

National Park Service



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Vision and Guiding Principles for National Air Program

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May 14, 2009

Overview of Presentation



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- General observation
- Basis for perspective
- What's a good start, but vague or needs more attention
- What's missing
- Parting shots

General Kudos



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- Vision on target
- Peripheral vision well-focused
 - Move toward integrated, multi-pollutant approach
 - Recognition of climate change overlay
- Guiding principles broad enough to encompass issues and strategies
- Surprising amount of detail given diverse interests represented in CAAAC
- Sticky and complex topics fairly vague

NPS Perspective: Non-Urban Monitoring Network

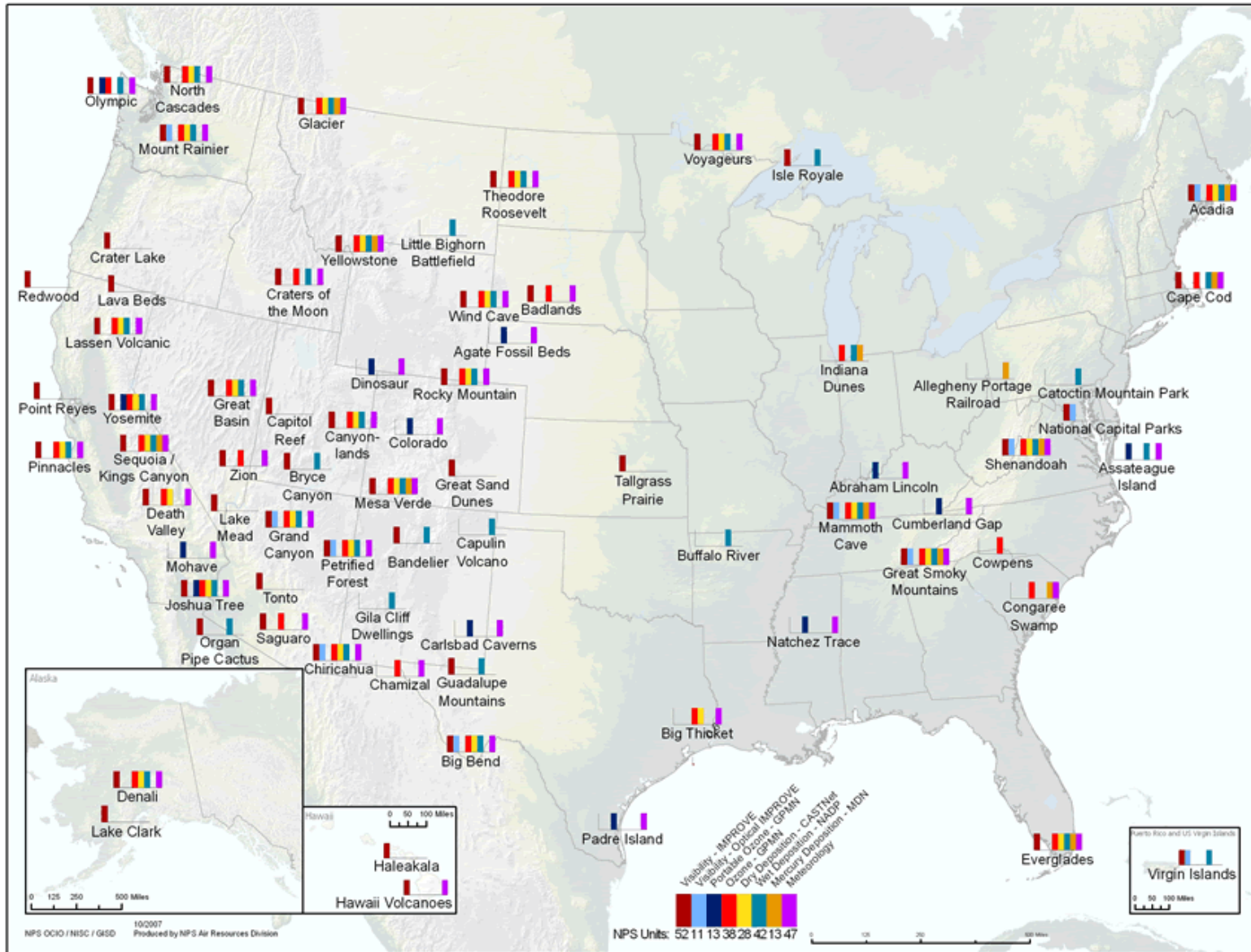
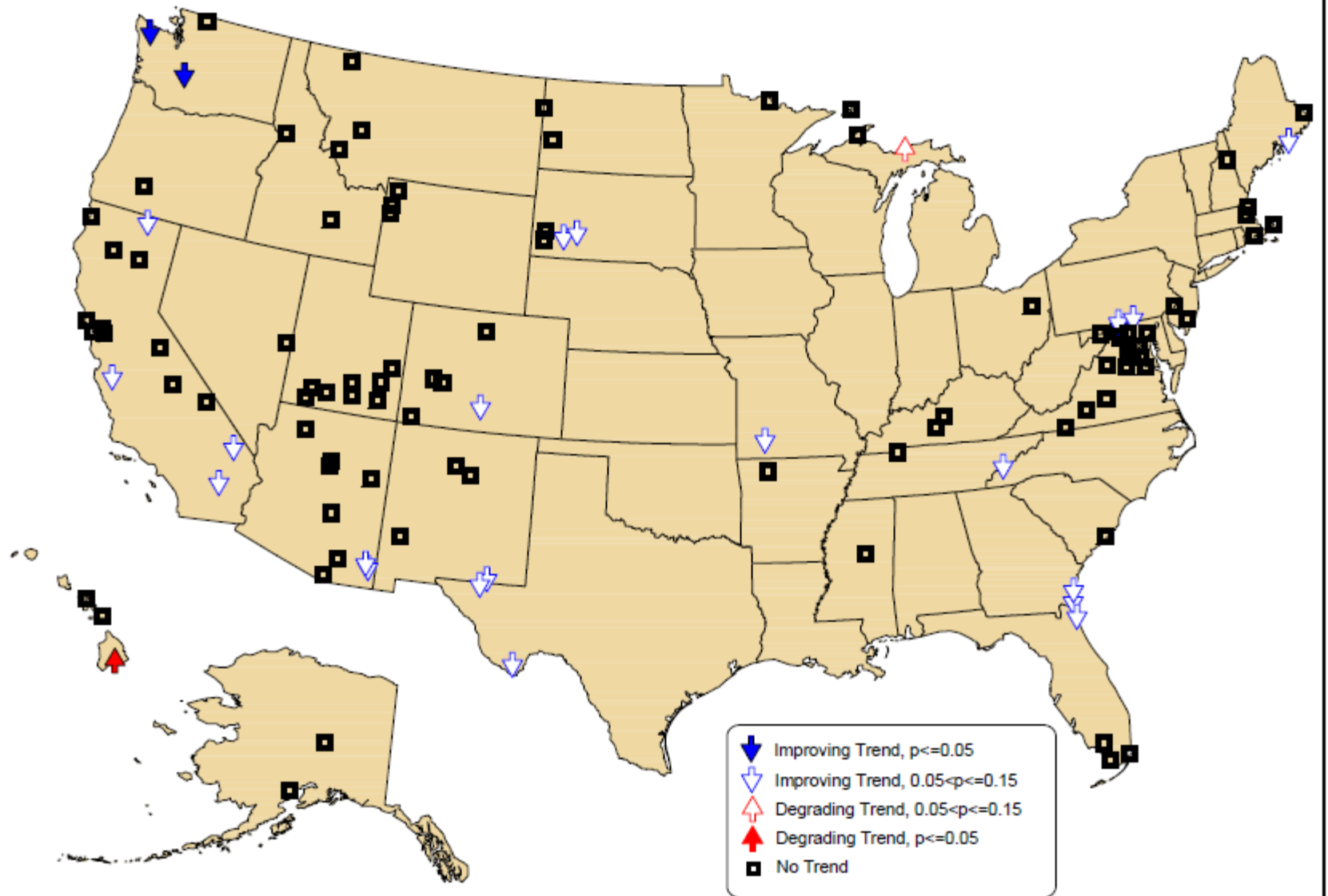


Figure 2.
Trends in Haze Index (Deciview) on Haziest Days, 1998-2007



Continuum of Ecological Impacts from Air Pollution

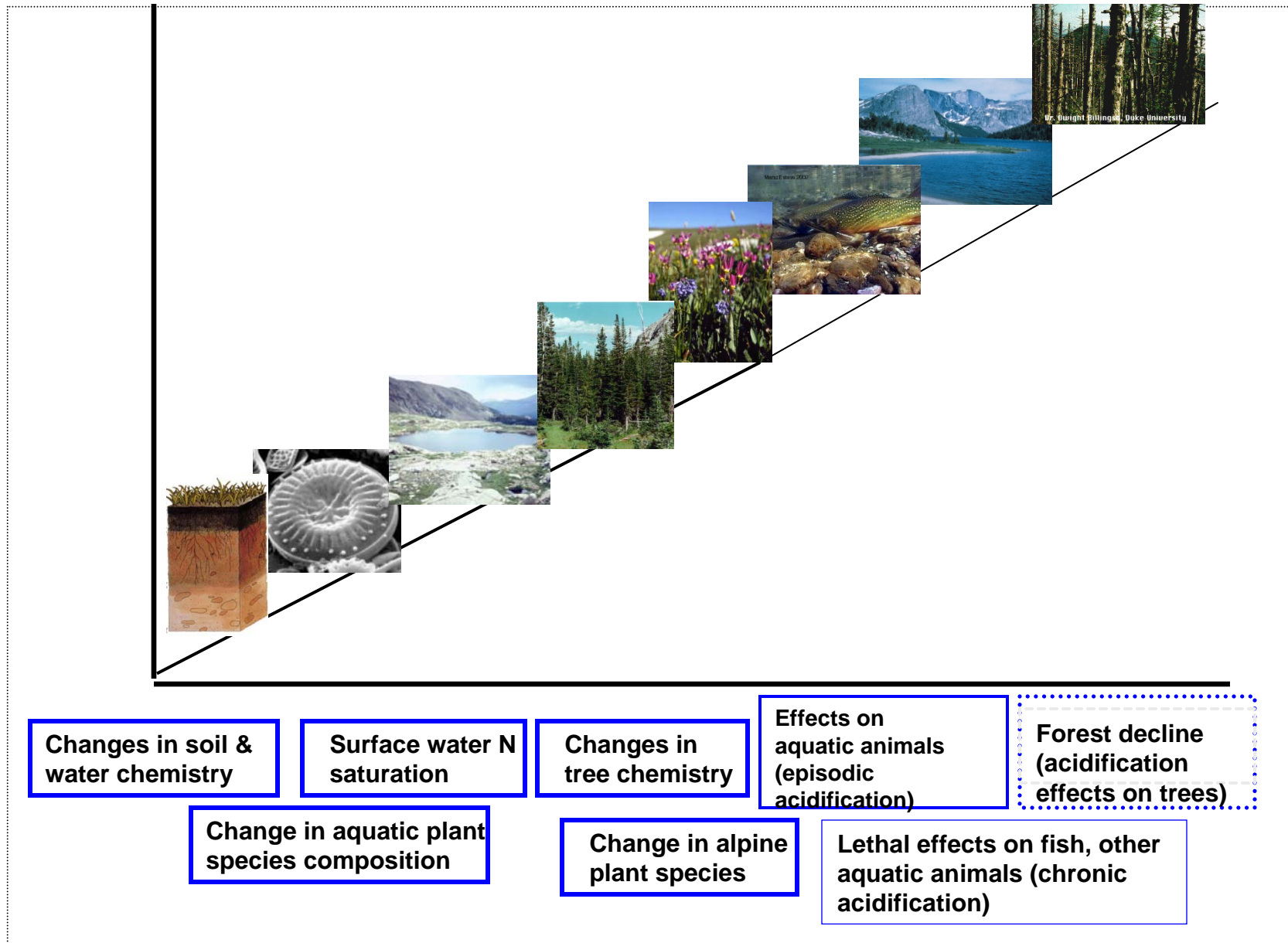
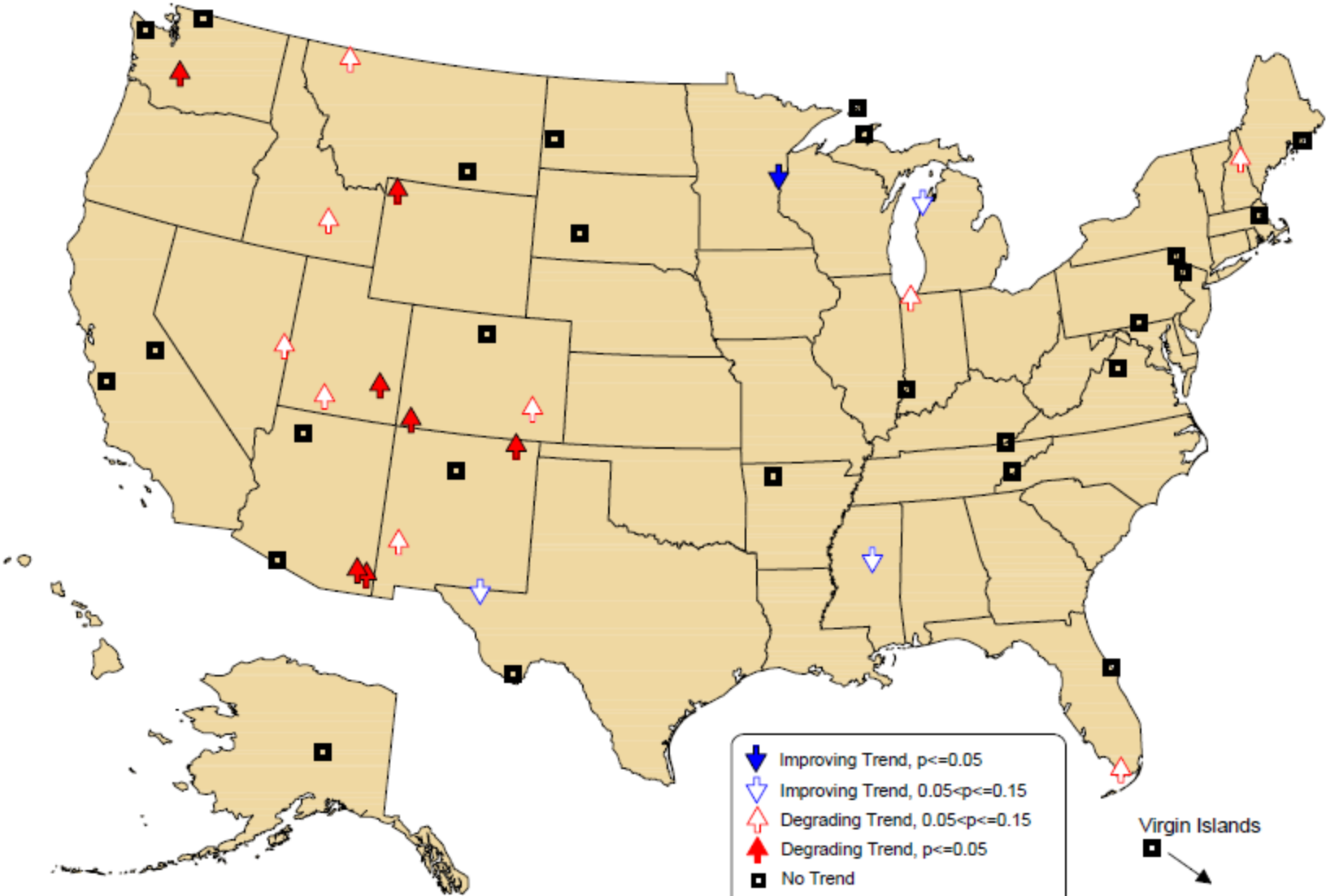
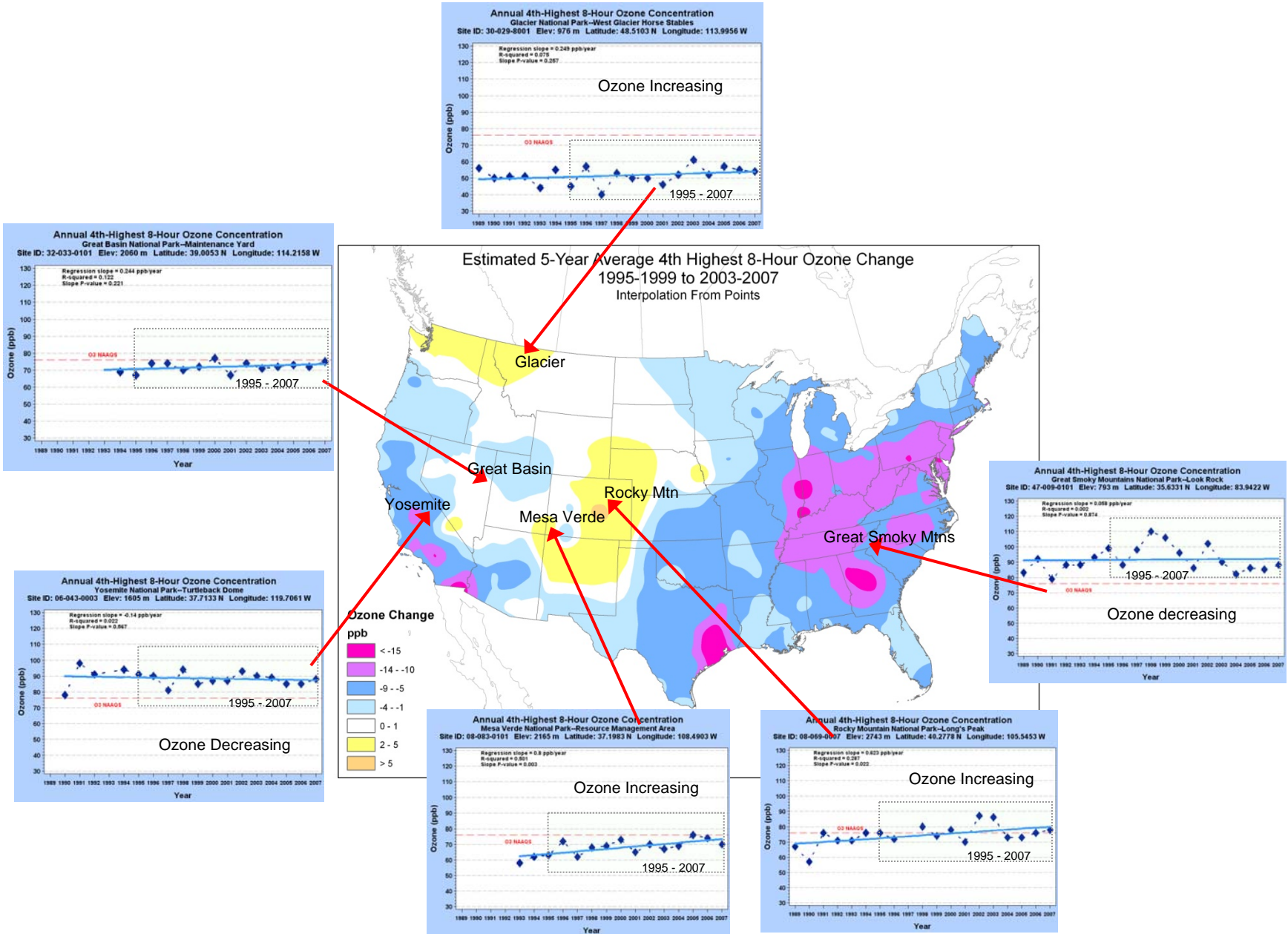


Figure 5.
Trends in NH₄ Concentrations in Precipitation, 1998-2007



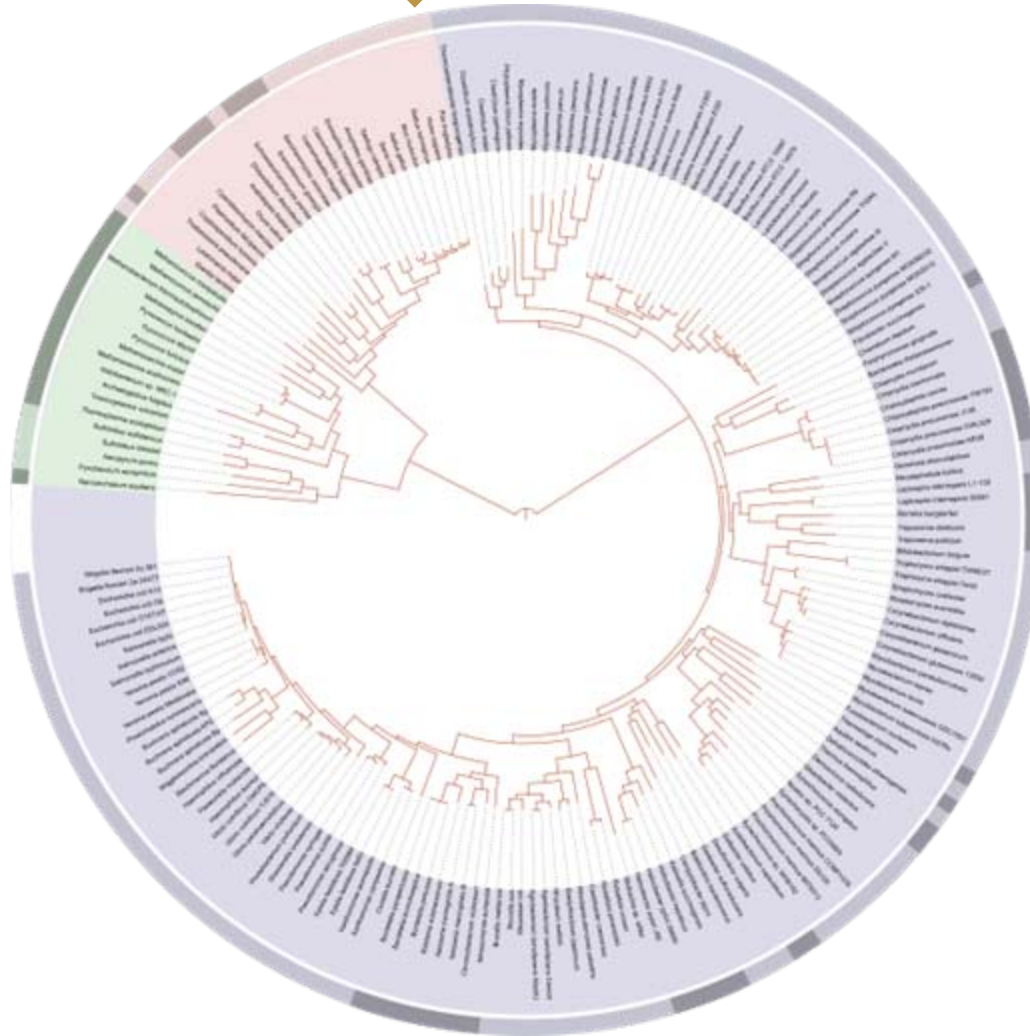
Comparison of Ozone Trend Approaches at Selected Locations



Our Place on the Planet



We are here



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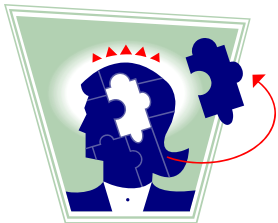
Goals, results & accountability



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- ✓ Need for goals linked to ecological impacts
- ✓ Greater collaboration in planning & implementation



- Performance measures, accountability in protecting clean(er) air, including ecological health
- Understand and embrace connection between people, ecological health and ecosystem services

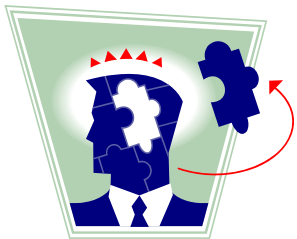
Appropriate tools, including innovation



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- ✓ Technology for source categories – nationally
- ✓ Multi-pollutant concept
- ✓ Pollution prevention



- Multi-pollutant implementation
- Watch out for multi-media impacts

Conduct & use research



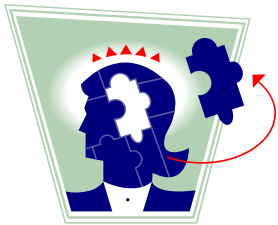
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✓ Emissions, monitoring and research all important, but

➤ Don't neglect

- Emerging pollutants (NH₄) and multi-stressor effects
- Predictive needs
- Technological & fuel innovations
- Characterization of economic and ecosystem service benefits



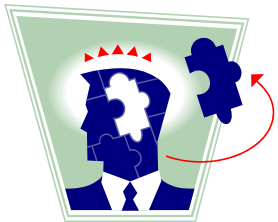
Build capacity & partnerships



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- ✓ It takes more than EPA and States
- ✓ Money, people, guidance
- ✓ Recognition that others may be better positioned to lead



- “Improved understanding” should be coupled with responsiveness to science, incorporation into planning & accountability metrics

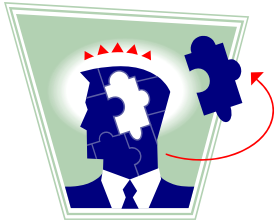
Public education & involvement



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- ✓ Access to public-friendly info and action-oriented messages



- Emphasize multi-media benefits of pollution control and prevention and behavior adjustments

What About...



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- Geographic scale of air quality problem
 - Regional, interstate, national and global
 - Clarify roles and responsibilities
 - Institutional mechanisms (& support for them)
- NAAQS dilemma
 - Science vs practicality, honesty vs hope of compliance
 - How to ensure accountability and diligence/ push the envelope without penalizing failure to accomplish impossible,

Consider multi-media connections



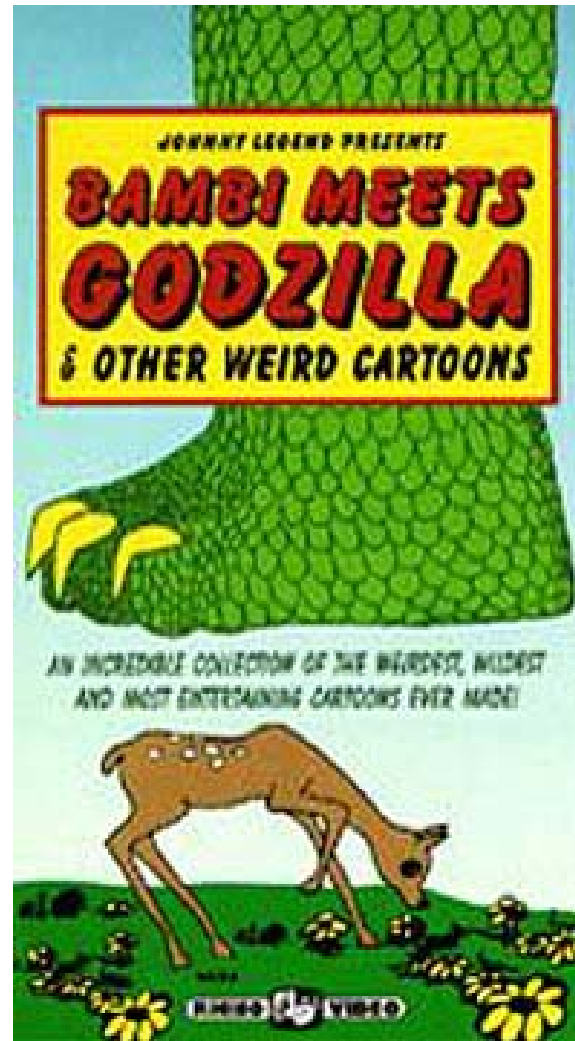
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- Air disperses, transforms and deposits pollution to:
 - Water (deposition)
 - Wildlife (bioaccumulation)
 - Soil (nutrient loading, leaching)
- Control strategies to reduce risk in one media may increase risk in another (e.g., waste management, renewable energy)
- Connections between programs within EPA and in States and Tribes to avoid redundant, counter-productive, ill-informed actions
- Optimization requires coordination and dialogue
dialogue needed

Climate Change Connection



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Links and Symbiosis



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- Need for resiliency
 - Criteria pollutant control programs improve health
- Some criteria pollutants = GHGs, others interact with GHGs
- Synergistic and/or confounding impacts
 - Multi-media, multi-pollutant
 - science, policy and management issues **NEED** to be addressed
- Advance opportunities for technological innovation

Parting Shots



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Be guided by constellation of ideas, not just the North Star



For More Information



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<http://www.nature.nps.gov/air>