



**2016 Ozone Season Kickoff Event**  
**March 30, 2016**  
**Sheila Holman**

*Department of Environmental Quality*

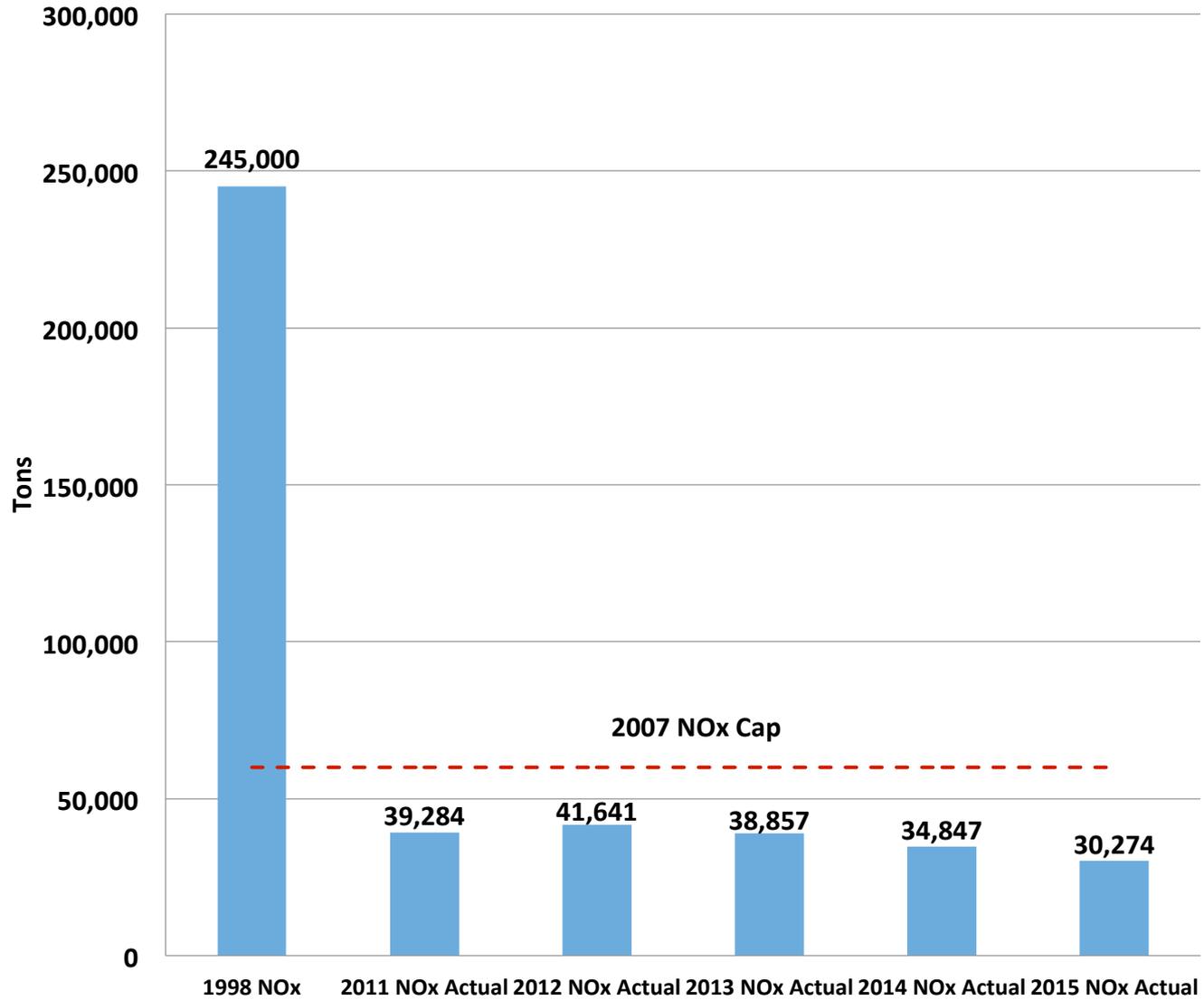


# Air Quality in North Carolina

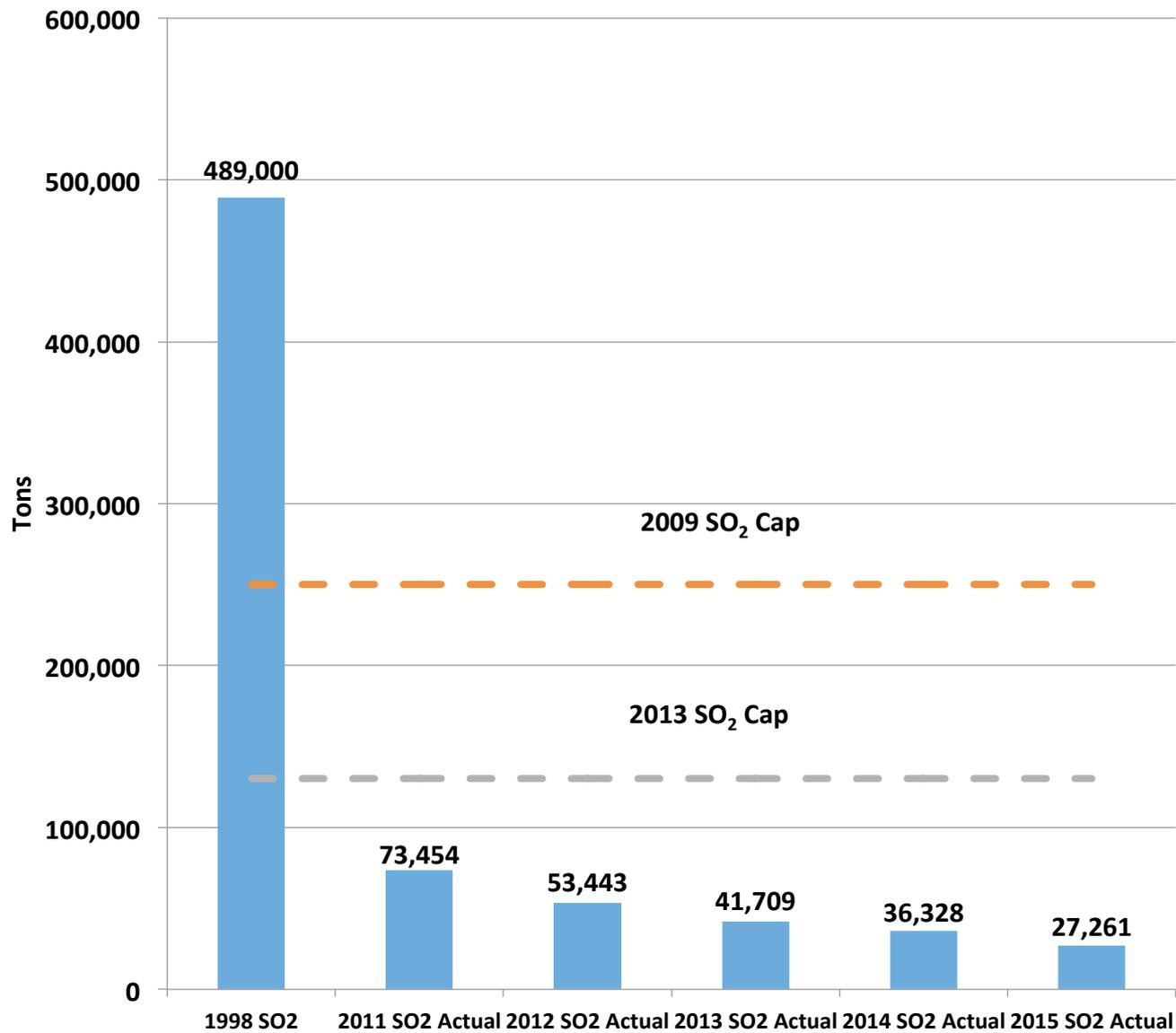
- Continues to improve
- Emission reductions are working – federal, state and local
- All areas of the state now measuring compliance with and designated as attainment or maintenance for all standards



## Duke and Progress Energy NO<sub>x</sub> Emissions



## Duke and Progress Energy SO<sub>2</sub> Emissions



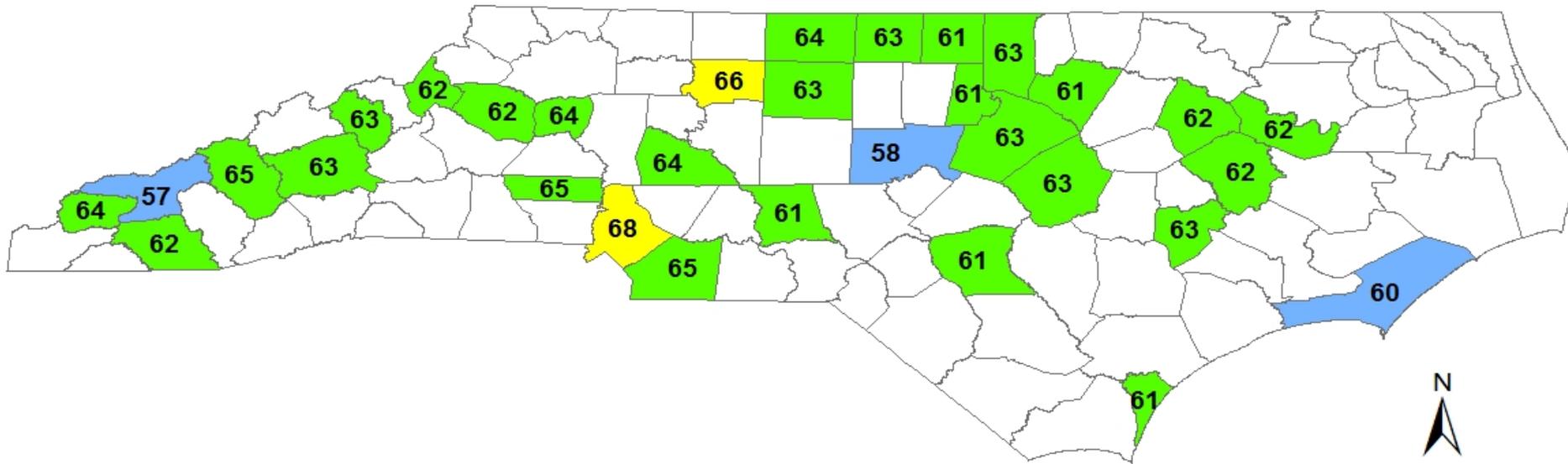
# *Ozone*



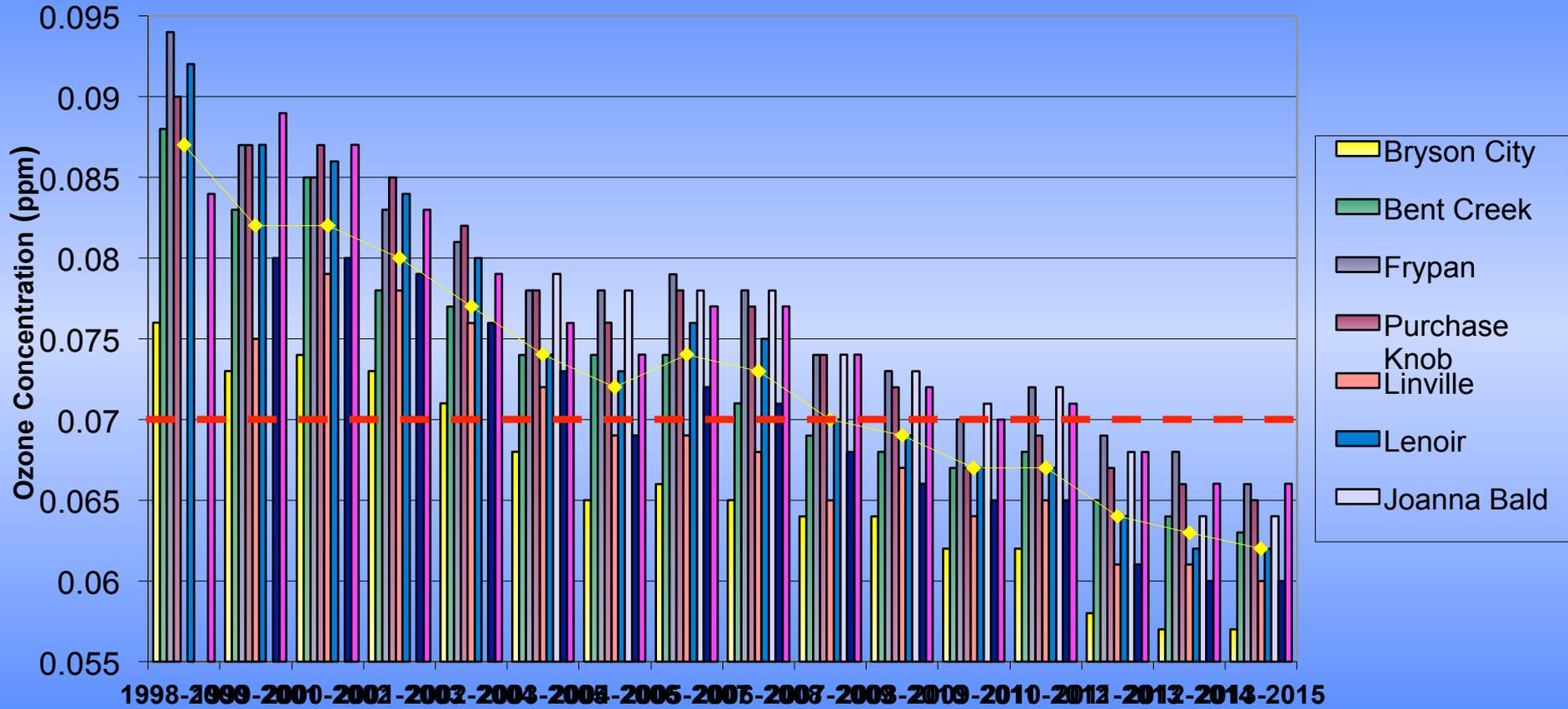
# Ozone NAAQS Review

- On 10/1/15 EPA announced new primary and secondary standards 70 ppb
- State recommendations for boundary designations due October 2016 based on 2013-2015 data or preliminary 2014-2016 data
- EPA designations to be finalized in October 2017
- Currently all monitors in North Carolina are measuring compliance with the new standard

# North Carolina Ozone Design Values 2013-2015



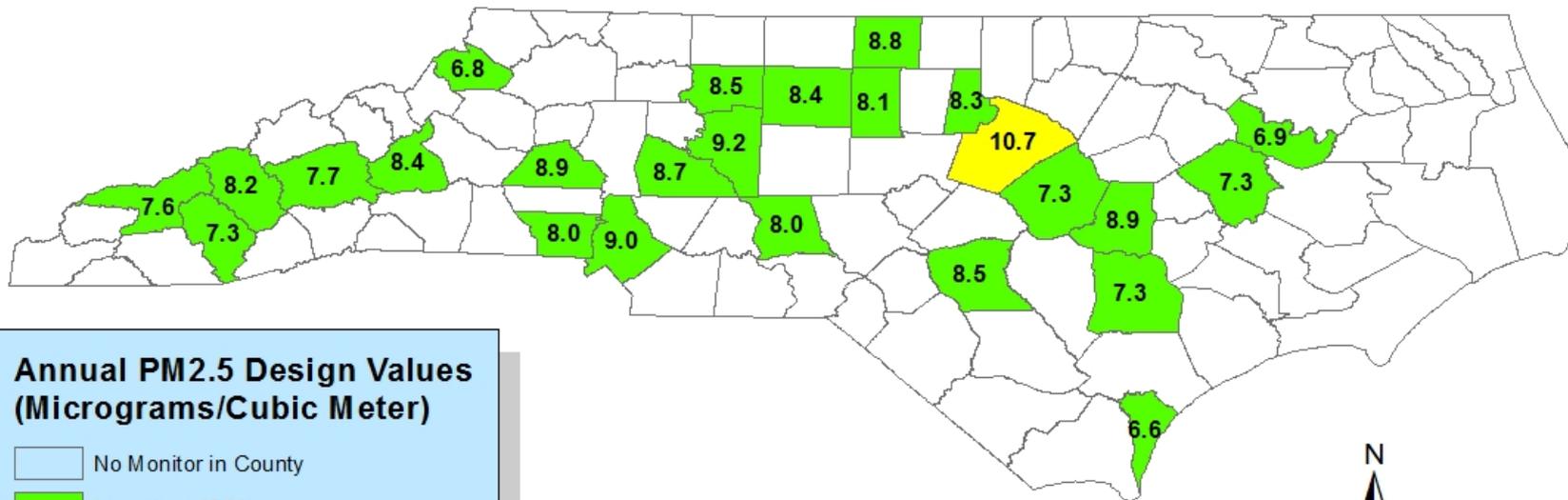
# WNC Ozone Design Values



# *Fine Particulate Matter*



# North Carolina Annual PM2.5 Design Values 2013-2015



**Annual PM2.5 Design Values  
(Micrograms/Cubic Meter)**

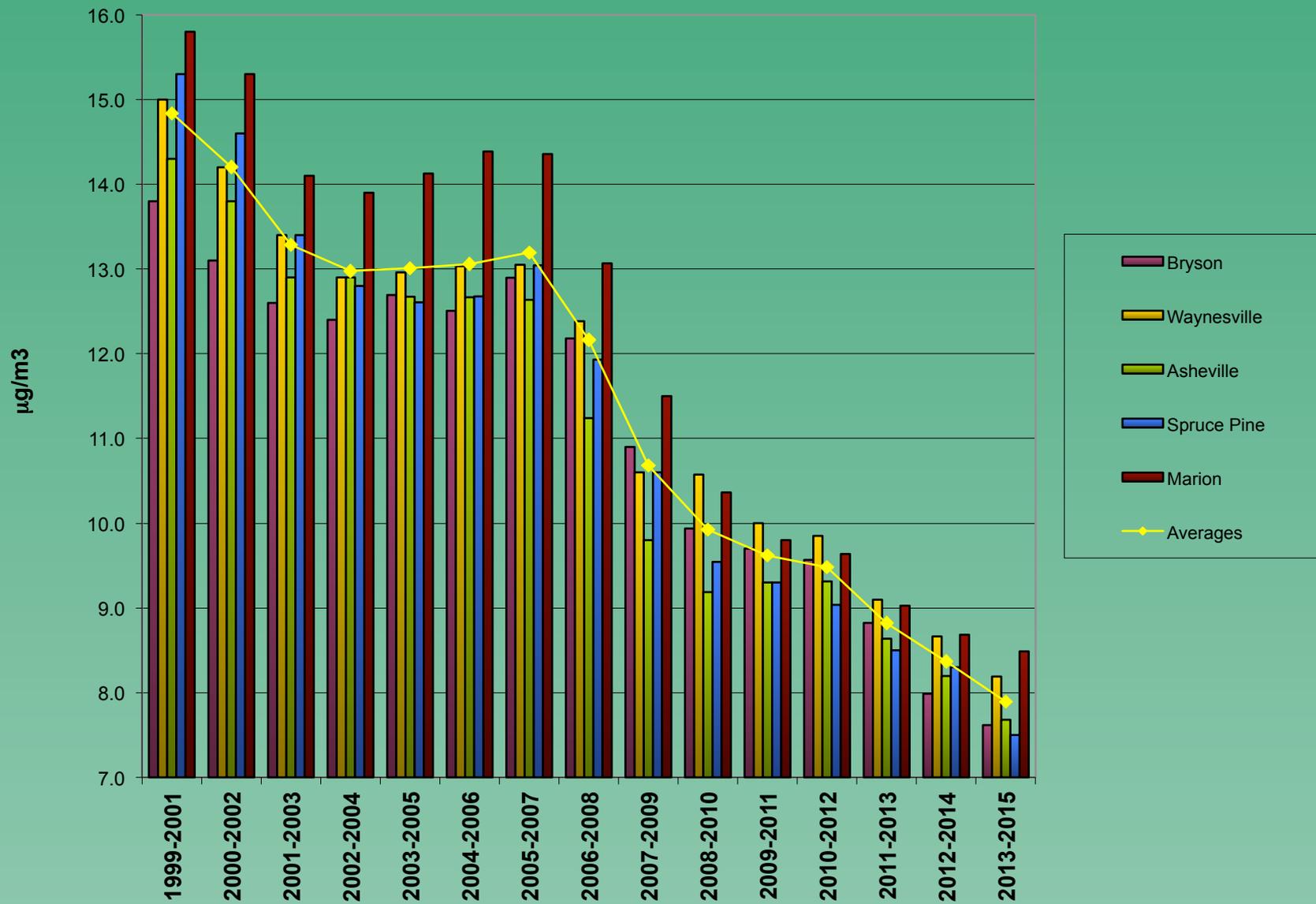
- No Monitor in County
- Less than 10 Micrograms
- 10 - 11 Micrograms

Annual PM2.5 Standard: 12.0 Micrograms/Cubic Meter

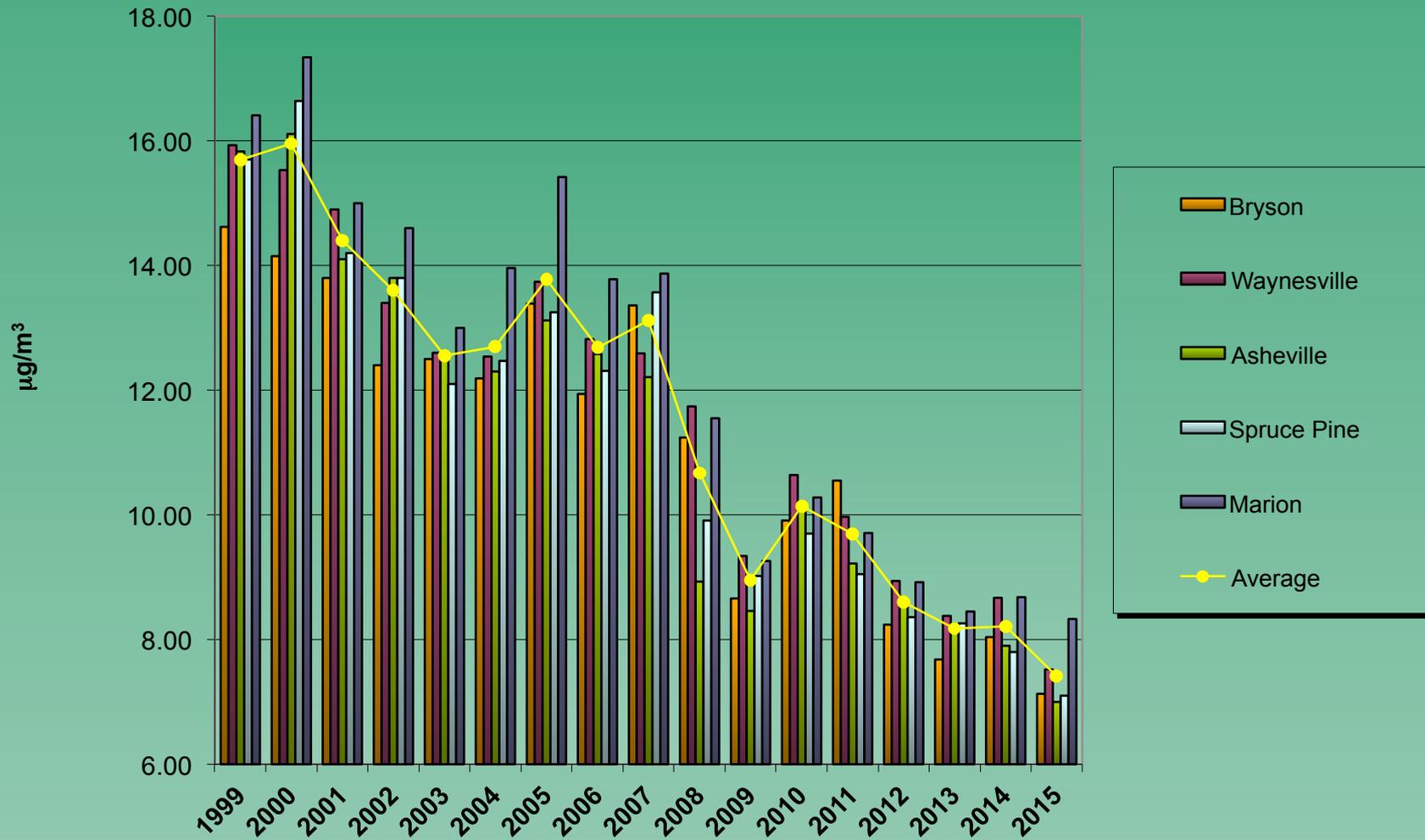


\*2015 Data is Preliminary

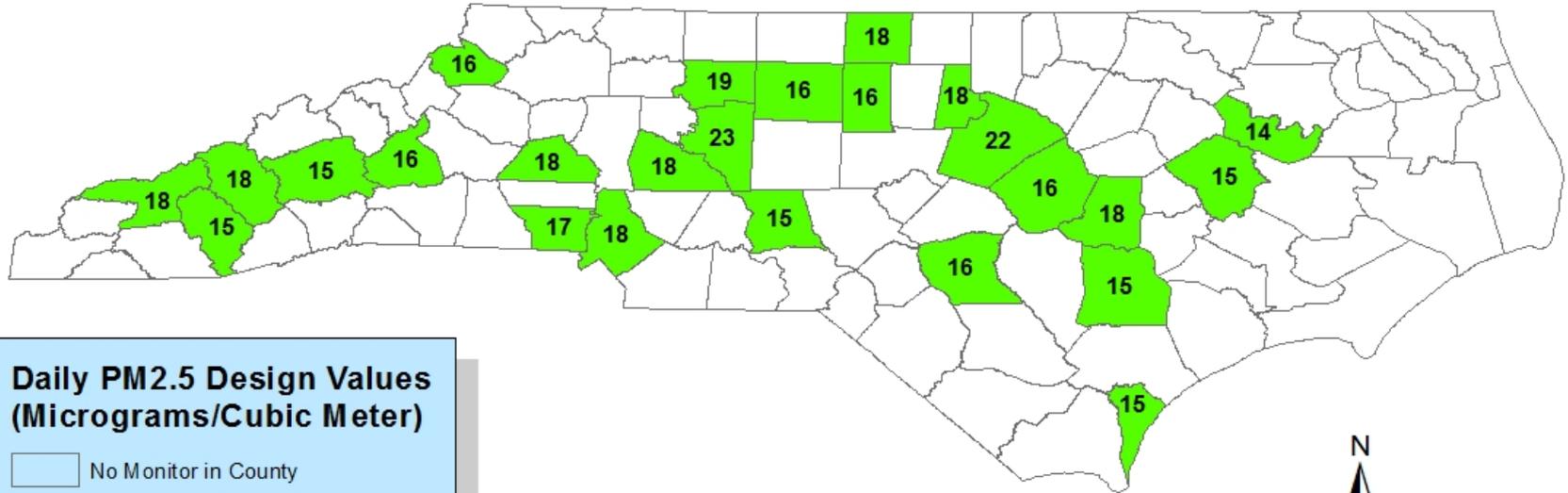
# WNC PM<sub>2.5</sub> Design Values By Site



# WNC PM<sub>2.5</sub> AVERAGES BY YEAR



# North Carolina Daily PM2.5 Design Values 2013-2015



## Daily PM2.5 Design Values (Micrograms/Cubic Meter)

- No Monitor in County
- Less than 25 Micrograms

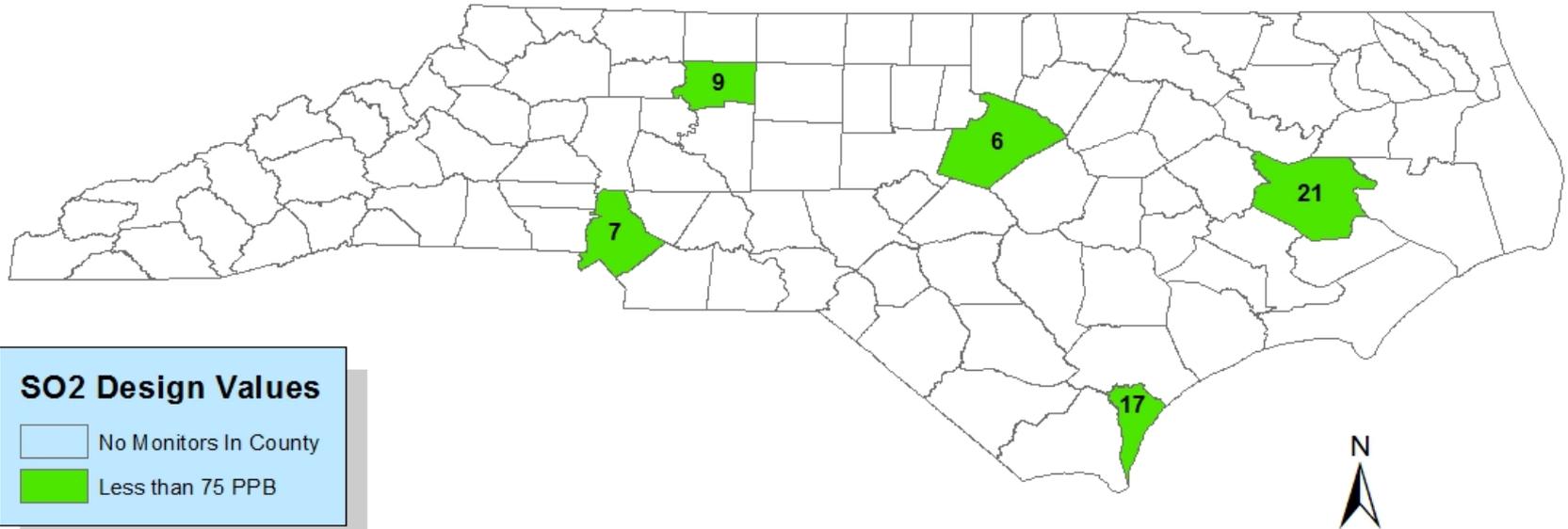
Daily PM2.5 Standard: 35 Micrograms/Cubic Meter



*SO2*



# North Carolina SO2 Design Values 2013-2015



\*2015 Data is Preliminary

Map Updated: 29 March 2016  
Author: ET

# SO<sub>2</sub> Standard Implementation

- Court Entered Consent Decree on March 2, 2015
- One Facility Impacted in North Carolina
- State Recommendation Due September 18, 2015
- EPA Sent Letter Generally Concurring with State's Recommendation on February 16, 2016
- Final Response Due to EPA on April 19, 2016
- Final Designations to be Announced by July 2, 2016



# SO<sub>2</sub> Standard Implementation

- Final Data Requirements Rule – August 2015
- All Facilities with emissions > 2000 tons per year must be analyzed
- January 15, 2016 – list of facilities due
  - 7 total facilities with emissions over threshold
  - 2 additional facilities below threshold with 3<sup>rd</sup> party modeling analysis showing potential violations
- July 1, 2016 – monitoring or modeling approach due
- January 1, 2017 – monitoring sites installed and operational
- January 13, 2017 – modeling due to EPA

# *Air Toxics*



# Air Emissions of NC Toxic Pollutants

	CY2009	CY2010	CY2011	CY2012	CY2013	CY2014
TAP Only Total in pounds/yr	38,142,325	36,385,525	31,712,917	26,259,283	24,367,502	22,589,203
HAP Only Total in Pounds/yr	32,774,769	32,604,346	27,977,691	22,515,772	19,934,880	18,366,010
HAP + TAP Total in pounds/ yr	48,493,673	46,497,405	41,410,502	35,565,170	33,007,611	31,356,301

TAP = Toxic Air Pollutant regulated by NC State Air Toxics Rule; 97 pollutants in list.

HAP = Hazardous Air Pollutant regulated under 40 CFR Part 61 & 63; 187 pollutants in list.

HAPs + TAPs = 111 unique HAPS added to the 97 TAPs.

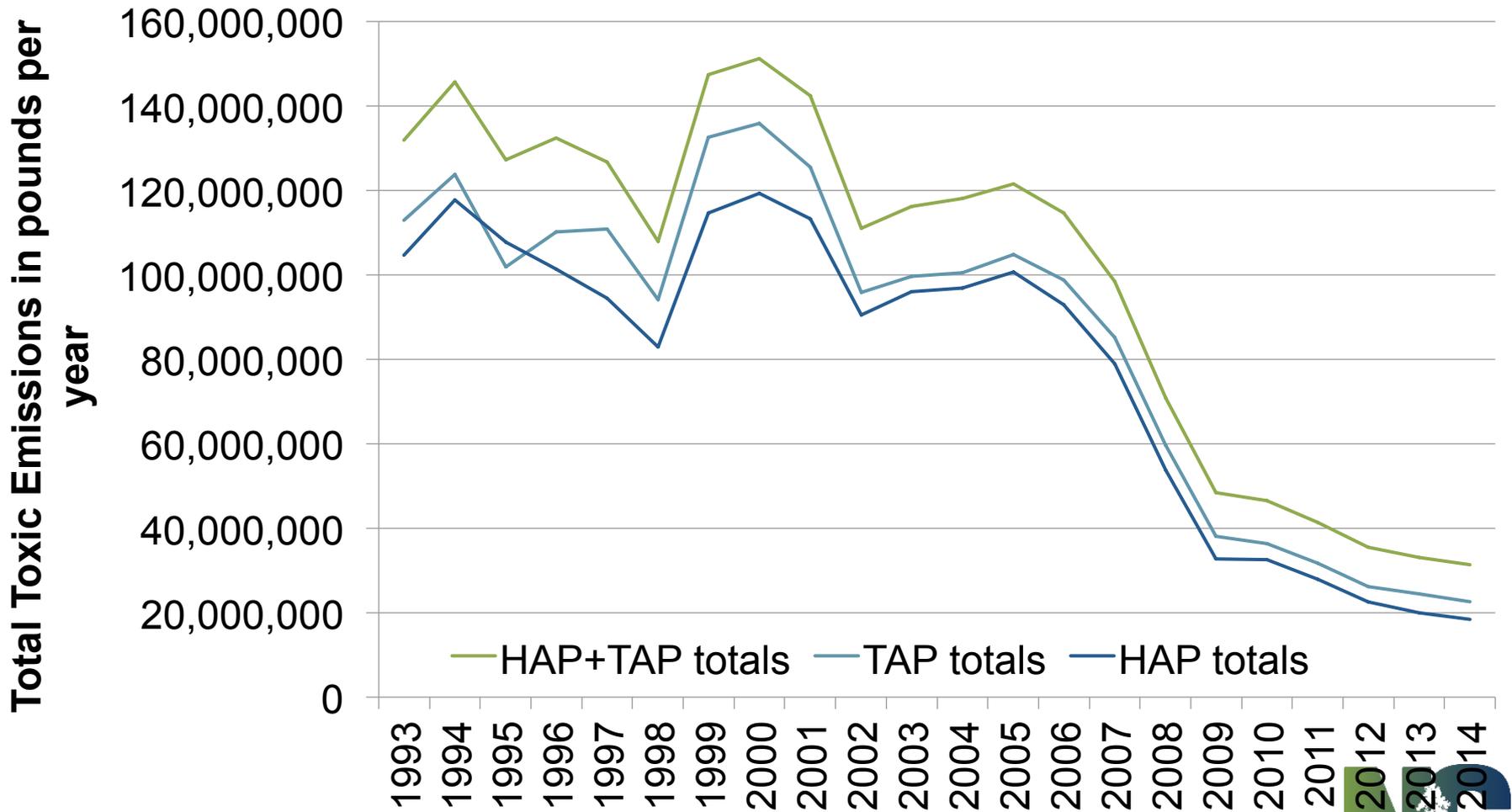
CY2012 emissions data were updated since all TV facility emissions have now been reviewed and approved.

CY2013 and CY2014 emissions data are complete. All TV facility emissions have been reviewed and approved.

Source: Annual toxic air emissions reported by North Carolina facilities to the DAQ.



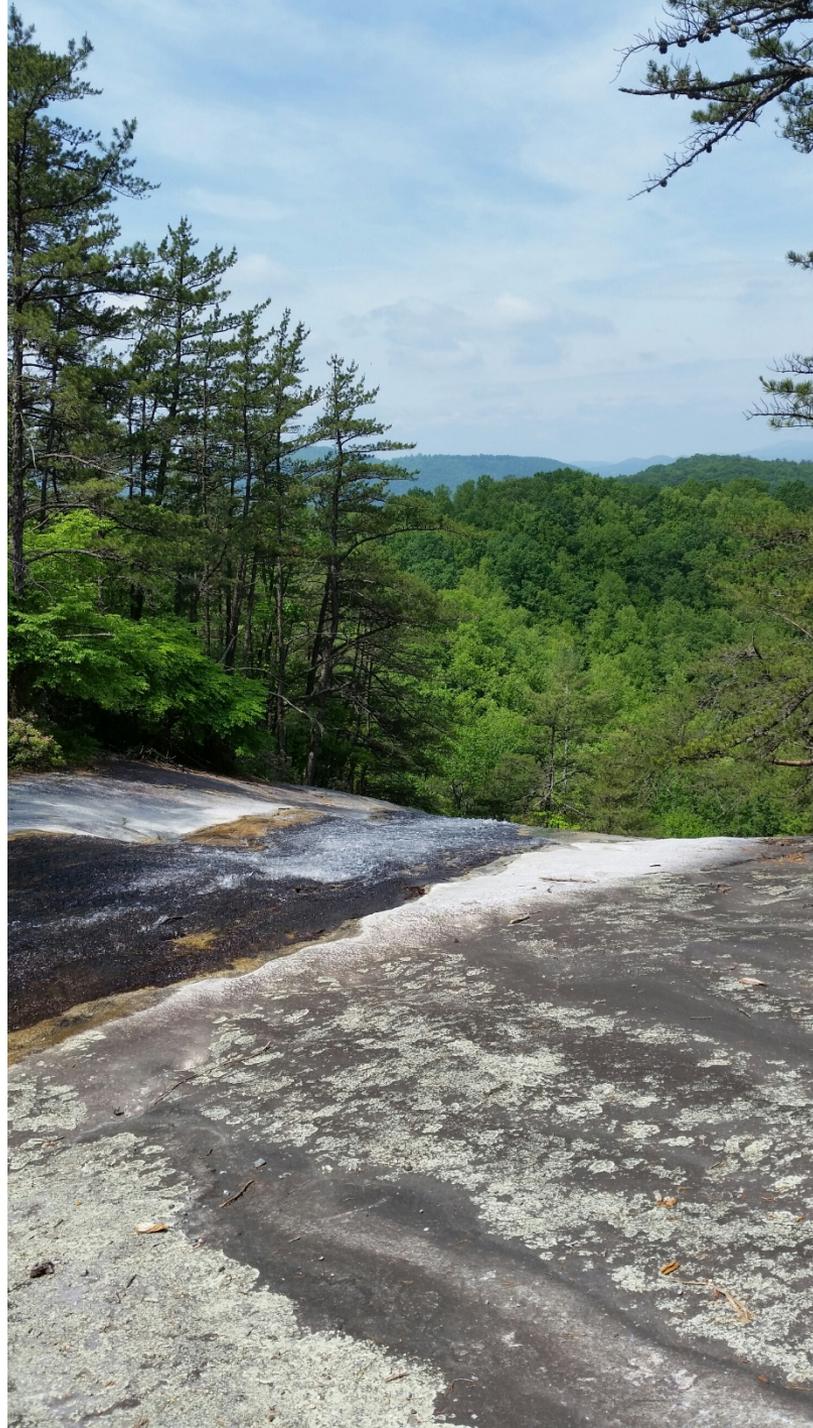
# Toxic Pollutant Totals Trend



# *Visibility*



May 16, 2015



**August 12, 2015**



# Thank you.

## Questions?

**Sheila Holman**

Director

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