7519

KS Up to Date 100200

Continuity

2002 Contract w/ KSTATE

KONZA PRAIRIE - OWNED BY NATURE CONSERVANCY

Mark

JAN 2011

KS Pbm

Mark Evangelista

~~Jim Sherac~~

~~Gary~~

Gary → convert ← not changing QA

Special Study monitor

Jim

Gary

Mark

Chet

Neal

Martha

Send R7 requesting redesignation of Monitor

Clean Air Status & Trends Network (CASTNET)

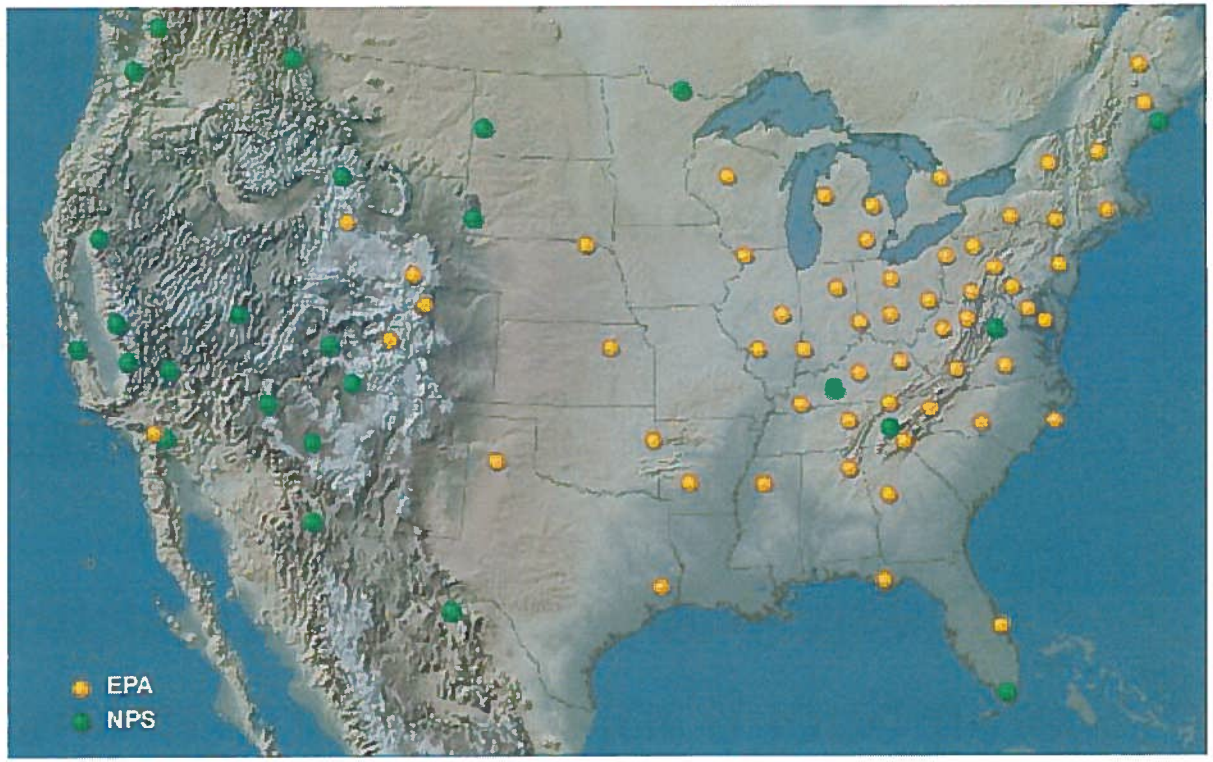
National Air Quality Conference
Ambient Monitoring 2012
Denver, Colorado
Tuesday, May 15, 2012

Primary purposes of the network

- Monitor the status and trends in regional air quality and atmospheric deposition
- Provide information about complex atmospheric chemistry in rural areas.
- Provide information on the contribution of atmospheric pollution to ecosystem conditions
- Provide measurements for validating and improving atmospheric models

Current CASTNET Monitoring Program

- Operating since 1987
- 83 sites in 44 states/provinces (2 collocated)
- Weekly ambient concentrations
- Continuous (hourly)
- Dry deposition is estimated using an inferential model



- Sites are located in rural and often ecologically important locations, including 25 National Parks

* Meteorology at all NPS sites and 4 EPA sites (BEL116, BVL130, CHE185, PAL190)

What Makes CASTNET Unique?

- Consistent measurements made for a long time.
- Located in rural areas far from major emission sources.
- Continuous measurements
- Attempts to measure dry deposition
- The cost per site is much lower compared to other continuous monitoring networks.
- Collaboration with other agencies

Ozone

- CASTNET is the primary source of rural O_3 monitoring data for the Agency
  - Provides data where the urban AQS network does not
  - Used to asses benefits of NOx Budget Program
  - Supports development of secondary standards

- Recently, CASTNET monitors were requested to become 40 CFR Part 58 Compliant
  - All CASTNET sites are submitting data to AQS (started in 2011)
  - All CASTNET sites are 40 CFR Part 58 compliant

Efforts to Attain 40 CFR Part 58 Compliance

- All 78 CASTNET ozone monitoring sites became Part 58 compliant in 2011
- March 2012 – CASTNET summit with EPA, NPS, AMEC, and ARS - discussed the final edits to the CASTNET Plan for Part 58 Compliance document
- April 2012 - CASTNET Plan for Part 58 Compliance v.1.012 was released to EPA regions and OAQPS
- May 2012 – 2011 CASTNET Ozone Network Summary Report is being finalized
- May 2012 – AQS AMP 255 and AMP 450 reports are being finalized

40 CFR Part 58 Compliance

Benefits to states:

- Better confidence in rural ozone measurements
  - Now that CASTNET data are subject to Part 58 compliance; their data are subjected to the same site performance audits as SLAMS sites
  - Regular NPAP, PE, and TSA audits
- Additional monitoring data
  - Better capacity to compare regional data (e.g., exceptional events) with nearby SLAMS sites
- Cost sharing with site audits

What Does the Future of Monitoring Look Like?

- Rural monitoring locations – CASTNET is well-positioned for new Agency monitoring needs (e.g., potential new NAAQS Ozone and Secondary SOx that could affect rural areas).
- Further substantial regional and national SO_2 & NO_X reductions:
  - –Acid Rain Program
  - –CAIR and CSAPR
  - –Utility MACT
  - –Ozone NAAQS
  - –PM NAAQS
  - –Secondary SOx/NOx NAAQS?
  - –Potential multi-pollutant control legislation?
- Thinking bigger – ammonia? Total reactive N?
- And bigger – coupled biogeochemical cycles?
  - –C, N, S – separate in policy, but not in nature

This will be discussed in more detail later in the presentation