United States Environmental Protection Agency

U.S. EPA Region 4 Regulatory Update

Carolinas Air Pollution Control Association Conference
Asheville, NC

April 11, 2019

Carol L. Kemker
U.S. Environmental Protection Agency, Region 4
Atlanta, GA

Today's Topics

Administrative Update

Air Program Update

- Air Quality Improvements
- Progress on NAAQS Implementation
- Clean Air Act Regulatory and Policy Activity
- Voluntary Activities

Questions

New Senior Management

Mary S. Walker
Acting Regional Administrator
EPA Region 4

Beverly H. Banister
Acting Deputy Regional Administrator
EPA Region 4

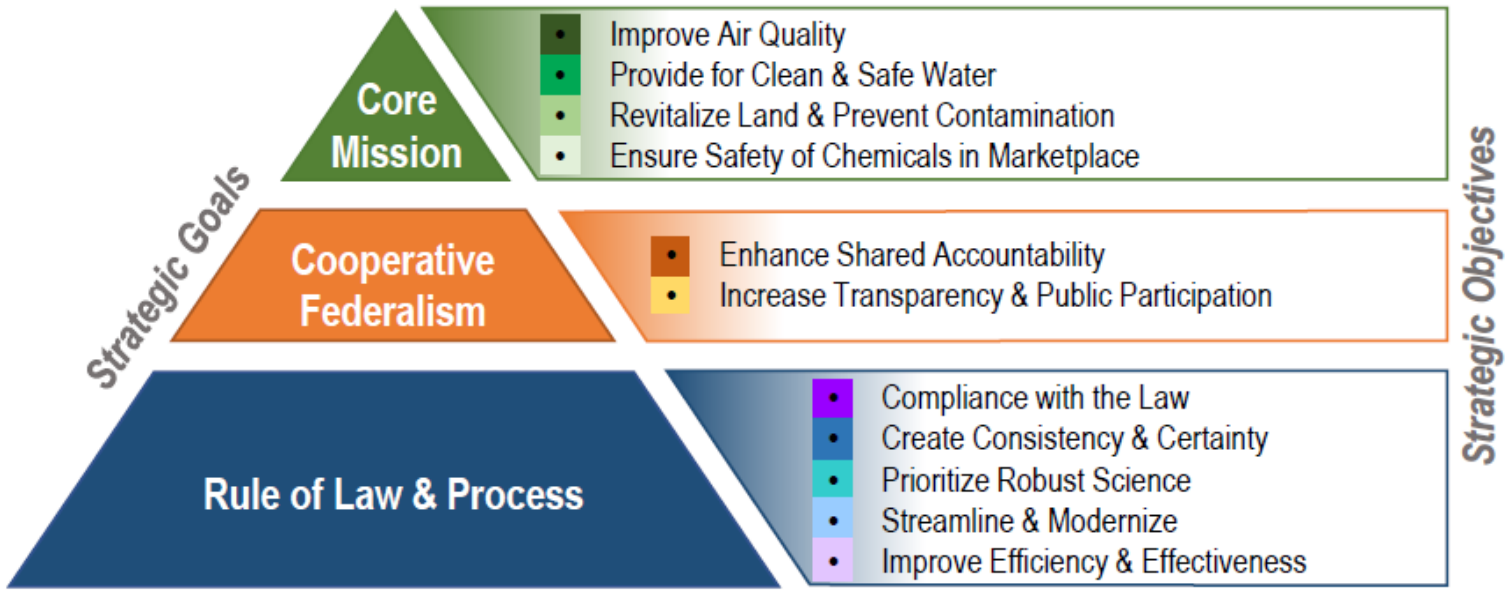
Air, Pesticides and Toxics Management Division

Air, Pesticides & Toxics Management Division
Beverly H. Banister, Director
Carol L. Kemker, Deputy Director
Ken Mitchell, Deputy Director
Immediate Office Staff
Stuart Perry, Director, Grants Management and Strategic Planning Office
404-562-9077

Air Enforcement and Toxics Branch 404-562-9155 *Beverly Spagg*	**Air Planning and Implementation Branch** 404-562-9057 *Scott Davis*	**Air Analysis and Support Branch** 404-562-9105 *Gregg Worley*	**Chemical Safety and Enforcement Branch** 404-562-9892 *Anthony Toney*
North Air Enforcement and Toxics Section *Richard Dubose*	Air Permitting Section *Heather Ceron*	Air Data and Analysis Section *Todd Rinck*	Chemical Management and Emergency Planning Section *Robert Bookman*
South Air Enforcement and Toxics Section *Todd Russo*	Air Regulatory Management Section *Lynorae Benjamin*	Communities Support Section *Amber Davis*	Lead & Asbestos Section *Donnette Sturdivant*
			Pesticides Section *Kimberly Bingham*

Plans for FY18 and Beyond

The new 2018-2022 Strategic Plan charts the course for advancing EPA's priorities and mission to protect human health and the environment



https://www.epa.gov/planandbudget

Leaning EPA

EPA is Implementing a Lean Management System (ELMS)

EPA Desires:

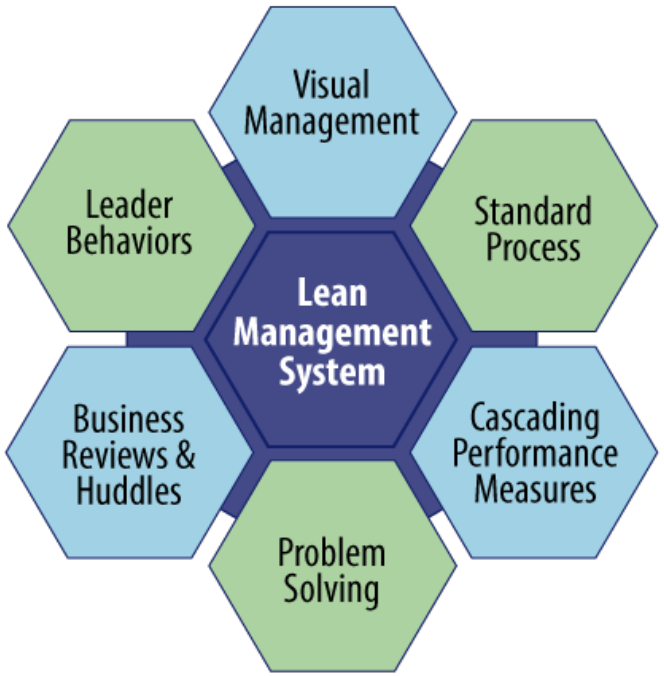
Continuous improvement through problem solving at the level closest to the work

Continuous improvement based on respect for the people doing the work

Accountability to the process without blaming people

Sustainment of gains from its improvement efforts

Development and adherence to standard processes



http://intranet.epa.gov/lean/lms/index.html

Historic Success of the Clean Air Act (CAA)

Then…

Now

- The United States has made great progress since 1970 in cleaning the air, but the job is far from complete
- November 15, 1990 marks a milestone in Clean Air Act history, the signing of the 1990 Amendments
- These amendments set the stage for protecting the ozone layer, reducing acid rain and toxic pollutants, and improving air quality and visibility
- The success of the Act is a result of states and EPA working in partnership to solve multiple air pollution problems through programs based on the latest science and technology information

https://www.epa.gov/transportation-air-pollution-and-climate-change/timeline-major-accomplishments-transportation-air

Historic Success of the Clean Air Act cont'd

Examples of Success

- Vehicle pollution in the U.S. has reduced significantly due to:
  - New passenger vehicles are 98-99% cleaner
  - Fuels are cleaner due to the elimination of lead and 90% reduction of sulfur levels
- Standards for stationary sources have sparked technology innovation from industry
- U.S. communities have much improved air quality, despite ever increasing population and vehicle miles traveled

Then…

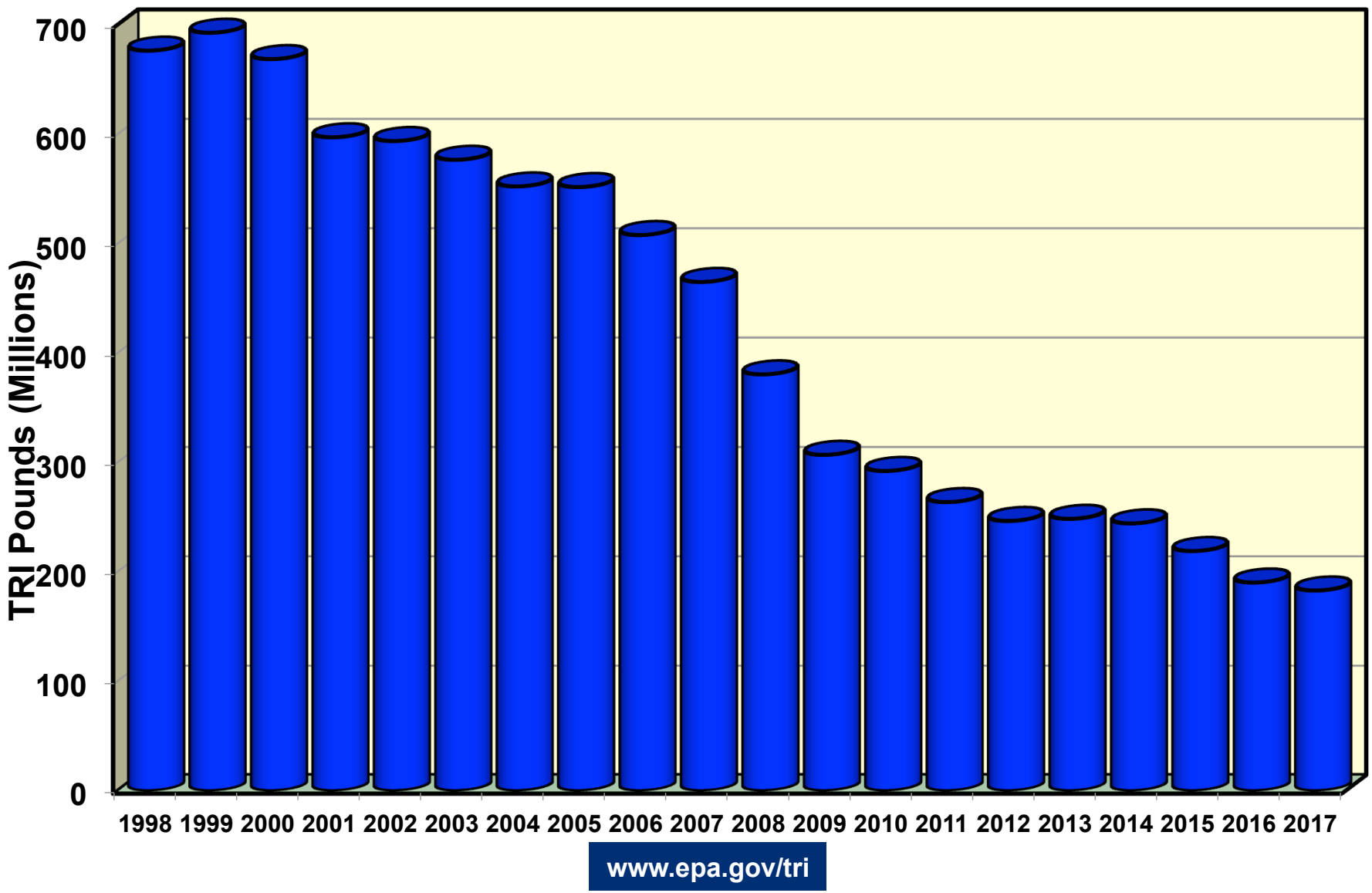
Now

Air Quality Trends

- National Emissions Inventory (NEI)
- 1998-2017 Region 4 TRI (Air Releases Only)

Emissions Have Reduced In Region 4

The TRI: 30 Years and Counting



www.epa.gov/tri

Progress on Ozone and $PM_{2.5}$ Attainment in Region 4

OZONE	1997 NAAQS (2004 Designations)	2008 NAAQS (2012 Designations)	2015 NAAQS (2018 Designations)
Initial Nonattainment Areas	14	5	3
Areas Redesignated to Attainment	14	5	0
Current Nonattainment Areas	0	0	3

PM2.5	1997 $PM_{2.5}$ NAAQS (2005 Designations)	2006 $PM_{2.5}$ NAAQS (2009 Designations)	2012 $PM_{2.5}$ NAAQS (2015 Designations)
Initial Nonattainment Areas	11	2	0
Areas Redesignated to Attainment	11	2	0
Current Nonattainment Areas	0	0	0

https://www.epa.gov/green-book

CAROLINAS AIR POLLUTION CONTROL ASSOCIATION

DEDICATED TO CLEAN AIR

CAPCA

ORGANIZED 1969

50 Years of Excellence

Environmental Stewardship in North and South Carolina

North Carolina

2018 ENERGY STAR® - Awards and Certified Manufacturing Plants

Charlotte-Douglas International Airport Electrification

Path Forward Projects

Air Stem Program

South Carolina

2018 ENERGY STAR® - Certified Manufacturing Plants

School Bus Rebate Program

Low-No Bus Program Project

Ferry Conversions to Hybrid Electric

https://www.energystar.gov/about/2018_energy_star_award_winners
https://www.epa.gov/newsreleases/epa-announces-2018-energy-star-r-certified-manufacturing-plants

EPA Focus Areas – Region 4

Region 4 is working with our state partners to implement the regulatory requirements of the Clean Air Act and to look for risk reduction opportunities through voluntary efforts

NAAQS Reviews

(As of March 2019)

	Ozone	Lead	Primary NO_2	Primary SO_2	Secondary (Ecological) NO_2, SO_2, PM[1]	PM[2]	CO
Last Review Completed (final rule signed)	Oct. 2015	Sept 2016	April 2018	Feb 2019	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s)	Summer 2019 Draft ISA[3] Early 2020 Proposal Late 2020 Final	TBD[4]	TBD[4]	TBD[4]	Timing depends on PM/O3 schedules Final ISA; draft REA/PA[3]	March 28, 2019 CASAC teleconference on draft ISA[3] Early 2020 Proposal Late 2020 Final	TBD[4]

Additional information regarding current and previous NAAQS reviews is available at: http://www.epa.gov/ttn/naaqs/

[1] Combined secondary (ecological effects only) review of NO_2, SO_2, and PM
[2] Combined primary and secondary (non-ecological effects) review of PM
[3] IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment
[4] TBD = To be determined

2010 SO_2 NAAQS Review

2010 Primary SO_2 NAAQS	
Standard	75 parts per billion
Averaging Time	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
At Risk Population	Children, Elderly, Asthmatics
Current Nonattainment Areas	40 Areas in 16 States

In February 2019, EPA retained the existing primary NAAQS for SO_2 based on the agency's judgment that the current NAAQS protects the public health, with an adequate margin of safety, including the health of at-risk populations with asthma.

www.epa.gov/so2-pollution/applying-or-implementing-sulfur-dioxide-standards

2010 SO_2 Designations Process

Round 1: Completed August 2013 – EPA Region 4 designated 5 areas nonattainment based on existing monitors violating the standard*

Round 2: Completed June 30 and November 29, 2016 – EPA designated 65 areas in 24 states based on air dispersion modeling and 2013-2015 violating monitors (6 areas designated in Region 4)

Rounds 1-3

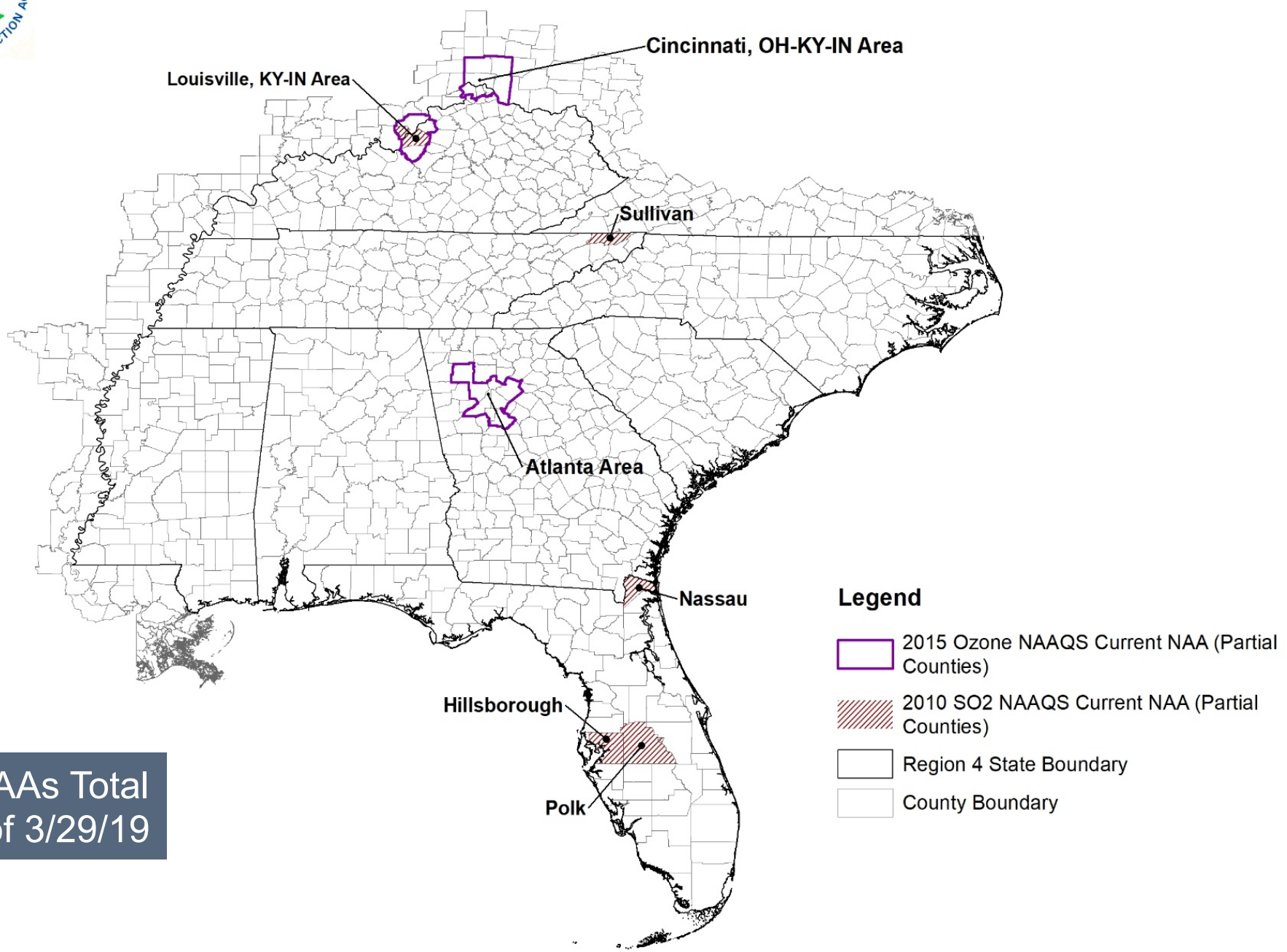
EPA currently has five areas designated as nonattainment in three States in Region 4

Round 3: Completed December 21, 2017 and March 28, 2018 – EPA completed an additional round of designations for all remaining undesignated areas ***except*** where states have deployed new monitoring networks by January 1, 2017 ***if*** executed under the SO_2 Data Requirements Rule (DRR); one new area was designated nonattainment

Round 4: By December 31, 2020 – EPA must complete designations for all remaining areas (based on 2017-2019 monitoring data)

www.epa.gov/so2-pollution/applying-or-implementing-sulfur-dioxide-standards

Current R4 Nonattainment Areas (all NAAQS Pollutants)



8 NAAs Total as of 3/29/19

Protecting Our Nation's Treasured Vistas

*More than 10 million people visited Great Smoky Mountains National Park in 2015, making it the most visited park in the U.S. The average visual range in Great Smoky Mountains National Park has improved from **25 miles** in 2000 to **60 miles** in 2015. Natural visibility range is **110 miles**, so we have work to do to reach natural visibility conditions.*

Simulated images of a typical hazy day during 2000-2004 (left), 2010-2014 (middle), and natural conditions (right) in the Great Smoky Mountains National Park.

https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=e4dbe2263e1f49fb849af1c73a04e2f2

Exceptional Events: Rule Implementation Update

- We have concurred on 25 demonstrations that were submitted after revising the Exceptional Events Rule in September 2016

- We continue developing new guidance documents to help right-size demonstrations and facilitate the exceptional events process
  - **Stratospheric Ozone Intrusion Guidance – Released November 2018**
  - **Updated High Wind Dust Event Guidance – soon to be released**
  - **Clarification Memo on Data Modification – soon to be released**
  - **Prescribed Fire Guidance – Ready to begin OMB interagency review process**

EPA's exceptional events webpage provides key resources, including example demonstrations, and will continue to be updated as new materials become available

- https://www.epa.gov/air-quality-analysis/treatment-air-quality-data-influenced-exceptional-events

https://www.epa.gov/air-quality-analysis/exceptional-events-rule-and-guidance

Voluntary Programs and Successes

- Advance Program
- Southeast Diesel Collaborative (SEDC)

Advance Program

The Advance Program is a collaborative effort by EPA, states, tribes, and local governments to encourage emission reductions in attainment areas, to help them continue to meet the air quality standards for ozone and $PM_{2.5}$.

Program Goals:

- Help attainment areas to ensure continued health protection
- Better position areas to remain in attainment
- Efficiently direct available resources toward actions to address ozone and PM2.5 problems quickly

Participants in Region 4

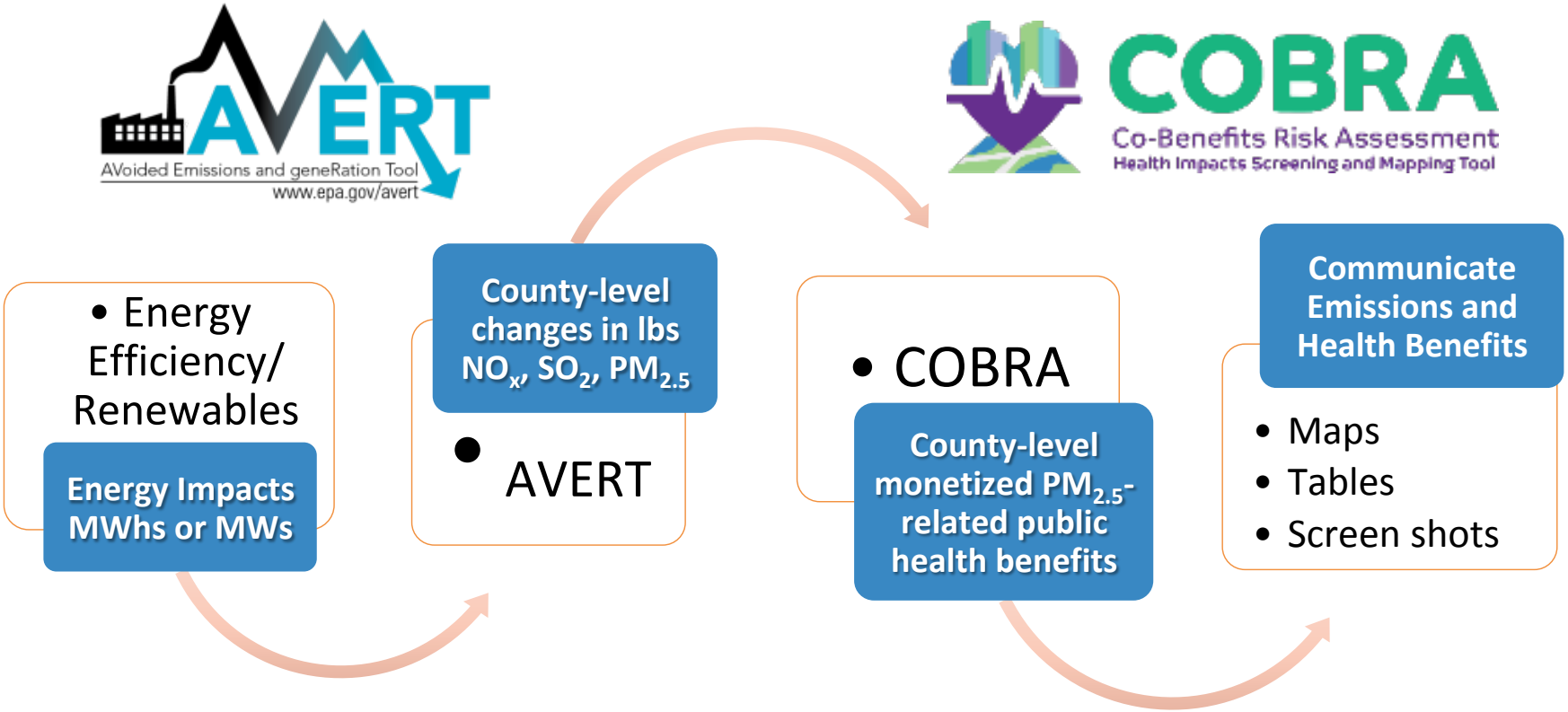
SC – entire state
Catawba Tribe, SC
Middle GA (including Robins Air Force Base)
Louisville, KY
Cumberland County, NC (including Fort Bragg)
Charlotte, NC
NC – Entire State

EPA Region 4 contact: Kelly Sheckler
404-562-9222; sheckler.Kelly@epa.gov
www.epa.gov/advance

Air Quality and Health Benefits Quantification

EPA is uniquely positioned to provide public health related tools and resources:

- **Updated AVERT and COBRA –** now you can more easily estimate AQ and Health benefits of energy efficiency and renewable energy programs using both tools together.



Southeast Diesel Collaborative (SEDC)

- Voluntary public/private partnership formed in 2006 (part of the National Clean Diesel Campaign), focused on clean diesel opportunities that incorporate Energy, the Environment and Economics

- Diverse Partners from government, industry, state/local groups with the goal of improving air quality and public health by reducing emissions from existing diesel engines

- Annual funding under the Diesel Emissions Reduction Act (DERA)

- Upcoming 14th Annual Partners Meeting is scheduled for September 24 – 26, 2019 in Chattanooga, TN

www.southeastdiesel.org

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