

SESSION I

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Three Agencies in One

- State and private forestry.
- National Forest Systems.
- Research.

Three Areas of Focus

- Smoke/Fire Emissions
- Class 1/Wilderness AQRV's
- Carbon Management

Fire Smoke

- Meteorology for Fire Behavior and Emissions
 - Urban Interface
- Transport and Dispersion of Smoke
 - Models
 - Remote Sensing
- Atmospheric Chemistry

Models used: SASEM, NFS PUFF, TSARS plus, PB Piedmont, CalMet, CALPUFF, Models3/CMAQ

AQRV's (PSD and NEPA Process)

- Visibility
- Acidification of Alpine Watersheds
- Ozone Damage
- Change in Species/Community/Productivity

Models used: Magic (watershed); EPA Guidance, other.

Carbon Management

- **Managing Forest and Rangelands for Carbon**
- **Fire/Disease/Use**
- **Inventory/Remote Sensing**
- **Feedback Loops**

Models used: Century; GCM's; Fire Ecology; others

Issues

- **Declining Research Base/Intellectual Resources**
1200 scientists (1970's) to 600 scientists Today
- **Lack of Computing Base**
 - **O/A System only**
 - **Purchase/Support Restriction**
- **Issues much more complex and Controversial**
- **Need Models**

Simple to Complex
Operations to Research
Atmosphere to Atmosphere/Ecosystem
Local to Global
1 hour to Century