



North Carolina Department of Environment and Natural Resources  
**Division of Air Quality** 

# Current Ozone Issues in the Metrolina Area

**Air Quality Committee  
March 11, 2009**


**Donnie Redmond**

North Carolina Department of Environment and Natural Resources  
**Division of Air Quality** 

## Overview

- **Air is getting cleaner**
  - Maybe not fast enough
  - Standard is changing
- **Ozone standards and nonattainment**
- **Old standard**
  - SIP was pulled: Why? What does it mean?
- **New standard**
  - EPA tightened: Why? What does it mean?


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## Ozone trends and projections

- Ozone levels across NC have improved and are expected to continue to improve despite growth
- Control measures
  - NO<sub>x</sub> SIP call and CAIR
  - Clean Smokestacks Act
  - Expanded motor vehicle emissions testing
  - Cleaner cars, cleaner fuels (low sulfur)
  - Motor vehicle fleet turnover
- Charlotte-area is the only remaining area in NC not achieving the 1997 ozone standard

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## What does Nonattainment mean?

- Clean Air Act requires EPA set national ambient air quality standards
- “Nonattainment” is EPA term that air does not meet the standards
- State must develop a State Implementation Plan (SIP) to attain standard
- Requires transportation conformity
- Requires new source review on new major industrial sources or major modifications

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## Old Ozone Standard

- **84ppb, set in 1997, to be attained by 2010**
  - Ozone data from 2009 summer
  - Measured as 3-year average of 4<sup>th</sup>-highest 8-hour value
- **SIP submitted to EPA in June 2007**
- **Nov 2008 EPA letter**
  - Current value is 94ppb, unlikely to get 84ppb
  - Voluntary bump-up to “serious” or disapprove
  - More time to attain, but strings attached to each
    - More controls on smaller industry, or
    - Transportation funding issues

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## Old Ozone Standard (cont.)

- **Discussed EPA letter with SC, local agency, transportation planners, others**
  - Most urgent concern is transportation funding
- **Decided to withdraw SIP**
  - Results in “finding of failure to submit”
    - In 18 mos.: Industrial offsets
    - In 24 mos.: Highway sanctions
  - Gives us more time
    - Revise SIP
    - Delay transportation consequences

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## Old Ozone Standard (cont.)

- **2009 activities to revise SIP**
  - Jan-Feb: Update emissions assumptions and projections
  - Mar-Jun: Run computer models\*
  - Jul-Oct: Internal and public review
  - Nov: Submit revised plan to EPA

\*EPA-approved tools to demonstrate that the planned control measures will result in clean air in the future. If existing rules are not enough, must add more control measures.

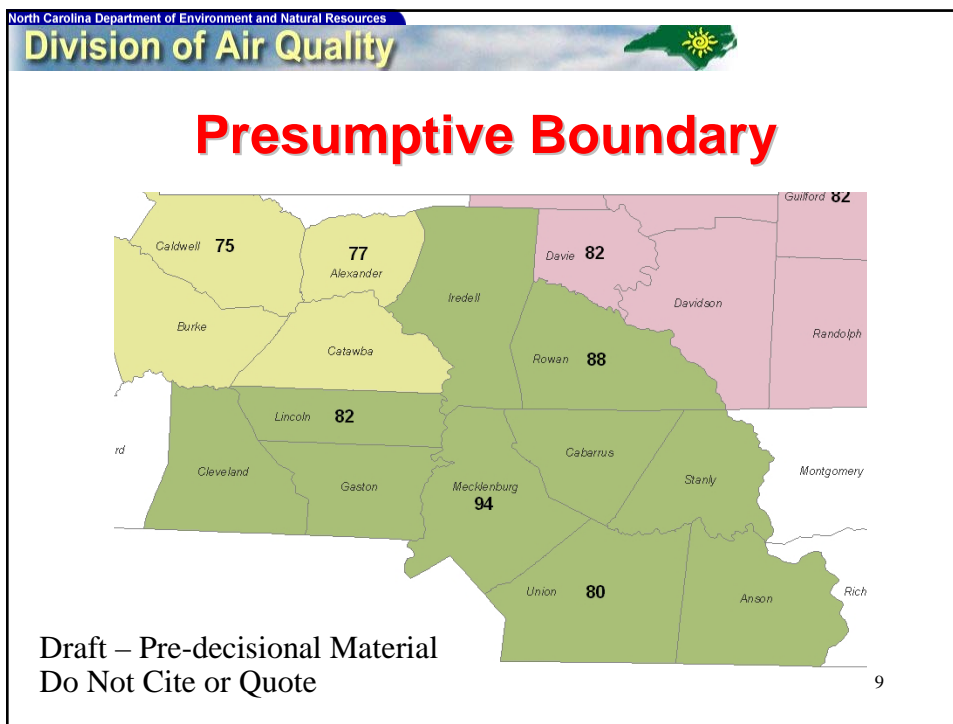
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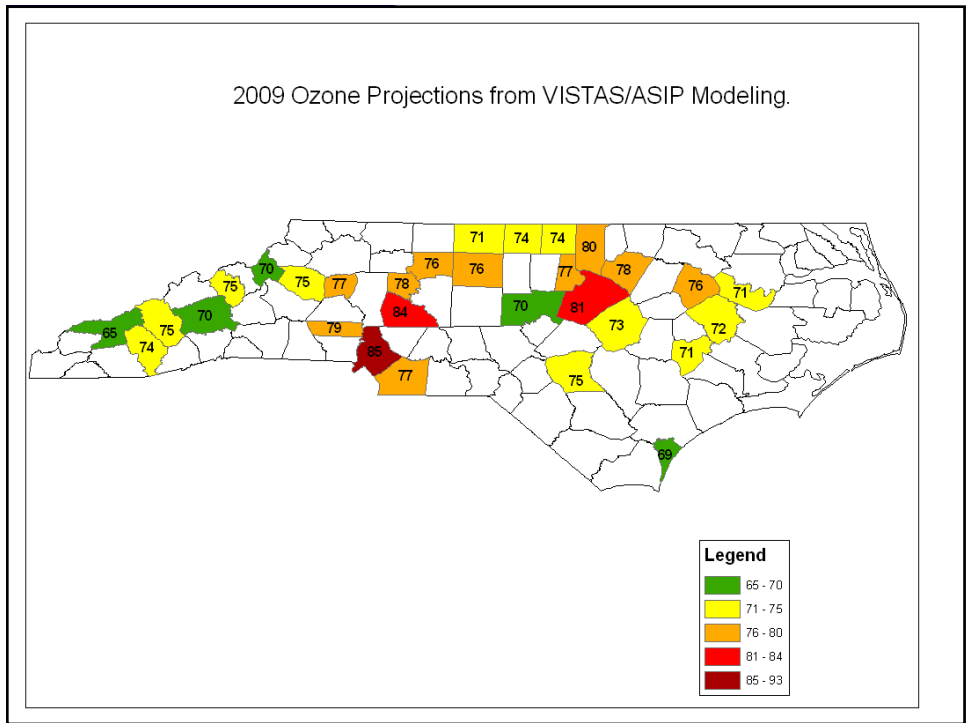
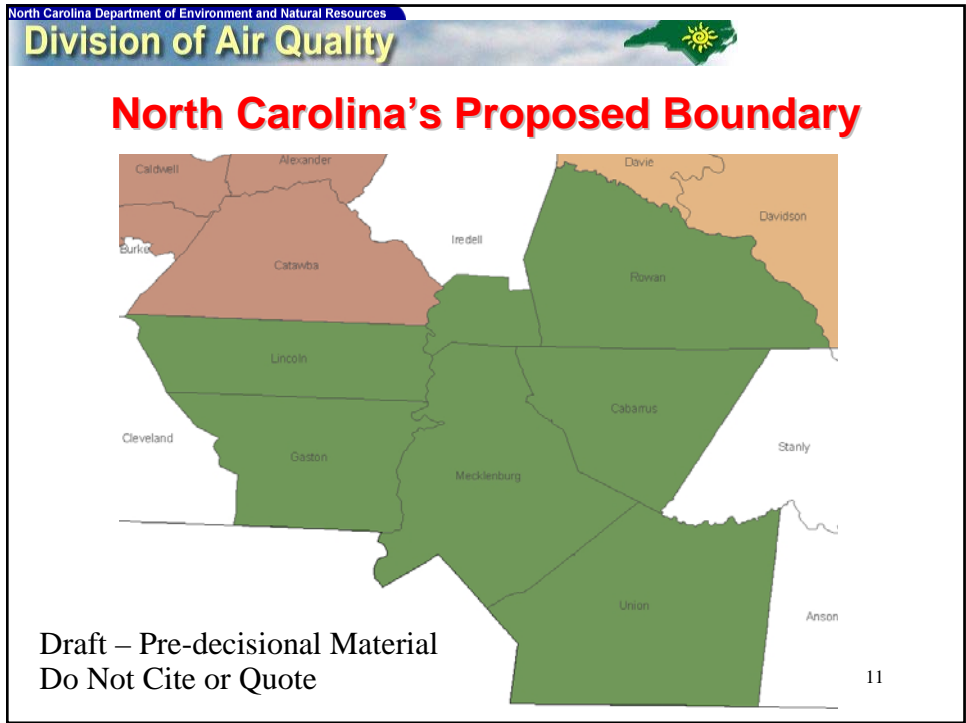
## 2008 8-hour Ozone Standard

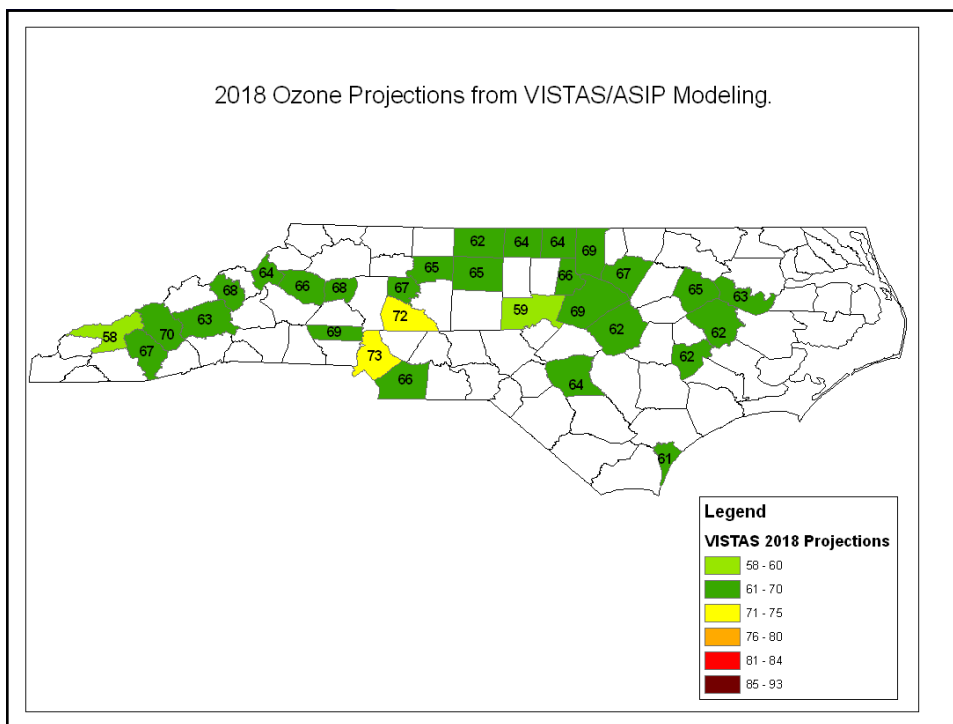
- **March 12, 2008: Standard set by EPA**
  - Lowered from 84ppb to 75ppb
- **March 12, 2009: State recommends geographical boundaries**
- **March 12, 2010: EPA sets nonattainment boundaries**
- **TBD: Classification level and attainment date**

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- ### Process for Determining Nonattainment Boundaries
- **Factors EPA says to take into consideration**
    - Air Quality Data
    - Emissions Data
    - Population Density/Degree of Urbanization
    - Traffic/Commuting Patterns
    - Growth Rates
    - Meteorology
    - Geography/Topography
    - Jurisdictional Boundaries
    - Level of Control of Emission Sources
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## So we're good to go, right? ... Not exactly

- **Concern over Metrolina**
  - Not certain we'll attain old standard in time
  - Uncertainty over new standard deadlines
- **"Big ticket" controls have already been required**
- **May take local NOx measures**
  - Diesel retrofits
  - Offroad equipment (construction, generators)
  - Better transit or carpooling
  - Anti-idling
  - Episodic controls

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## **Contact Information**

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