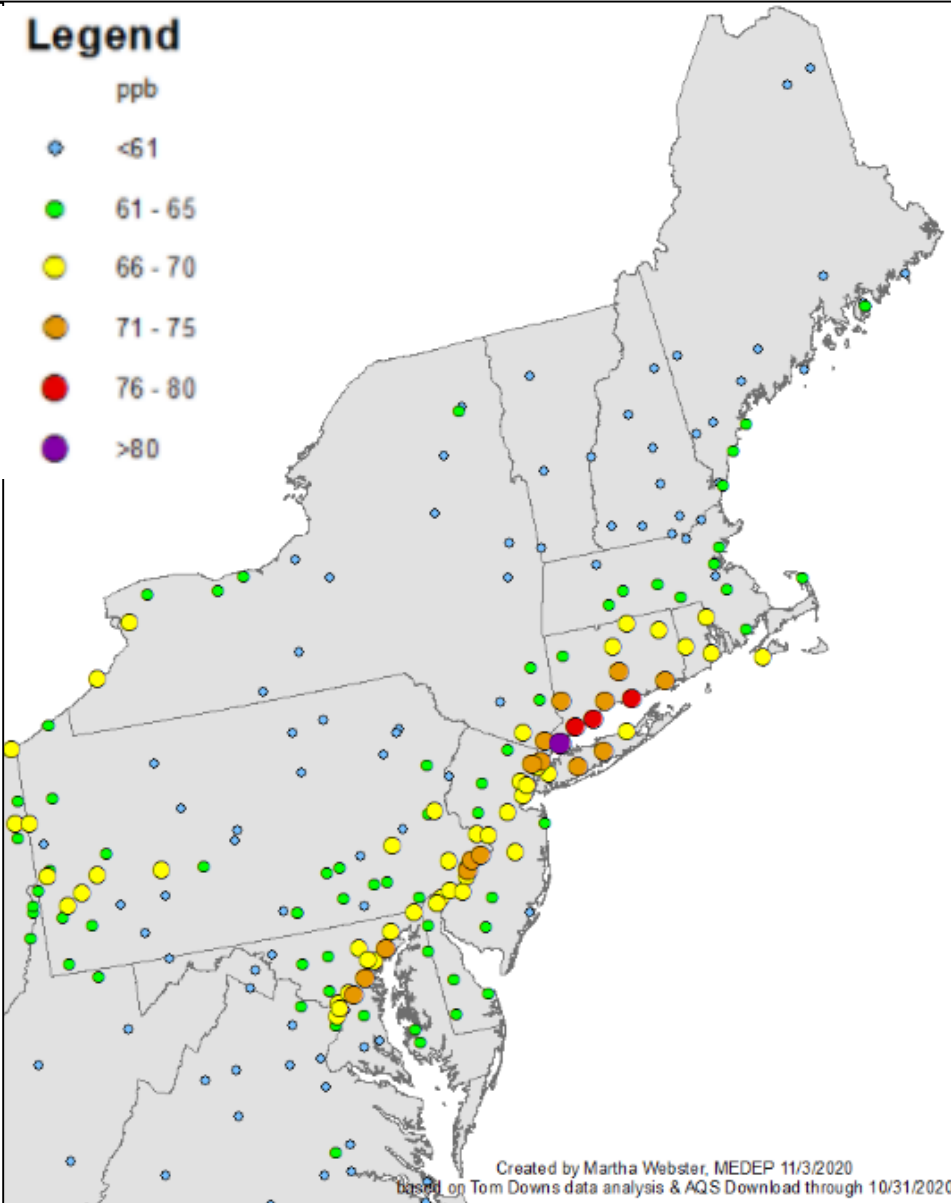


Created by Martha Webster, MEDEP 11/3/2020
based on Tom Downs data analysis through 10/31/2020

Legend

ppb

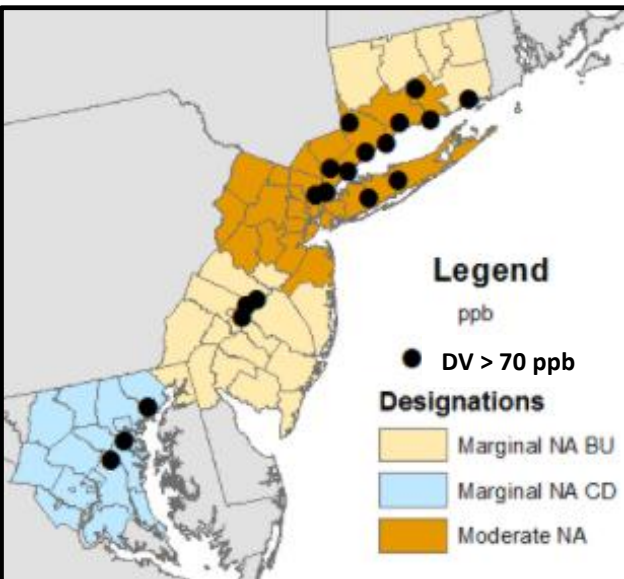
- <61
- 61 - 65
- 66 - 70
- 71 - 75
- 76 - 80
- >80



Created by Martha Webster, MEDEP 11/3/2020
based on Tom Downs data analysis & AQS Download through 10/31/2020



Preliminary 2020 4th HIGHS and DESIGN VALUES for 2015 Ozone NAAQS Nonattainment Areas



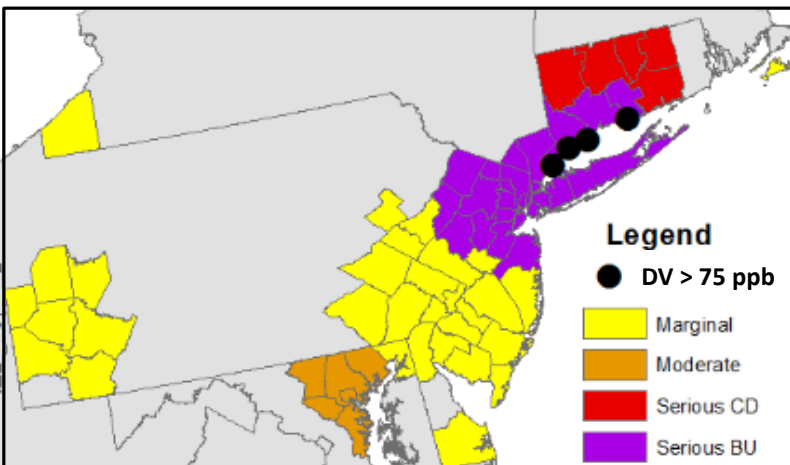
2015 Nonattainment Area	Preliminary	
	2020 4th High	2018-20 DV
New York-Northern New Jersey-Long Island, NY-NJ-CT (Moderate)	80	82
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE (Marginal)	71	74
Greater Connecticut, CT (Marginal)	71	73
Baltimore, MD (Marginal)	67	72
Washington, DC-MD-VA (Marginal)	65	71

BU = potential bump up area

CD = preliminary 2020 clean data (4th high less than NAAQS)

DV = preliminary 2018-2020 DESIGN VALUE

Preliminary 2020 4th HIGHS and DESIGN VALUES for 2008 Ozone NAAQS Nonattainment Areas



2008 Nonattainment Area	Preliminary	
	2020 4th High	2018-20 DV
New York-Northern New Jersey-Long Island, NY-NJ-CT (Serious)	80	82
Baltimore, MD (Moderate)	67	72
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE (Marginal)	71	74
Greater Connecticut, CT (Serious)	71	73
Pittsburgh-Beaver Valley, PA (Marginal)	71	68
Dukes County, MA (Marginal)	60	66
Jamestown, NY (Marginal)	64	66
Reading, PA (Marginal)	65	67
Lancaster, PA (Marginal)	62	65
Allentown-Bethlehem-Easton, PA (Marginal)	63	64
Seaford, DE (Marginal)	60	63



Ozone season analyses and maps used in this presentation are on the following ftp site:

https://www.maine.gov/dep/ftp/DEP_OZONE/OTC/2020/





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