

Four Corners Air Quality Task Force

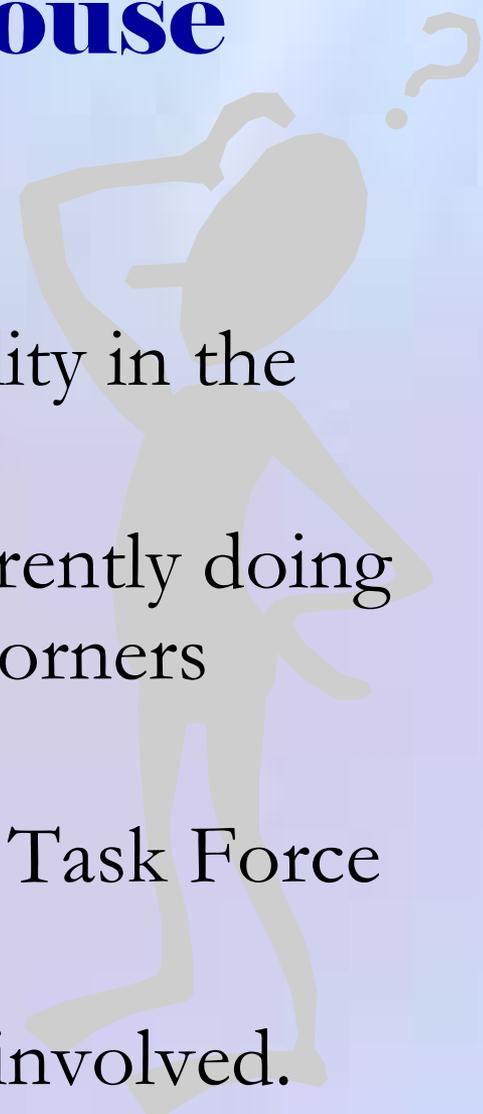


November 2, 2005

Welcome to the Four Corners Task Force Open House

Why Are We Here?

- To provide an overview of air quality in the Four Corners region.
- To update you on what we are currently doing to protect air quality in the Four Corners region.
- To explain what the Four Corners Task Force is.
- To let you know how you can get involved.

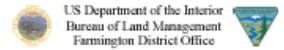


Why Create a Task Force?

- Significant air quality issues related to energy development and urbanization
 - Ozone, visibility, dust, mercury & others
- Multiple jurisdictions
 - Four States (NM, CO, UT, AZ)
 - Four Tribes (Navajo Nation, Jicarilla Apache, Ute Mountain Ute, Southern Ute Indian Tribe)
 - Local governments
 - Private lands
 - Federal Agencies
 - Bureau of Land Management (BLM)
 - Forest Service (FS)
 - National Park Service (NPS)
 - Environmental Protection Agency (EPA)



Surface Management in the Four Corners Region



1:500,000



AREA SHOWN



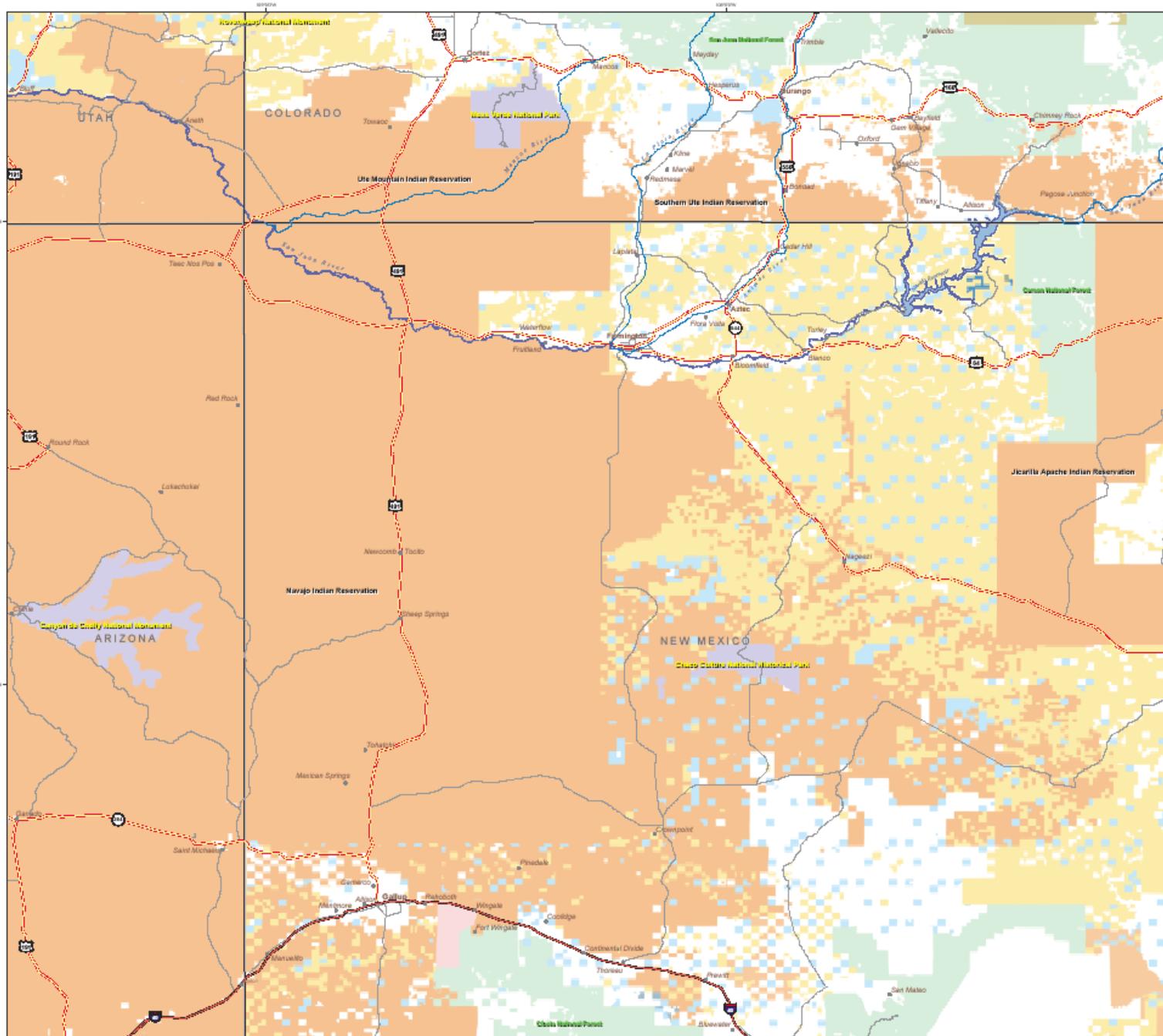
Surface Ownership

- Bureau of Land Management
- Bureau of Reclamation
- Dept. of Defense
- Forest Service
- Fish & Wildlife Service
- Tribal
- National Park Service
- Private
- State
- State Game & Fish Dept
- State Park

Road Classification

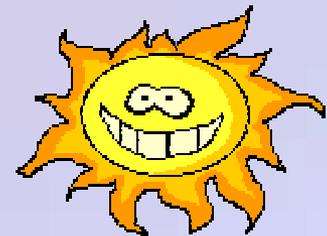
- Limited Access Highway
- Highway
- Local Roads

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Four Corners Air Quality Task Force

- Convened by States of Colorado and New Mexico
- Role is to study the air quality issues in the Four Corners Region and develop a broad list of mitigation options
 - Primary deliverable is a report containing information gathered and options for action
- Membership is made up of community members, interest groups, local government, industry, tribes, state and federal agencies



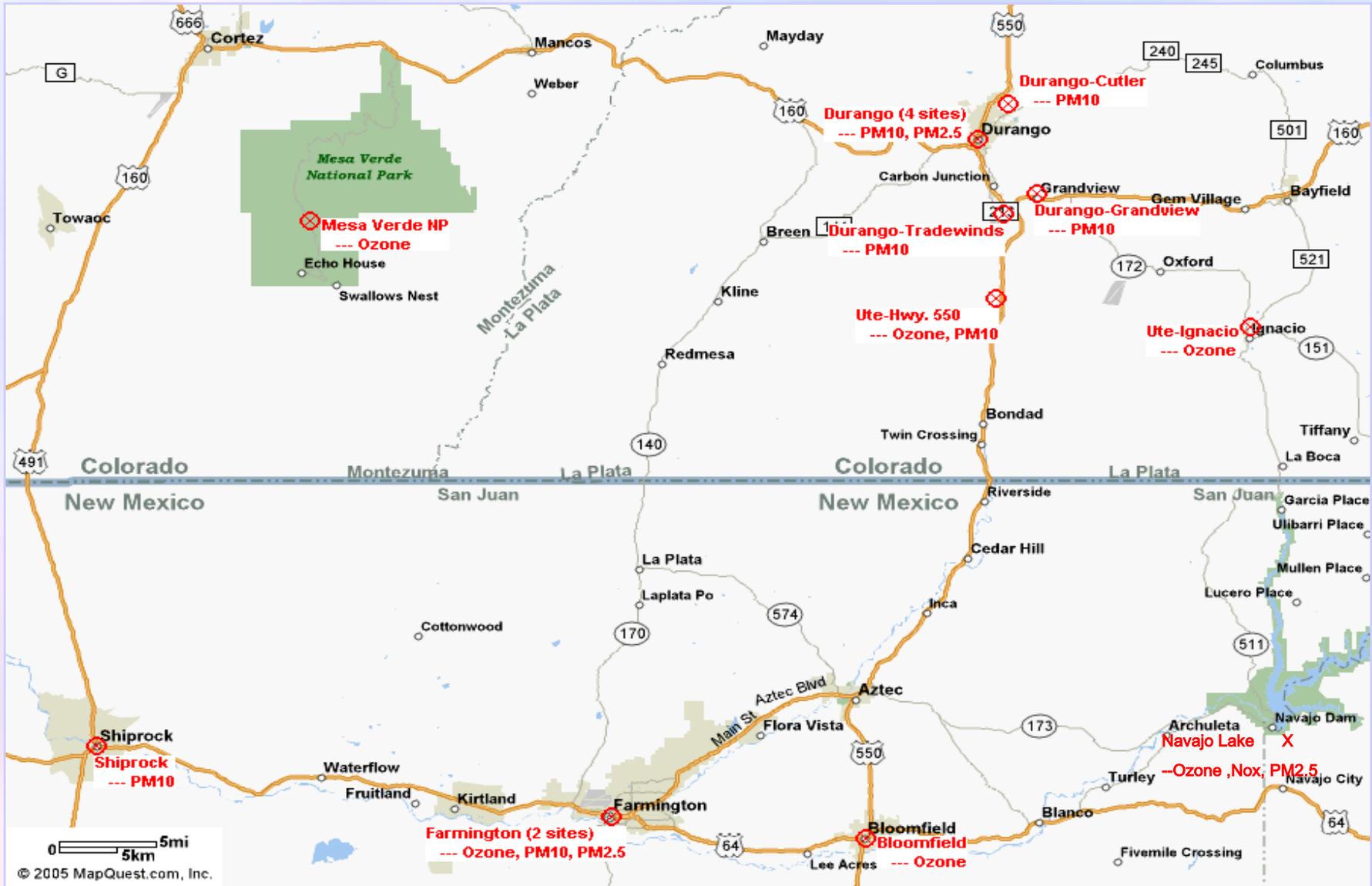
Air Quality Issues



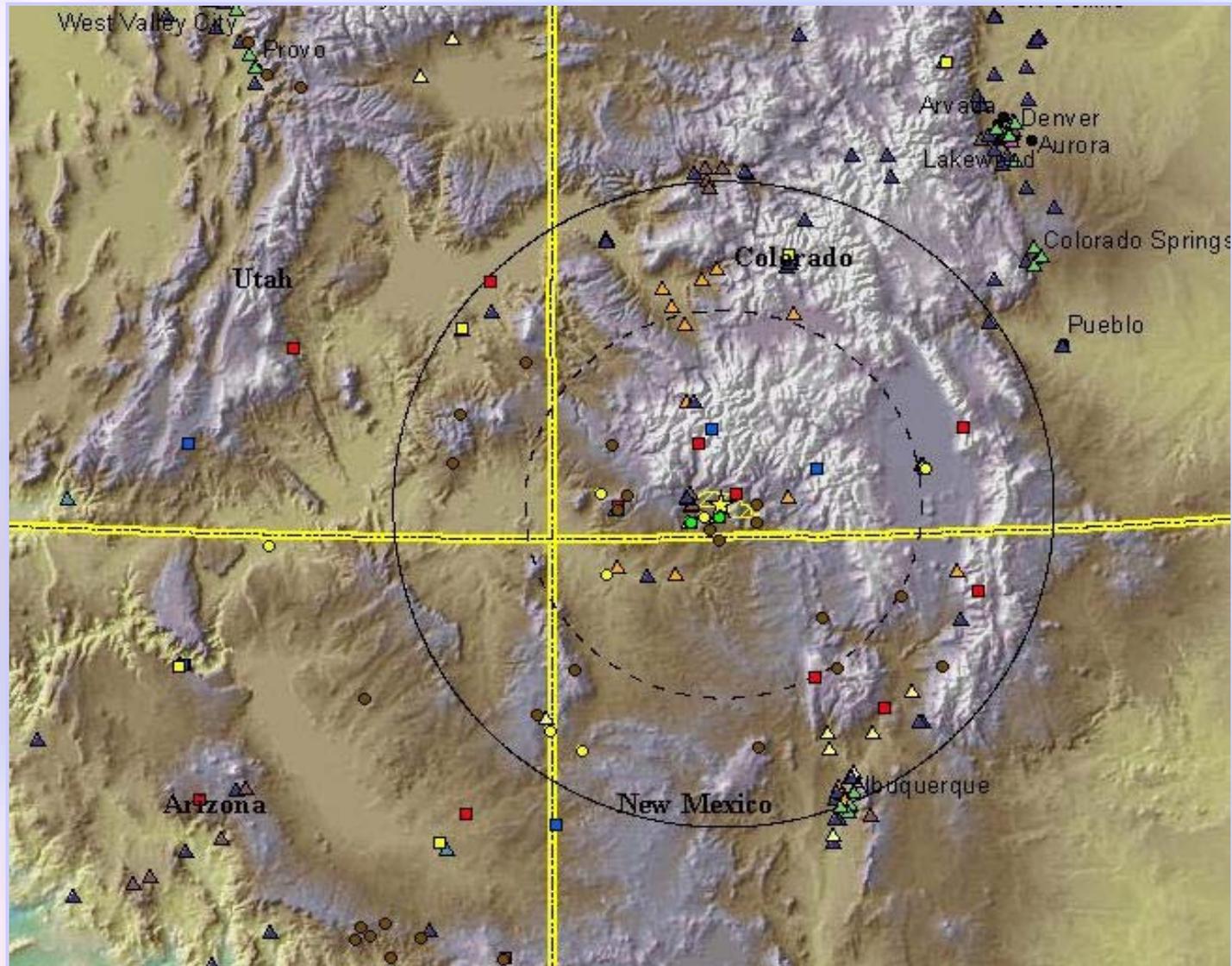
Air Quality Standards and Goals

- To protect human health (National Ambient Air Quality Standards)
- To keep clean areas clean (Prevention of Significant Deterioration)
- To improve visibility (Regional Haze Rule)
- To decrease air pollution impacts on ecosystems (Air Quality Related Values)

Monitoring In Four Corners



Visibility, Air, and Meteorological Monitoring



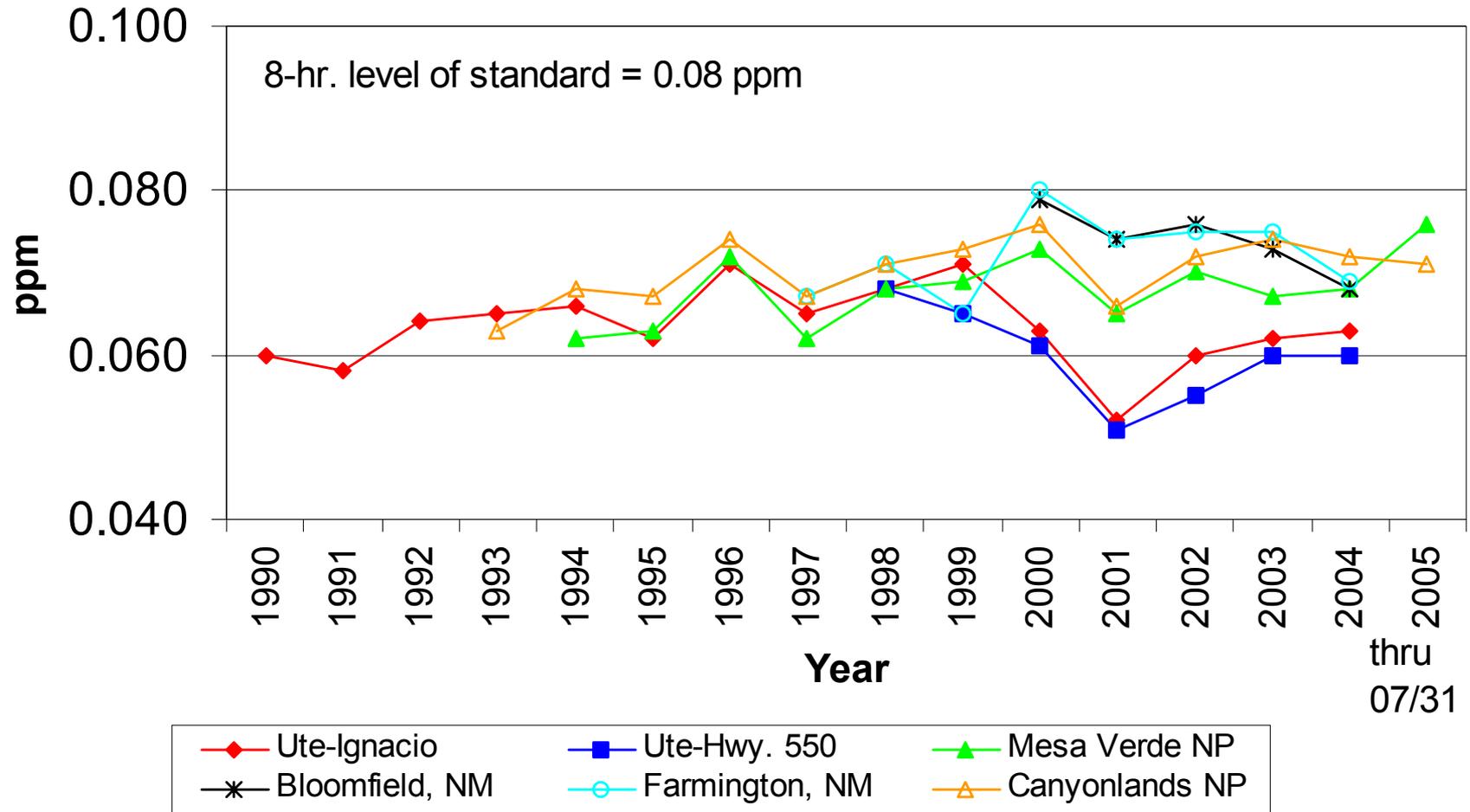
Ozone Levels in Four Corners

- Ground Level Ozone Pollution
 - Formed by emissions of Volatile Organic Compounds and Oxides of Nitrogen
 - Triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis
 - Has been shown to harm vegetation

 We are not violating the federal ozone ambient air quality standard and we want to keep it that way!

Four Corners Ozone Data

8-hour Ozone --- 4th Maximum Four Corners Area

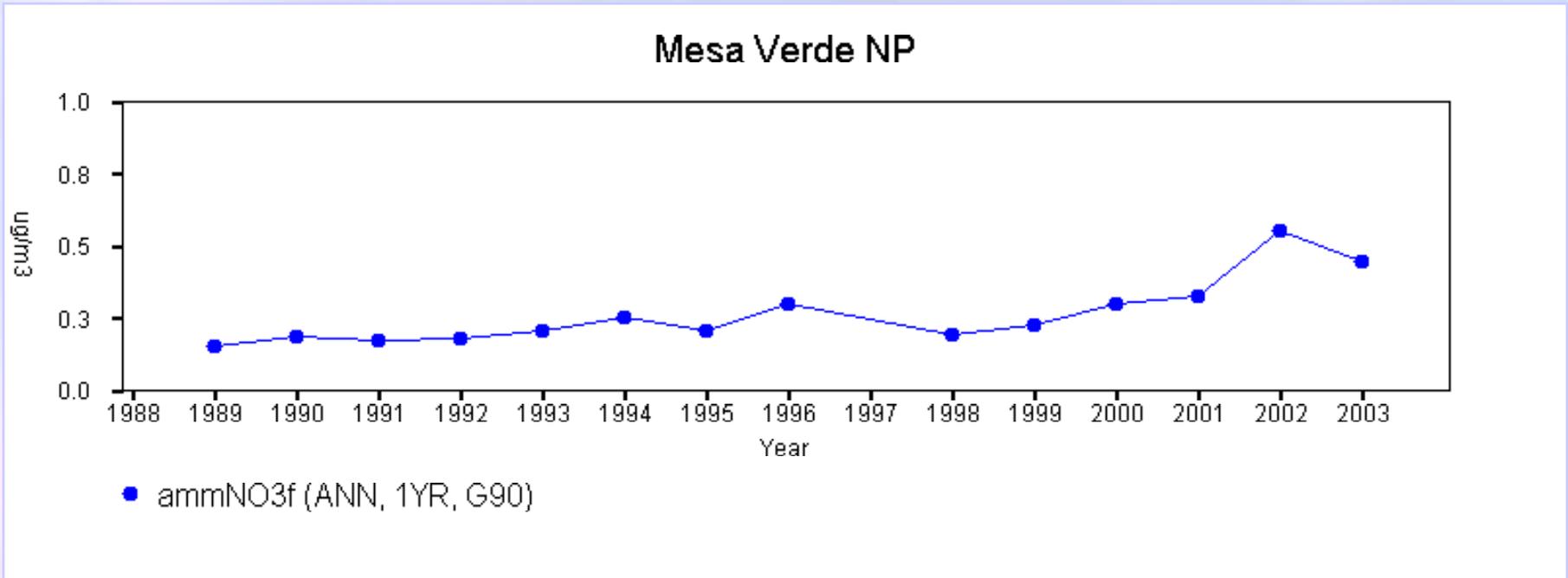


Nitrogen Compounds

- Nitrogen in various forms plays key role in ozone formation.
- Human health effects are the same as for ozone
- Deposition contributes to ecosystem effects (water bodies, vegetation, soils)
- Contribute to visibility impairment
- Nitrogen levels are increasing in the Four Corners region.



Nitrate Levels at Mesa Verde National Park

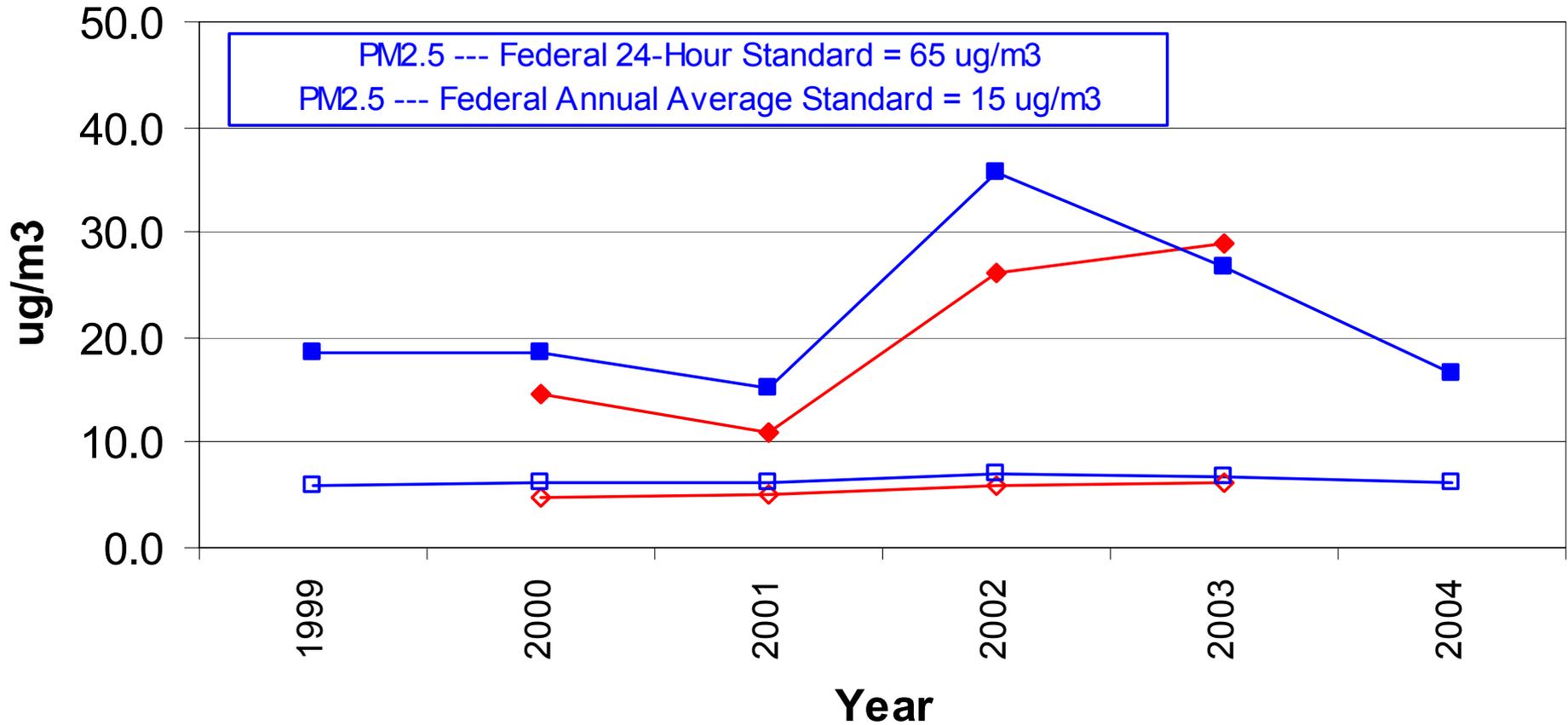


Particulate Levels in Four Corners

- Particulate levels in the Four Corners area are relatively low – let's ensure that this continues!
- Impacts human health and visibility
- Monitors in Durango, Pagosa Springs and Telluride, CO and Farmington and Navajo Lake, NM
- Monitors also on tribal lands and in National Parks

Four Corners Particulate Matter Data

4-Corners --- PM 2.5 24-Hr. Max. & Annual Avg.



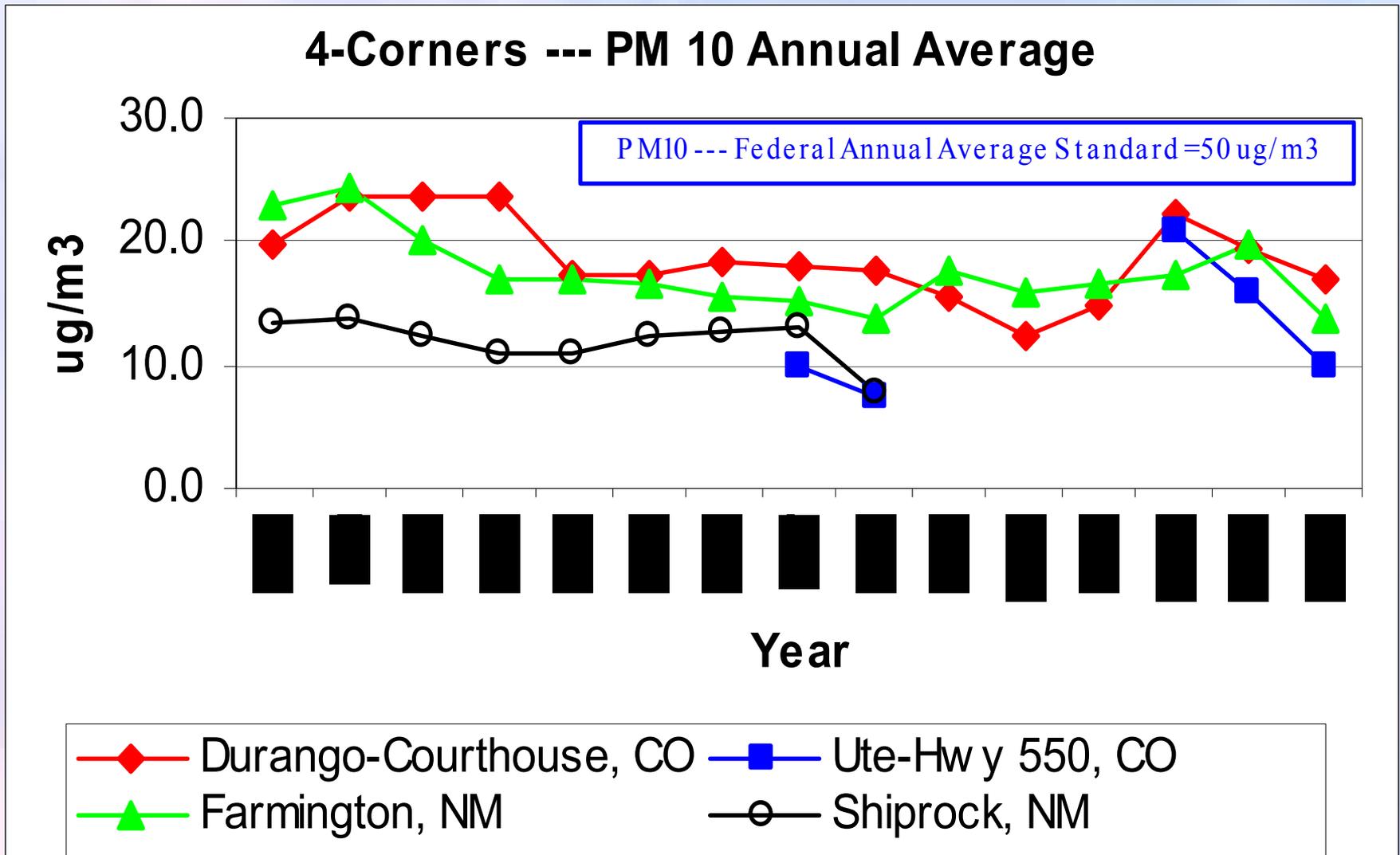
◆ 24-Hr. Max. - Durango-Park School, CO

■ 24-Hr. Max. - Farmington, NM

◇ Annual Avg. - Durango-Park School, CO

□ Annual Avg. - Farmington, NM

Four Corners Particulate Matter Data

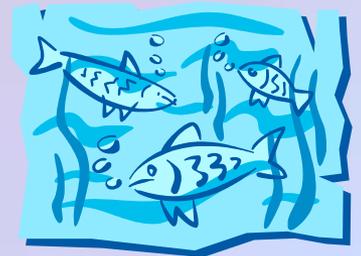


Mercury

- Mercury is a naturally occurring metal, released into the environment from natural and human activities (coal fired power generation, mining).
- Toxic to human and wildlife nervous systems
- The EPA enacted the Clean Air Mercury Rule in 2005 to permanently limit and reduce mercury emissions from coal-fired power plants.

Mercury in Four Corners

- Fish advisories have been issued for the lakes in the Four Corners region.
- Historically, Mesa Verde National Park has shown some of the highest concentrations of mercury deposition in the country.
- The issue before us is to better understand the problems and work to reduce airborne mercury.



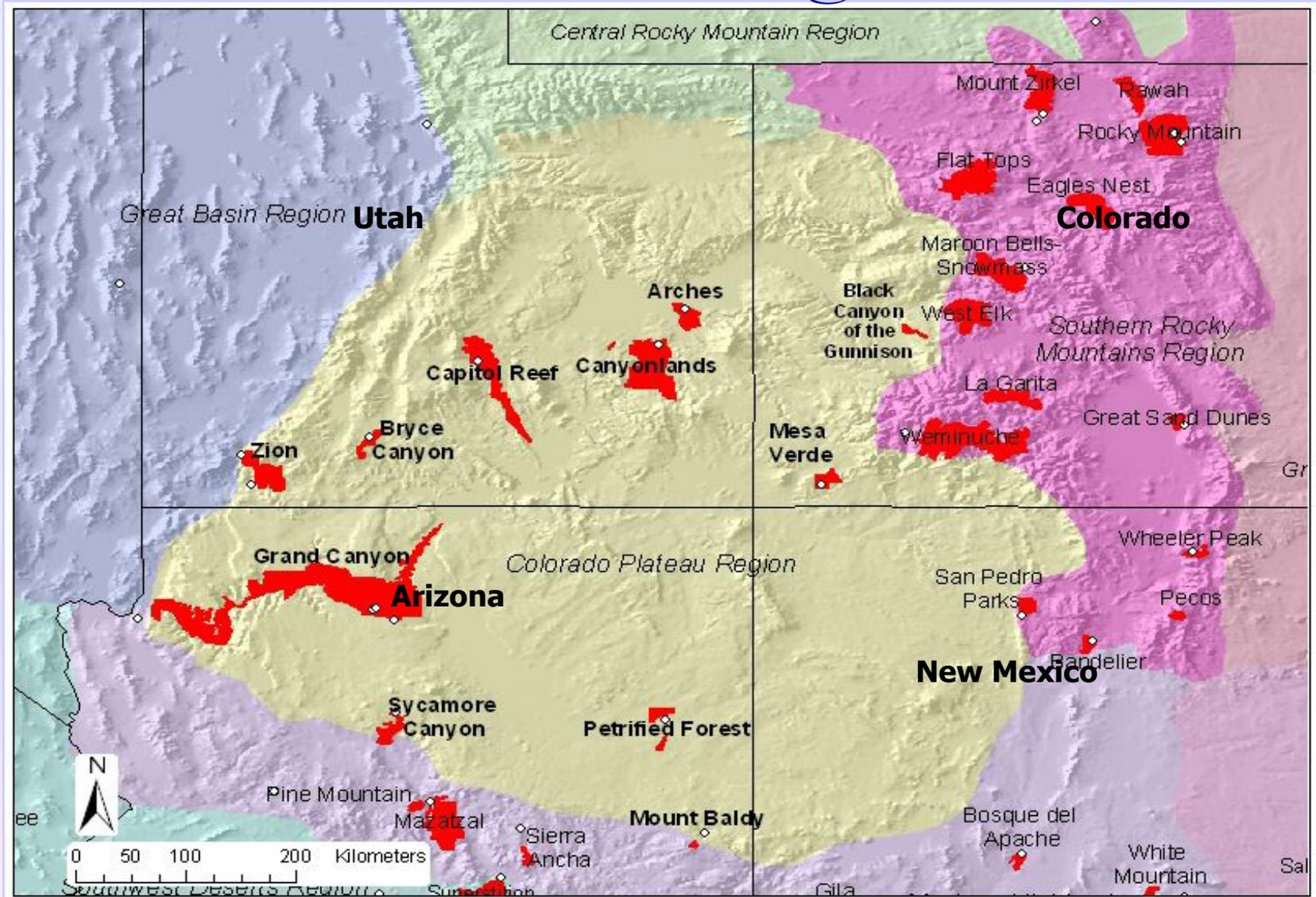
Inspections, Permitting & Enforcement Activities

- Evaluating and developing air permits
- Inspecting sources to determine compliance with air regulations and permit conditions
- Maintaining an inventory of air pollution emissions
- Controlling open burning & dust emissions
- Implementing a wood stove program to ensure that stringent emission standards are met (CO)
- Developing regulations and other strategies to ensure that the Four Corners meets clean air goals and federal requirements

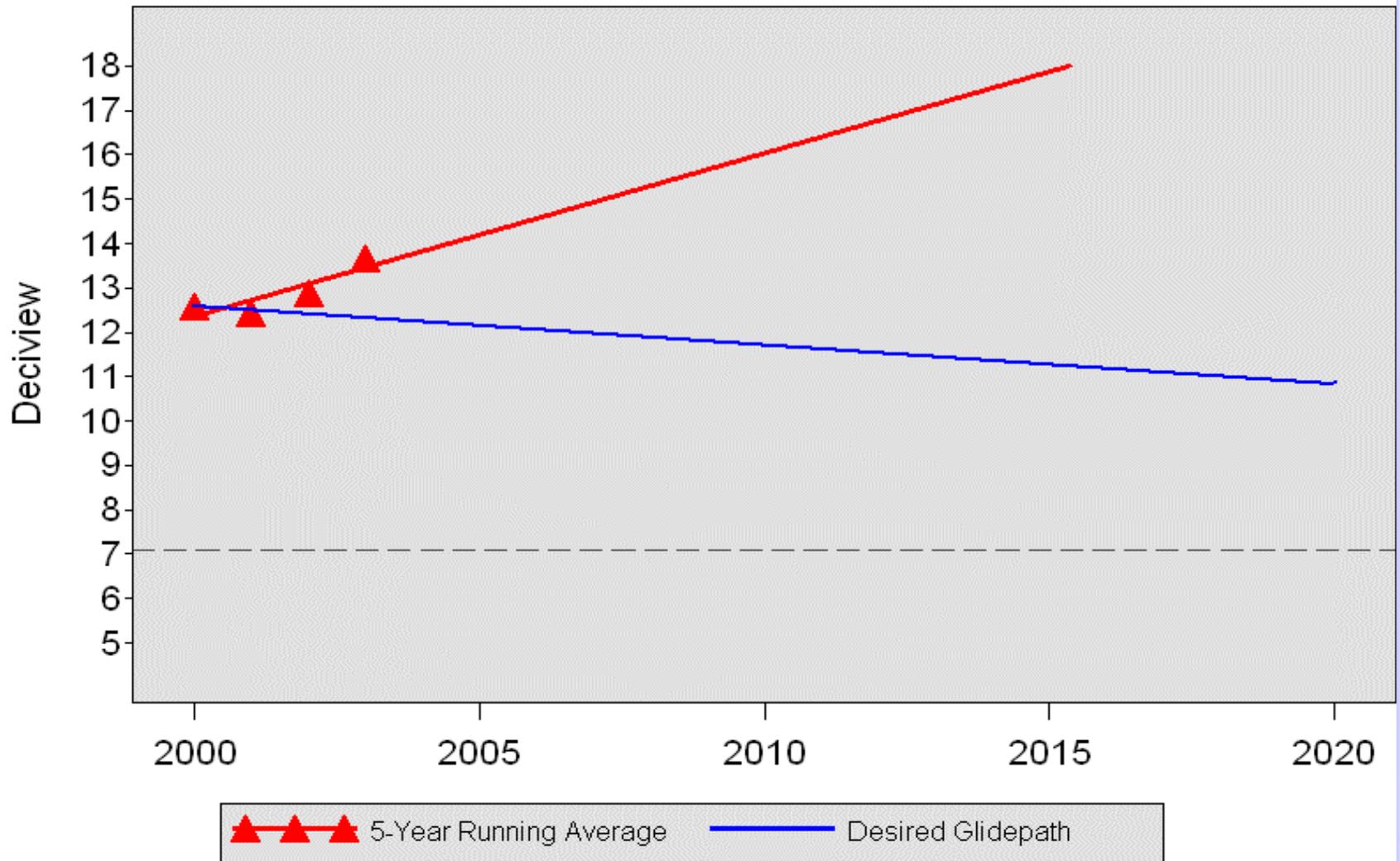
Improving Visibility in the Four Corners Region

- Visibility refers to how well you can see (distance, color, clarity).
- The EPA has developed regulations for visibility.
- States must reduce the impacts of regional haze and improve visibility in National Parks and Wilderness Areas.
- Visibility has been degrading over recent years.

Class I Areas in the Four Corners Region

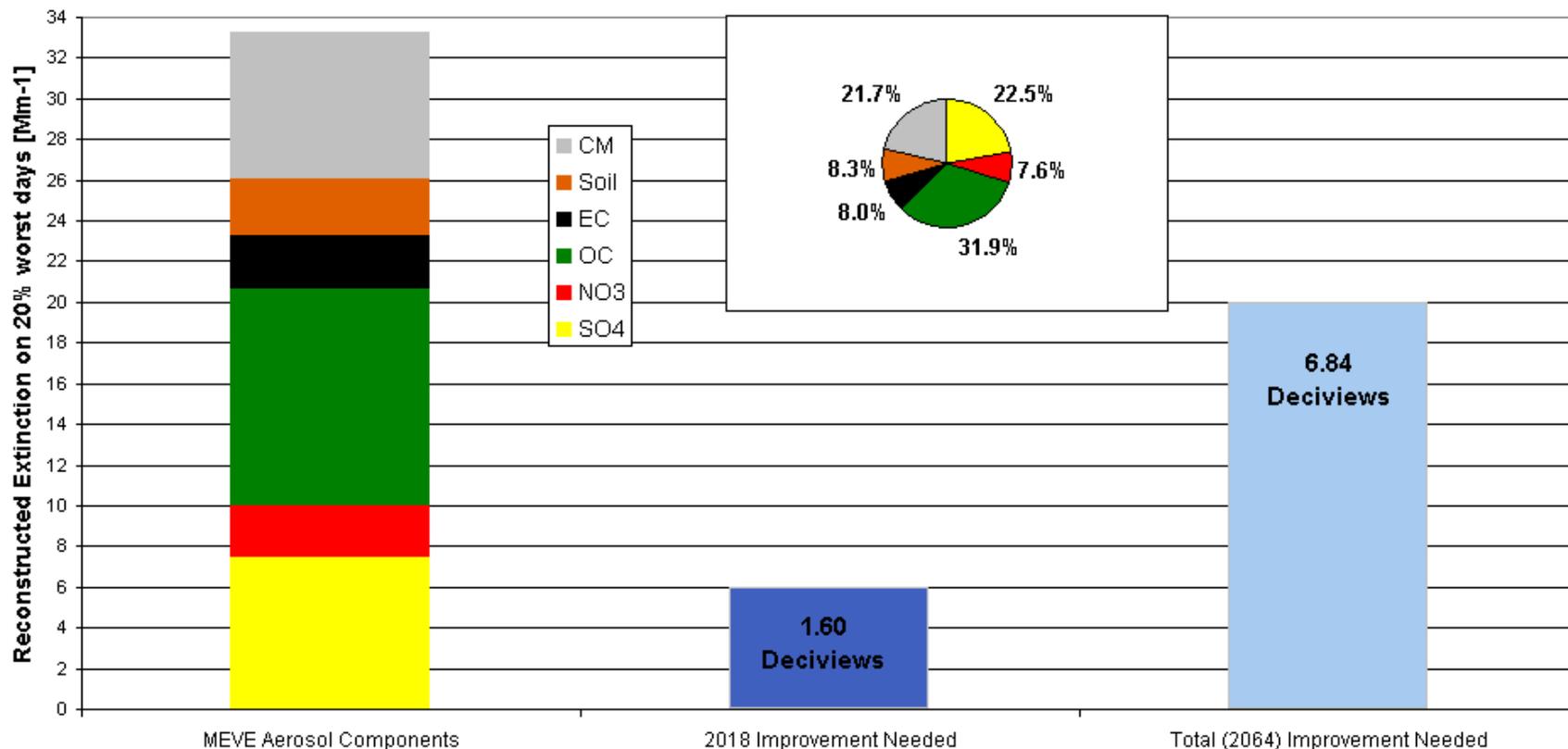


Deciview 5-year Running Averages on 20% Haziest Days Mesa Verde



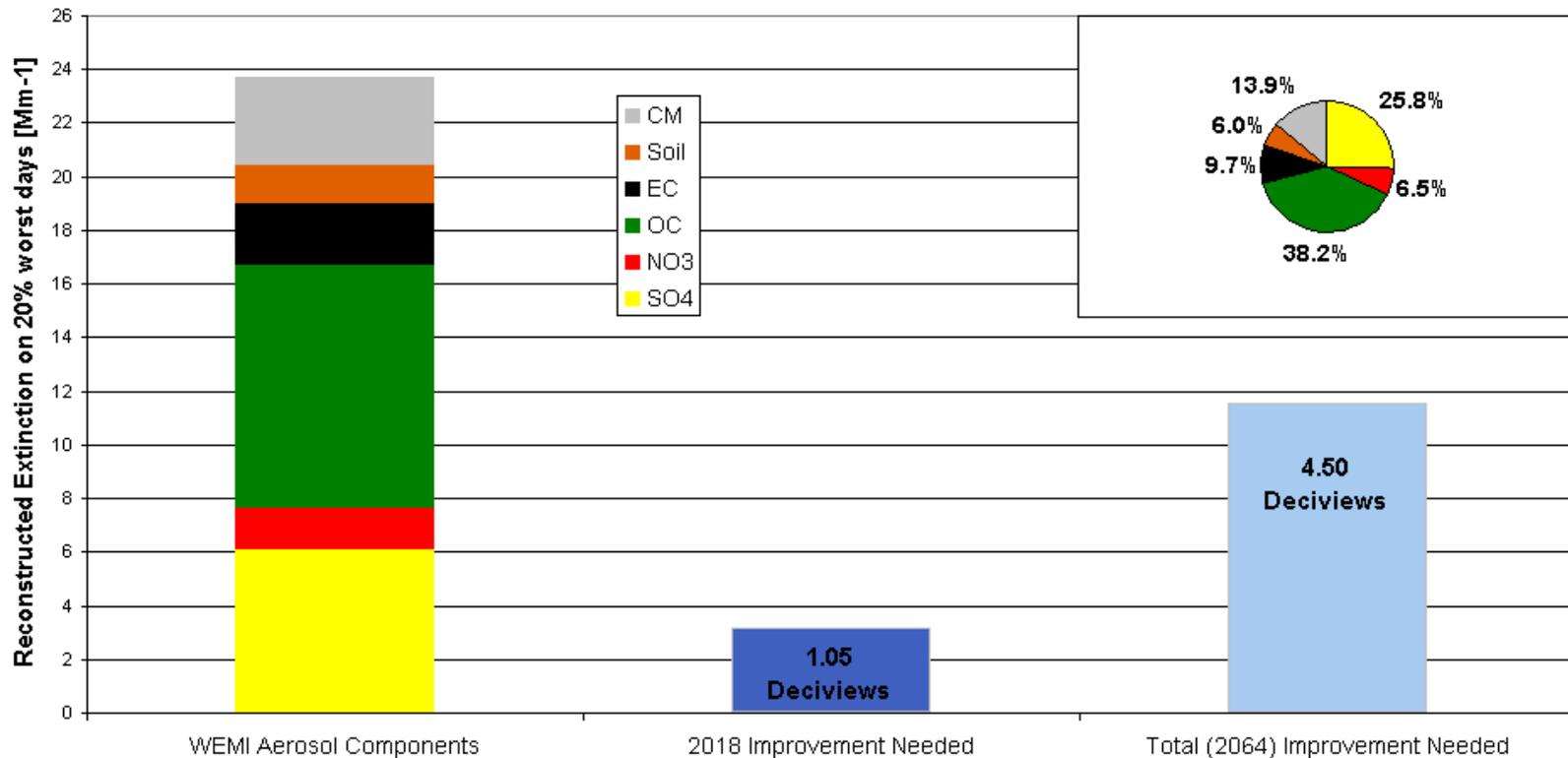
Mesa Verde Visibility Information

**Mesa Verde National Park
Visibility Improvement Needed by 2018 & 2064
Compared to Aerosol Components (2000-2003)**



Weminuche Wilderness Visibility Information

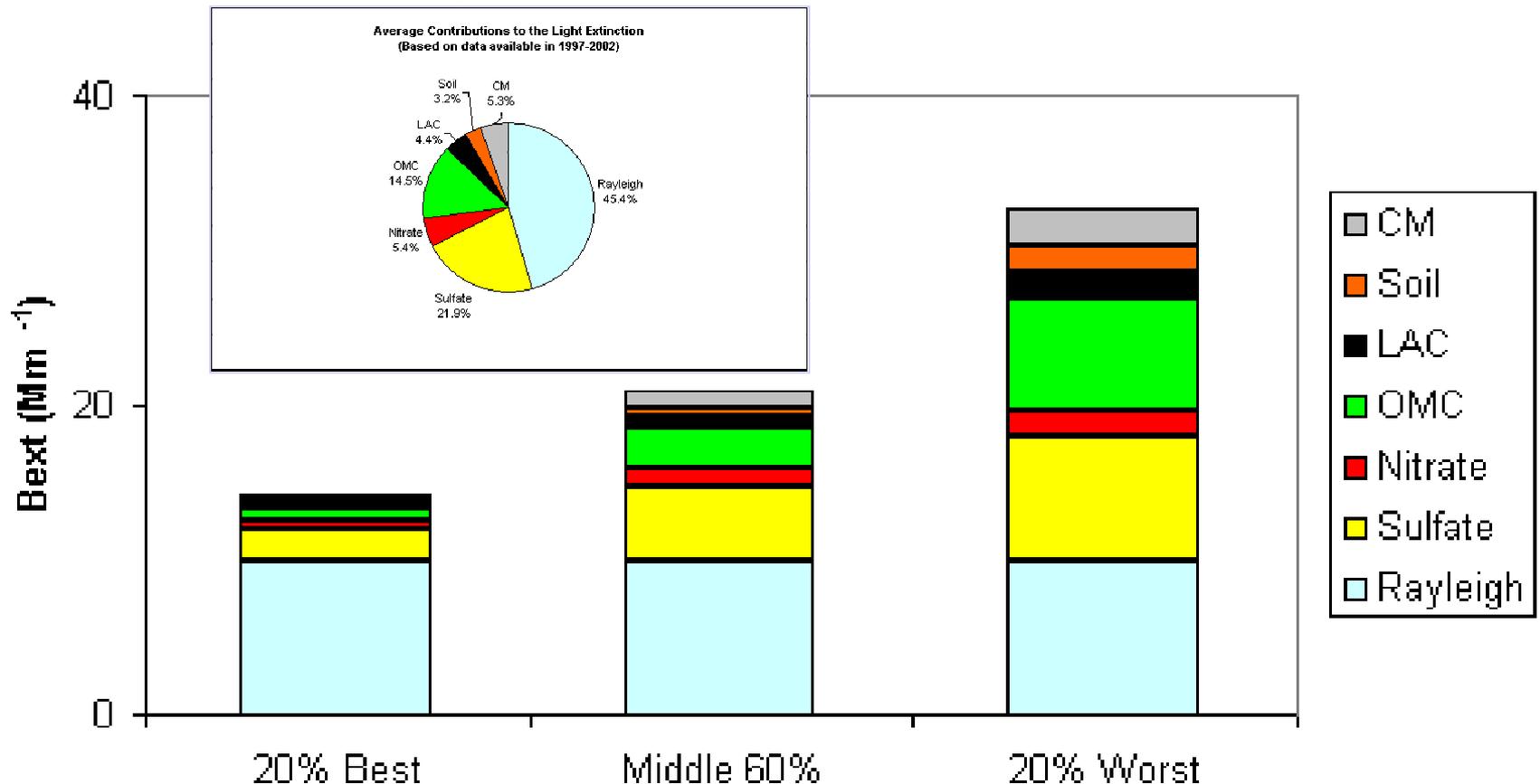
**Weminuche Wilderness Area
Visibility Improvement Needed by 2018 & 2064
Compared to Aerosol Components (2000-2003)**



(Same for La Garita Wilderness)

San Pedro Parks Visibility Information

**Average Light Extinction in 20% Best, Middle 60% and 20% Worst Days
(Based on data available in 1997-2002)**



Improving Visibility in the Four Corners Region

- Major sources of visibility-impairing pollutants:
 - Combustion of fossil fuels for heat and power
 - Other burning, such as residential woodburning, incineration, and forest fires
 - Emissions from industrial/commercial processes
 - Evaporative emissions and solvent usage
 - On-road and off-road vehicles
 - Fugitive dust from unpaved roads
- All states are working on visibility improvement plans as we speak – Task Force ideas are needed!

Existing Four Corners Air Quality Initiatives

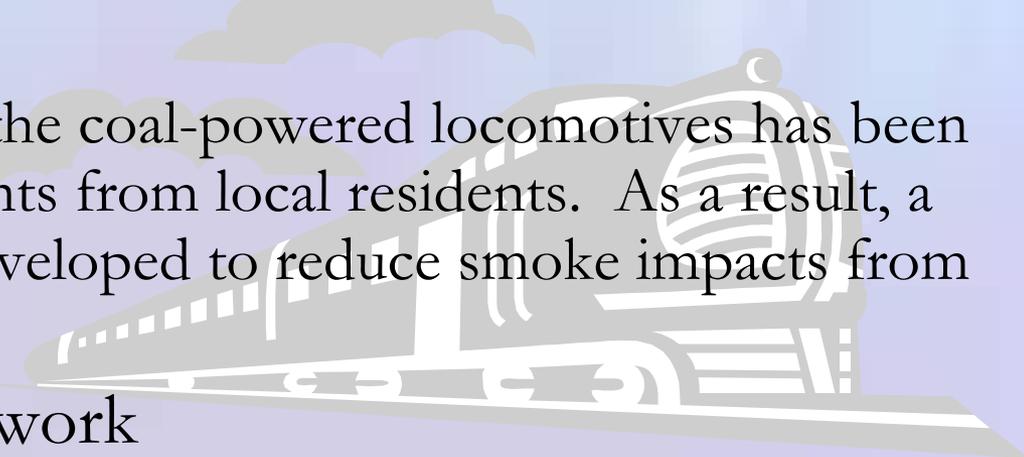


New Mexico

Four Corner Initiatives

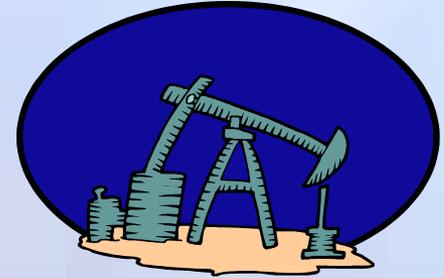
- San Juan County Early Action Compact
 - An agreement between EPA, local and State officials to implement a local air quality improvement plan to attain the 8-hour ozone standard and defer the effective date of nonattainment designation.
- San Juan VISTAS
 - VISTAS stands for Voluntary Innovative Strategies for Today's Air Standards. San Juan VISTAS is a voluntary emission control program. The purpose is to identify, promote, and implement cost-effective technologies and Best Management Practices to reduce nitrogen oxides and volatile organic compounds.

Colorado Four Corner Initiatives

- Emissions Control System for the Durango and Silverton Narrow Gauge Railroad
 - The smoke generated by the coal-powered locomotives has been a chief source of complaints from local residents. As a result, a plan was cooperatively developed to reduce smoke impacts from the train.
 - Mercury Deposition Network
 - Actively monitoring & analyzing mercury emissions and impacts in SW Colorado. Primary efforts include supporting the air deposition research being conducted around two known mercury-impacted water bodies. An investigation of mercury deposition at Sanchez Reservoir (located in the San Luis Valley) is in the planning stages.
- 

Some Regional & National Initiatives

- Regional Oil and Gas Initiative
 - Support environmentally responsible & energy efficient oil and gas development
- Regional Haze
 - Regional haze is the term used to describe visibility impairment that results from air pollutant emissions from numerous sources, not just from emissions from a single source or small group of sources.
 - States must make reasonable progress at each Class I area toward the ultimate goal of natural conditions by 2064.



Four Corners Air Quality Task Force

Task Force Goals & Objectives



- To identify a range of strategies to address air quality issues in the Four Corners from current & future emission sources.
- To conduct (or use available) scientific analyses on which to base proposed strategies for controls or mitigation measures.
- To produce a document that includes the information gathered and the options for action.
- To provide this document to the Interagency Policy Oversight Group.

Task Force Meeting Schedule

- Quarterly meetings in the Four Corners area:
 - November, February, May, August
 - 2nd Wednesday of the above months; Time TBD
 - Next Task Force Meeting February 8 in Durango
- Work Groups will meet/hold conference calls between Task Force meetings as needed to accomplish their assignments.
- Task Force Project will take up to 2 years: December 2007



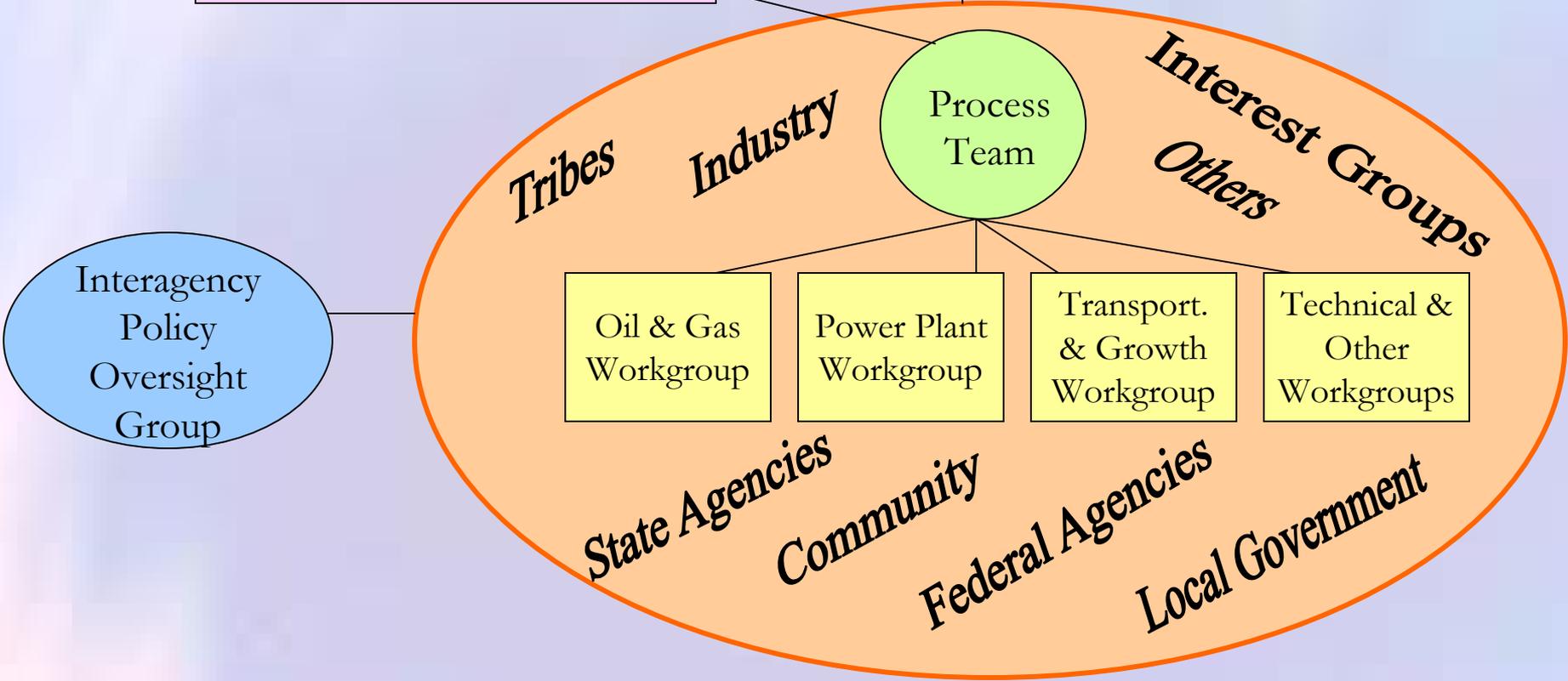
Task Force Work Plan

- **November 2, 2005:** Kick-off Meeting
- **February 2006:** Work Group Plan Complete
- **March 2006 through April 2007:** Technical Work Groups Develop Options
- **May 2007:** Final Work Group Products
- **August 2007:** Draft *Task Force Report with Options*
- **November 2007:** *Task Force Report* Complete

State of Colorado
State of New Mexico

Project Manager/Facilitator
Project Coordinator

**Four Corners Air Quality
Task Force**



Task Force Entities

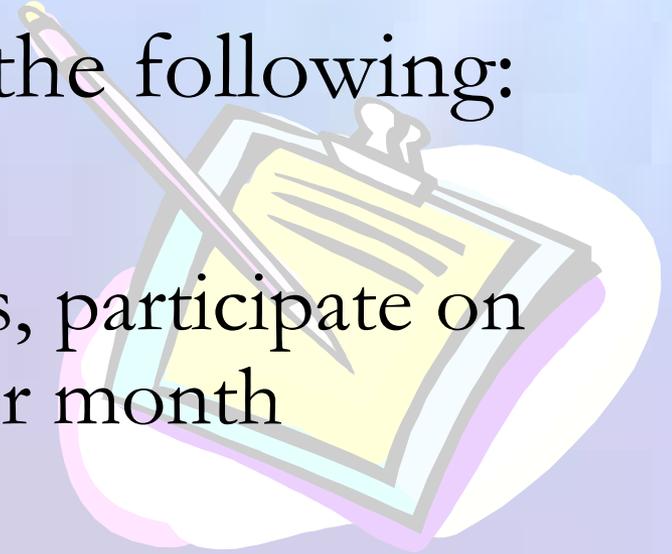
- Work Groups:
 - Role: To develop work products as needed by the Task Force.
- Policy Oversight Group:
 - Role: On-going interagency cooperation on air quality planning and management; *group who will make final recommendations*
- Process Team:
 - Role: *Manages process aspects of* Task Force and provides guidance to the Project Manager
- Project Manager/Facilitator:
 - Role: Manage the process and meetings of the Task Force with the Process Team
- Project Coordinator:
 - Coordinate Task Force; provide technical assistance *especially to work groups*; and coordinate with Project Manager

Task Force Call to Action

- Please sign up for one of the following:
 - **Task Force Member:**

Attend quarterly meetings, participate on work group, 5-10 hrs per month
 - **Interested Party:**

May attend meetings, receive notice of meetings & website updates, may submit comments via web
- *Sign-up sheets are at the door on your way out.*



Task Force Communication

- Four Corners Air Quality Task Force Website housed at:
 - New Mexico Environment Department – Air Quality Bureau
- Website address: www.nmenv.state.nm.us/aqb/4C
- All Task Force information will be posted here
 - Meeting Time & Locations
 - Work Group Products
 - Other related information



Task Force Contact Info

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**Thank you for your interest
in air quality!**