
Collaboration for Regional Haze and Fine Particle Planning

NYSERDA Conference on Environmental
Monitoring, Evaluation, and Protection in NY

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MARAMA

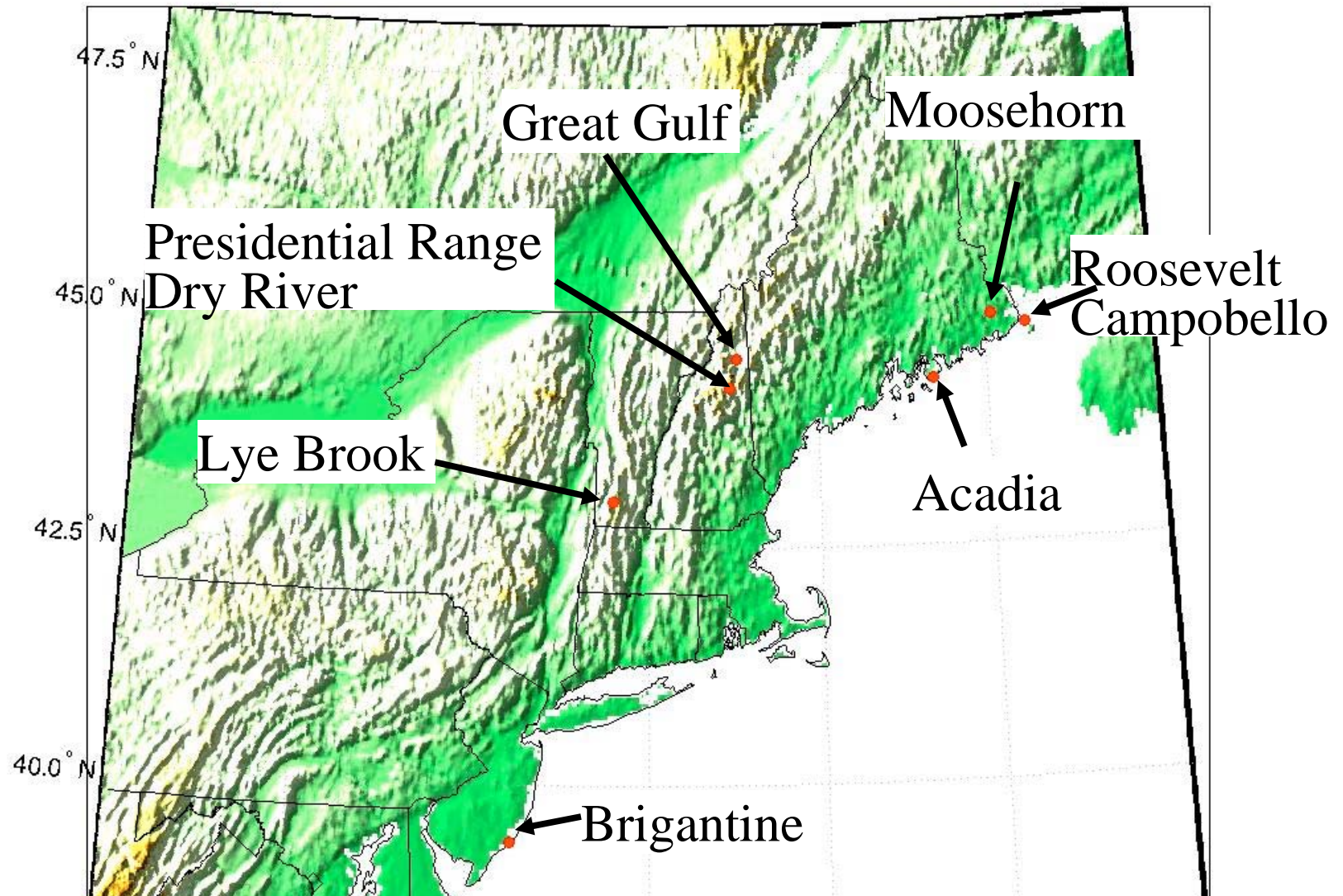
Topics

- Key Regional Haze SIP Requirements
- Ten Questions Visibility and PM2.5 Planners Want Answered
- Regional Collaboration--Visibility SIPs
- Current work & next steps

Regional Haze SIP Goal

“...the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from man-made air pollution.”

(CAA Sec. 169)



Class I areas near New York

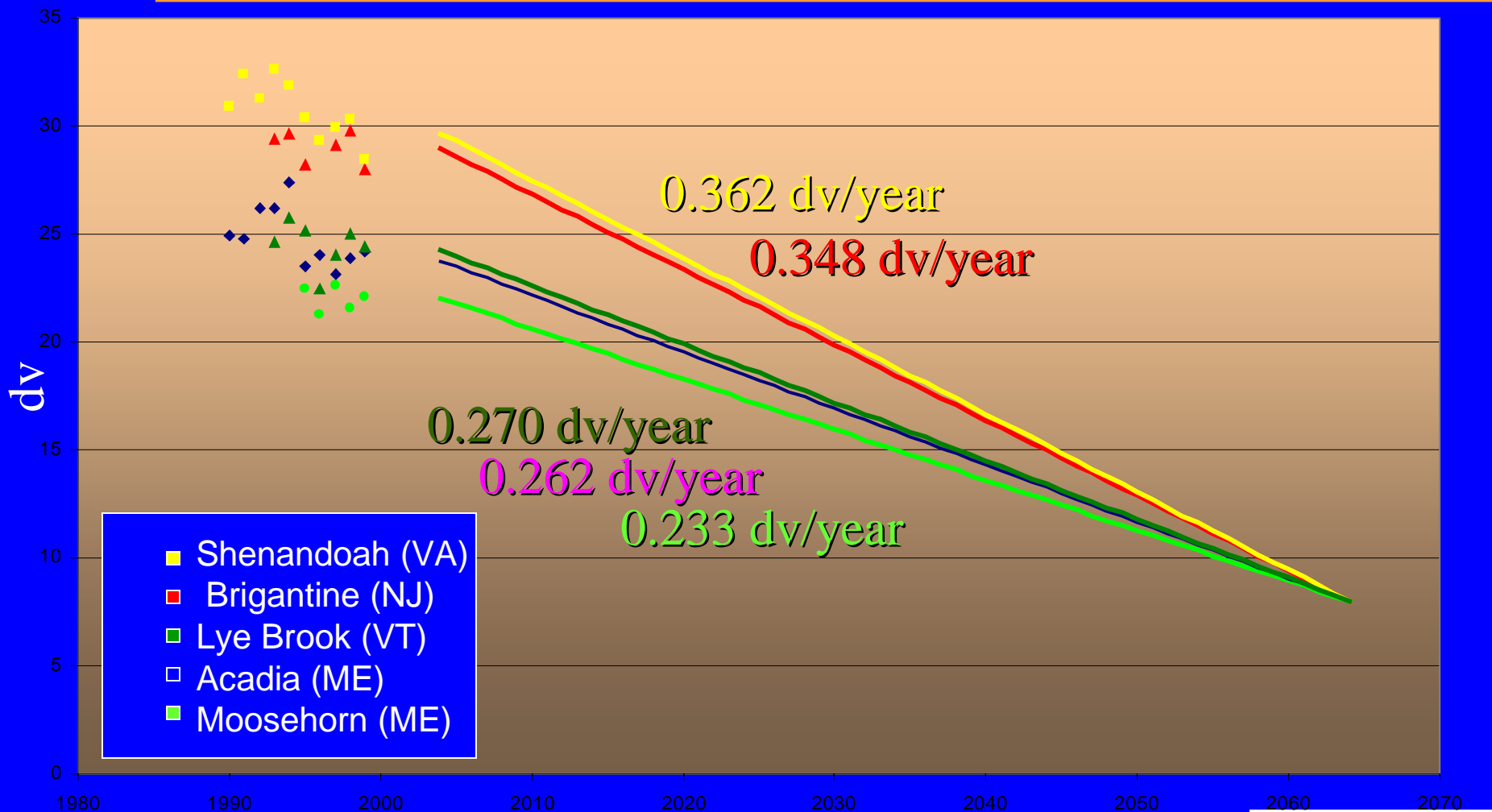
Fine particles = sulfates + organics + nitrates +
ammonium + elemental carbon+ soil dust

View from Look Rock, Great Smoky Mtns., TN

Key Regional Haze SIP Requirements

- Calculation of Baseline & Natural Visibility Conditions
- Reasonable Progress Goals
- BART (Best Available Retrofit Technology)
- Long-term Strategy (includes control measures needed to achieve goals)

Baseline to Natural by 2064



Schedule

- First SIP due ~ 2007
- First increment of progress by 2018
- Five year increments
- 2064 natural conditions

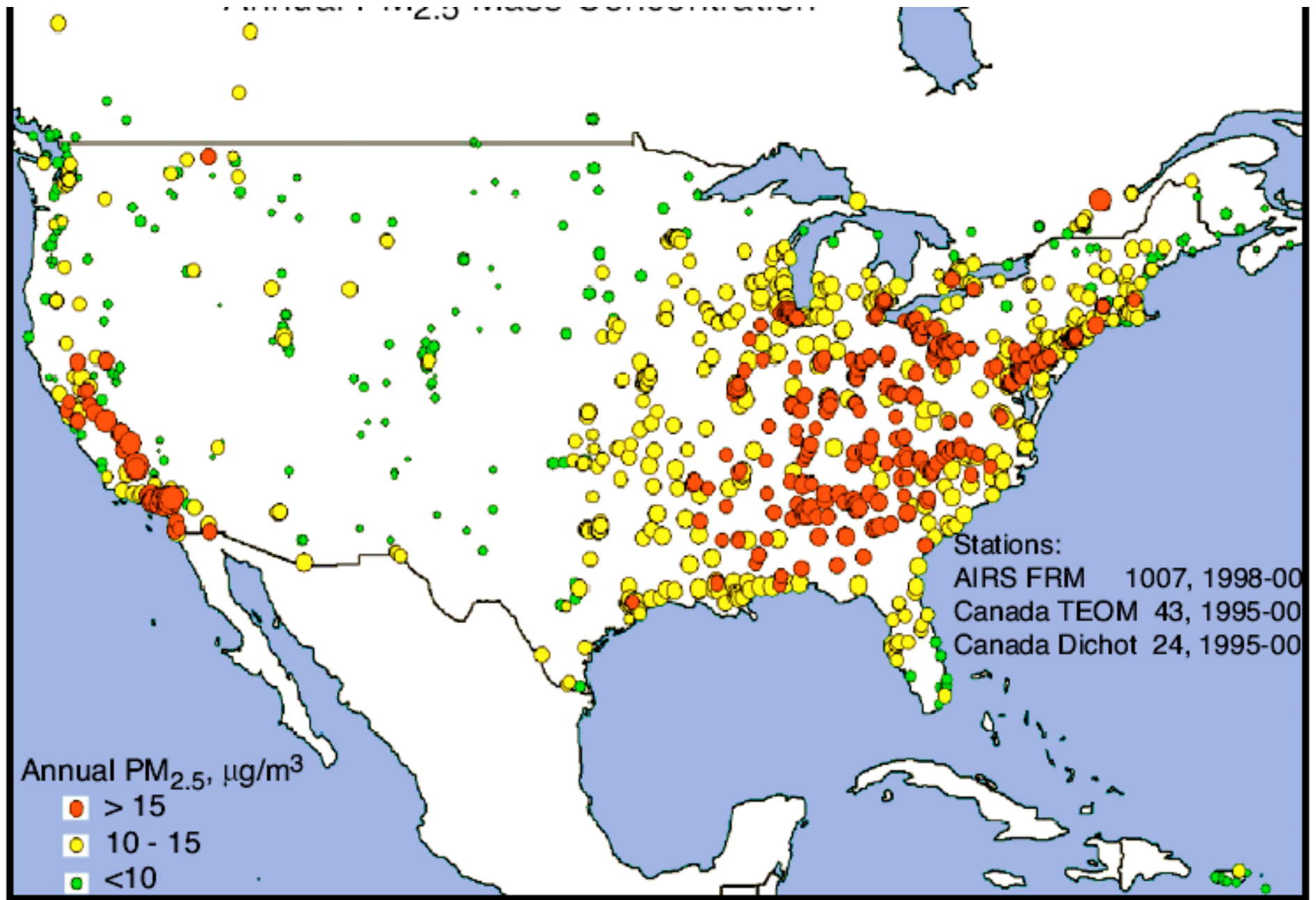


Figure 6.7. Average $PM_{2.5}$ concentrations. The U.S. data are from FRM monitors at sites in the EPA AIRS database for July 1998 through July 2000. Canadian data are from TEOM and dichotomous samplers operating from 1995 through 2000. The currently available data from sites in Mexico represented less than one year of

Regional Contribution

- Large for both sulfates and organic carbon
 - The principle components of $PM_{2.5}$ in the eastern US
- All Class I areas are affected by out-of-state sources

Basic Questions

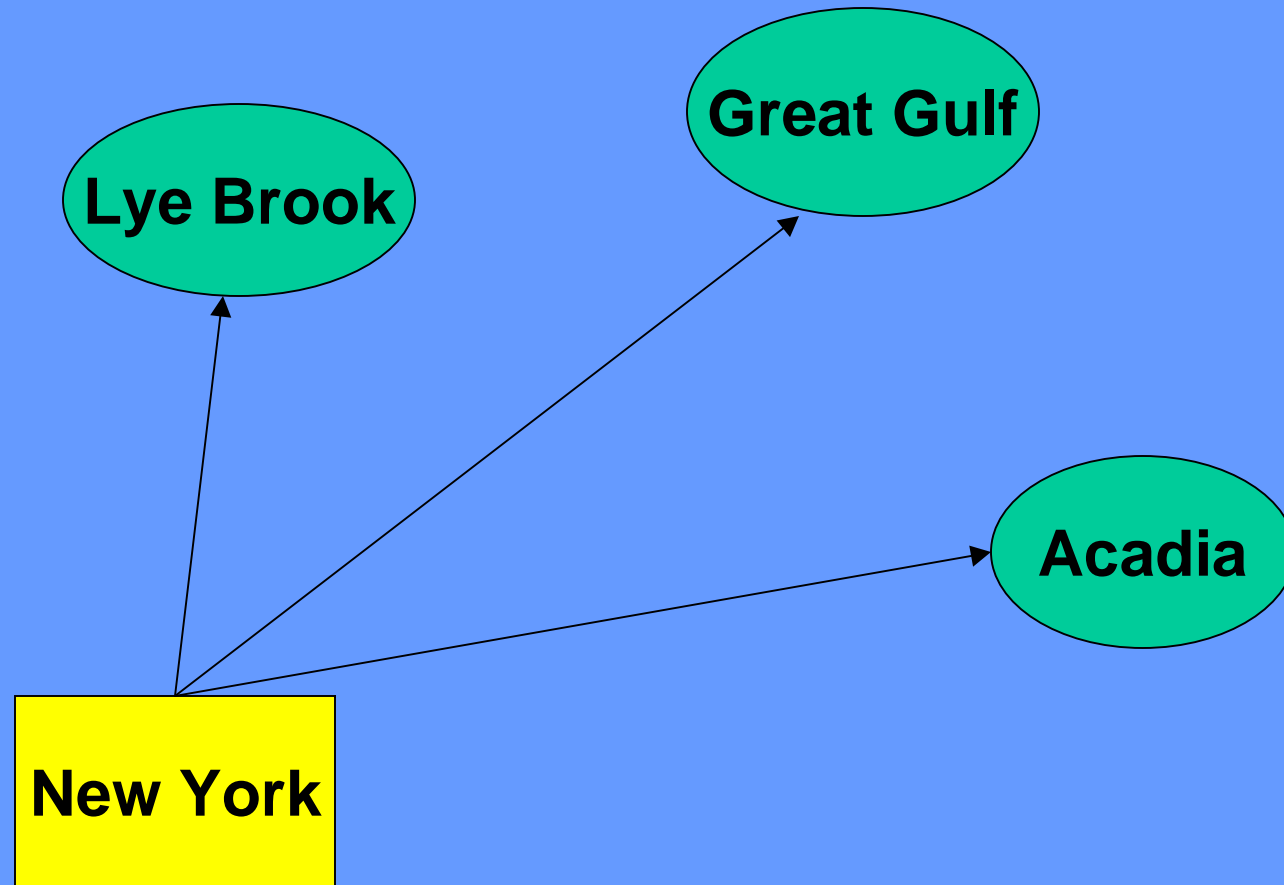
- What kinds of sources are causing visibility impairment and high PM levels?
- Where are those sources located?
- What kinds of emissions controls in my state will effectively reduce those emissions?

Additional Questions

- What help can I get from other states and EPA?
- How soon can controls be adopted?
- At what cost?
- In the mean time, how can I provide information to the public?

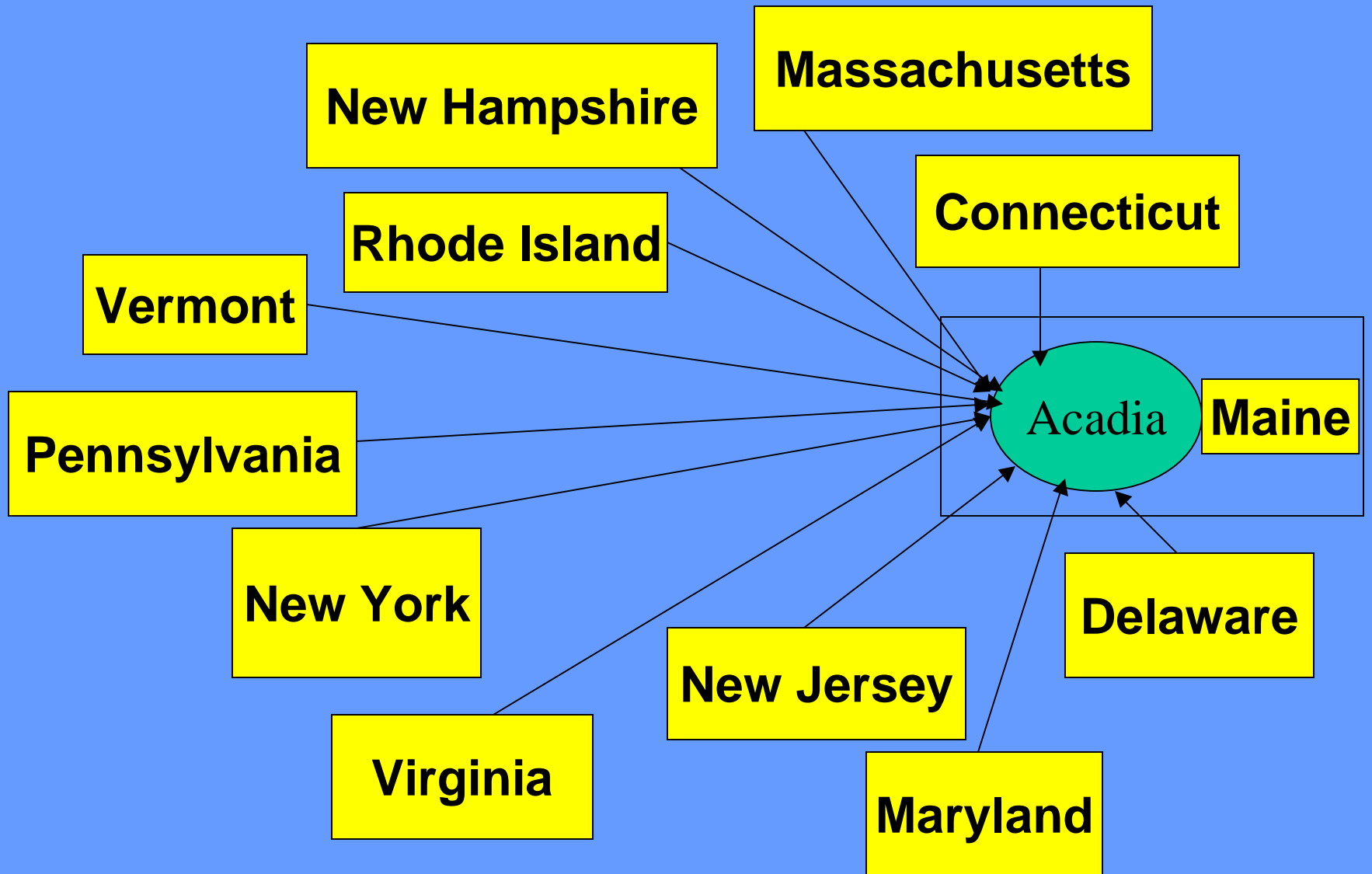
More Detailed Questions

- Do we know enough to predict high PM levels and to estimate the results of controls?
- Do we understand enough to identify and control carbon sources?
- Should we modify our monitoring network?



**New York Emissions Affect Class I
Areas in Other States**

Other States Affect the Same Areas



Collaboration among

- States affecting the area
- Tribes
- Federal land managers & EPA
- Affected sources
- The public

Purposes of Regional Process

- Identify sources contributing to haze
- Set Goals for Class I areas
- Coordinate BART determinations
- Assess adequacy of control options
- Develop regional control measures
- Coordinate among regions

Regional Planning Orgs.

- MANE-VU
- VISTAS
- Midwest RPO
- CENRAP
- WRAP

MANE-VU Members

- Maine
- New Hampshire
- Vermont
- Massachusetts
- Connecticut
- Rhode Island
- New York
- New Jersey
- Pennsylvania
- Delaware
- Maryland
- District of Columbia
- Penobscot Nation
- St. Regis Mohawk Tr.
- EPA, NPS, USFS, USF&WS

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MANE-VU Staff

- OTC

- Chris Recchia, Exec. Director

- NESCAUM

- Gary Kleiman, Technical lead

- MARAMA

- Serpil Kayin, Technical lead

Some MANE-VU Products

- Regional Haze summary report
- Additional monitoring
- CAMNET
- Source apportionment study
- Inventory improvements
- Reports on potential BART sources

Current MANE-VU Projects

- Additional data analysis
- Inventory improvements
- Model sensitivity analysis
- Contribution assessment report
- SIP Template
- Web-based tools for trajectory analyses & event tracking

Next Steps

- Must reduce SO₂ emissions
 - Will reduce both urban and rural sulfates
 - In-state and neighboring state SO₂ reductions greatest impact
 - Transport rule/multi-p bill essential

Other controls needed

- Year-round NO_x reductions
- Reduce diesel emissions
- Control various kinds of fires and combustion

More information

- <http://www.manevu.org/>
- <http://www.marama.org>
- <http://www.nescaum.org>
- <http://www.epa.gov/oar/visibility/>
- <http://www2.nature.nps.gov/ard/>