

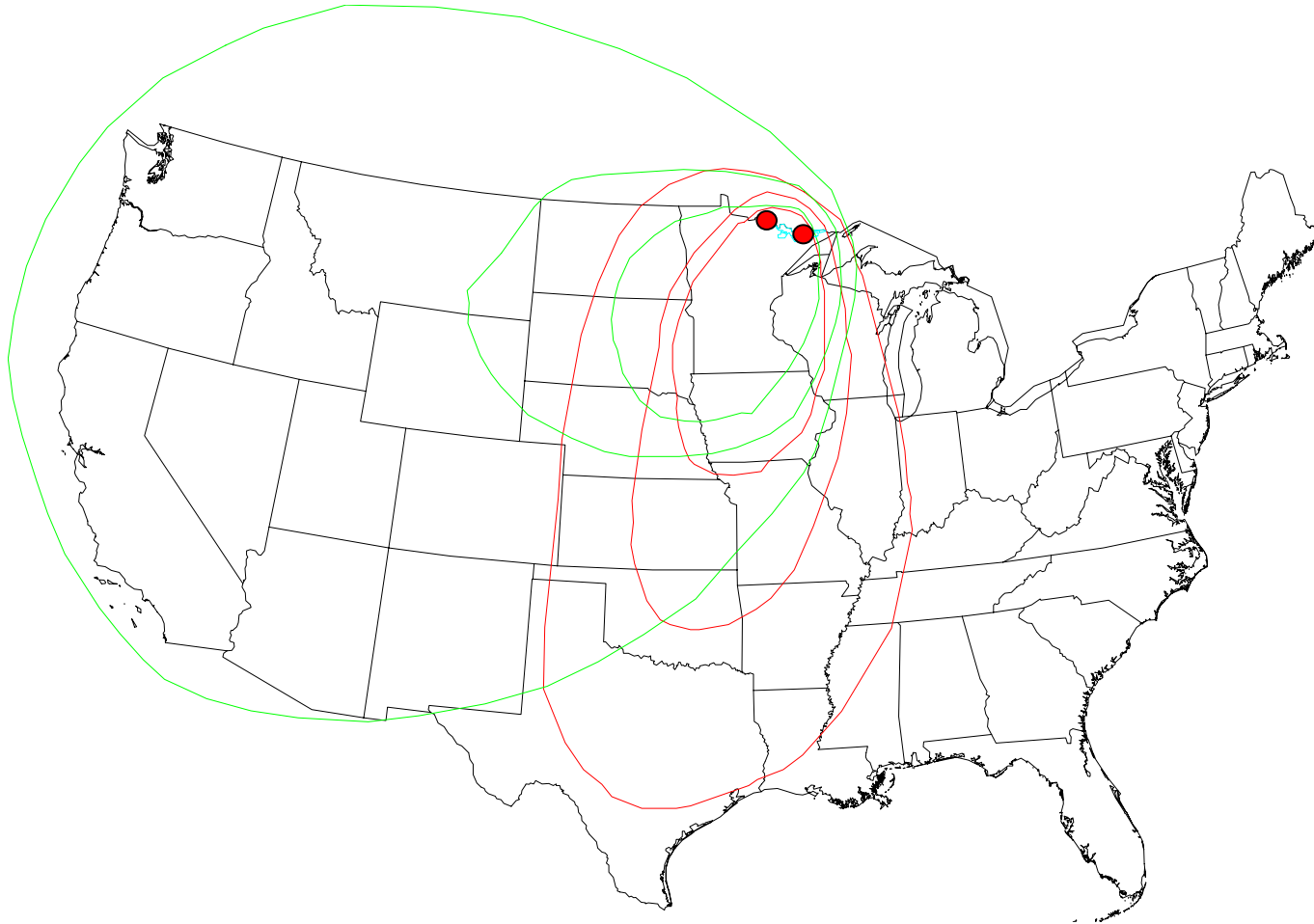
Summary of CENRAP Work Relevant to Northern Areas Consultation

January 31, 2007
MPCA Meeting

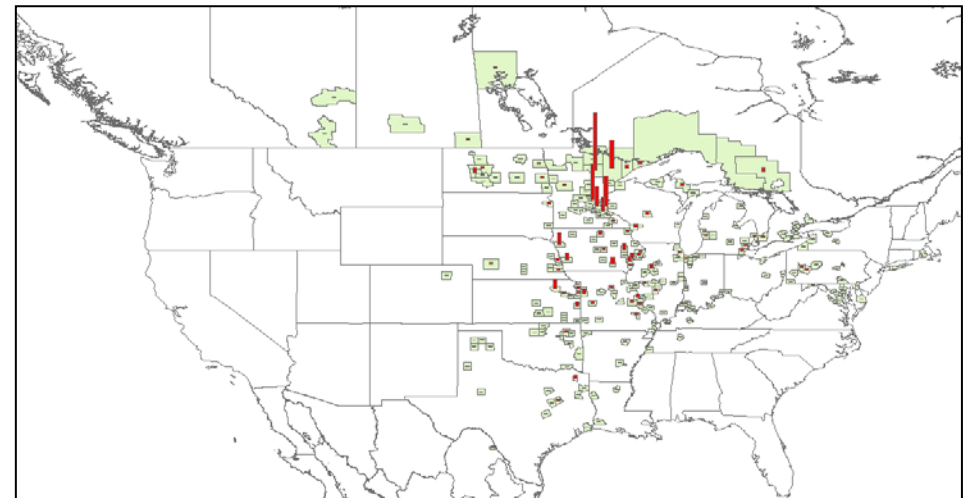
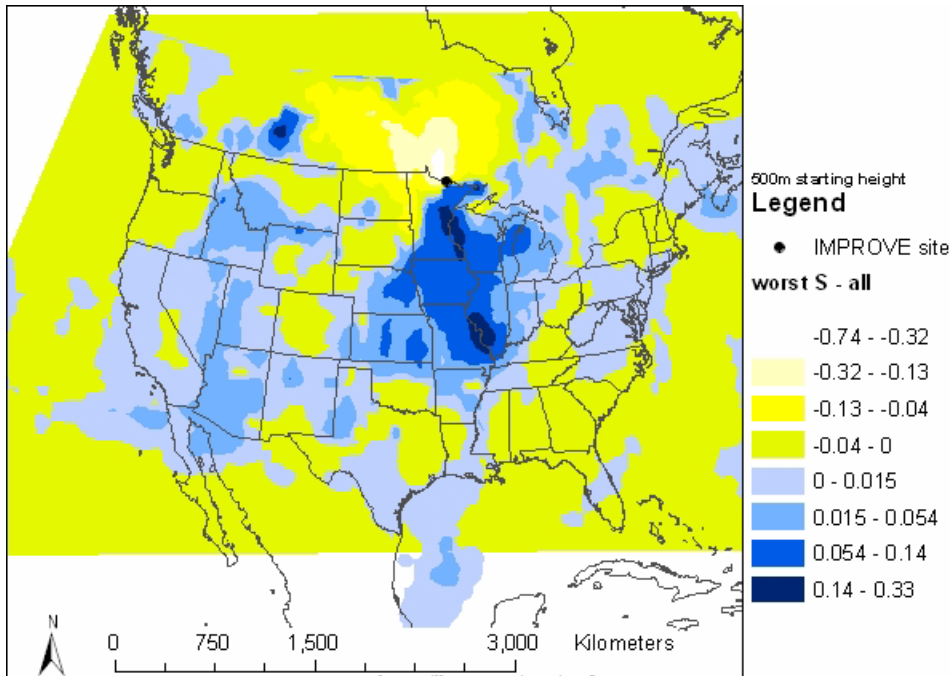
Jeff Peltola
CENRAP Technical Director

Boundary Waters-Voyageurs

(green=NO₃; red=SO₄/EC/OC/CM/FS)



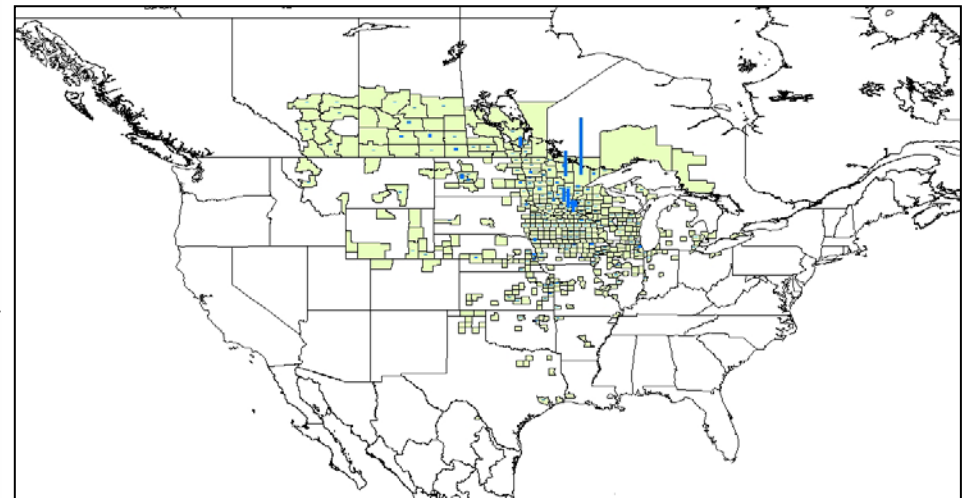
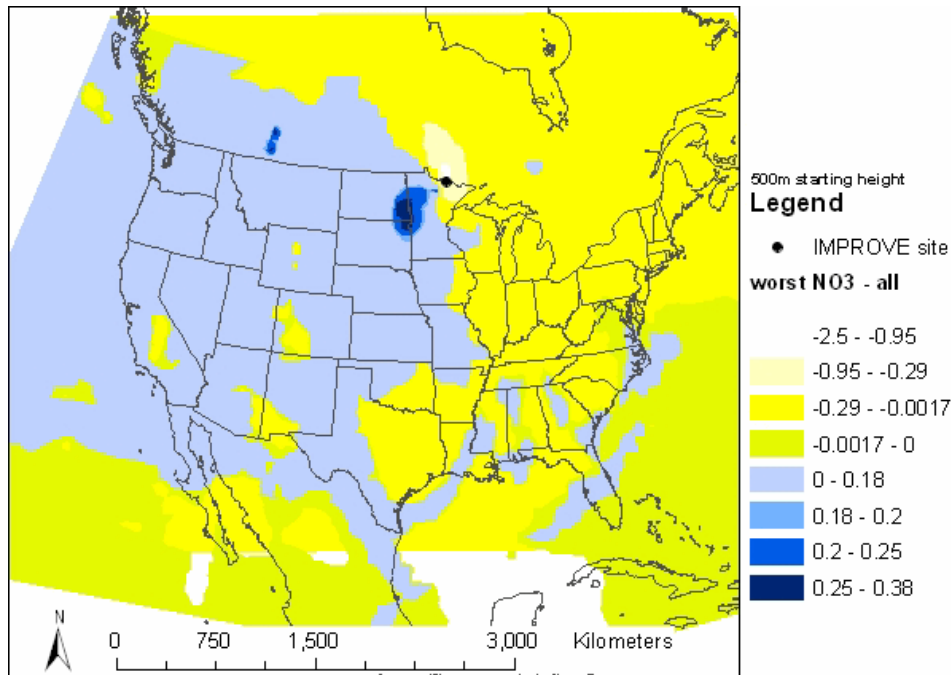
Voyageurs – SO₄ AOI-RTD & SO₂ Emissions Impact Potential (EIP)



Anderson, B. (2006), "Review of Causes of Haze Phases II-III: What Have We Learned So Far?" Presentation prepared for CenSARA/CENRAP CENRAP Workgroup/POG Meeting. February 8, PPT Presentation (Slide 19 of 44). In CENRAP/from FTP/CENRAP_COH_II-III.zip (CENRAP COH II-III [Brett Anderson].ppt)

DRI (2005), Causes of Haze Assessment. Back Trajectory Map Gallery.
www.coha.dri.edu/web/general/trajgallery/trajmapgallery.html

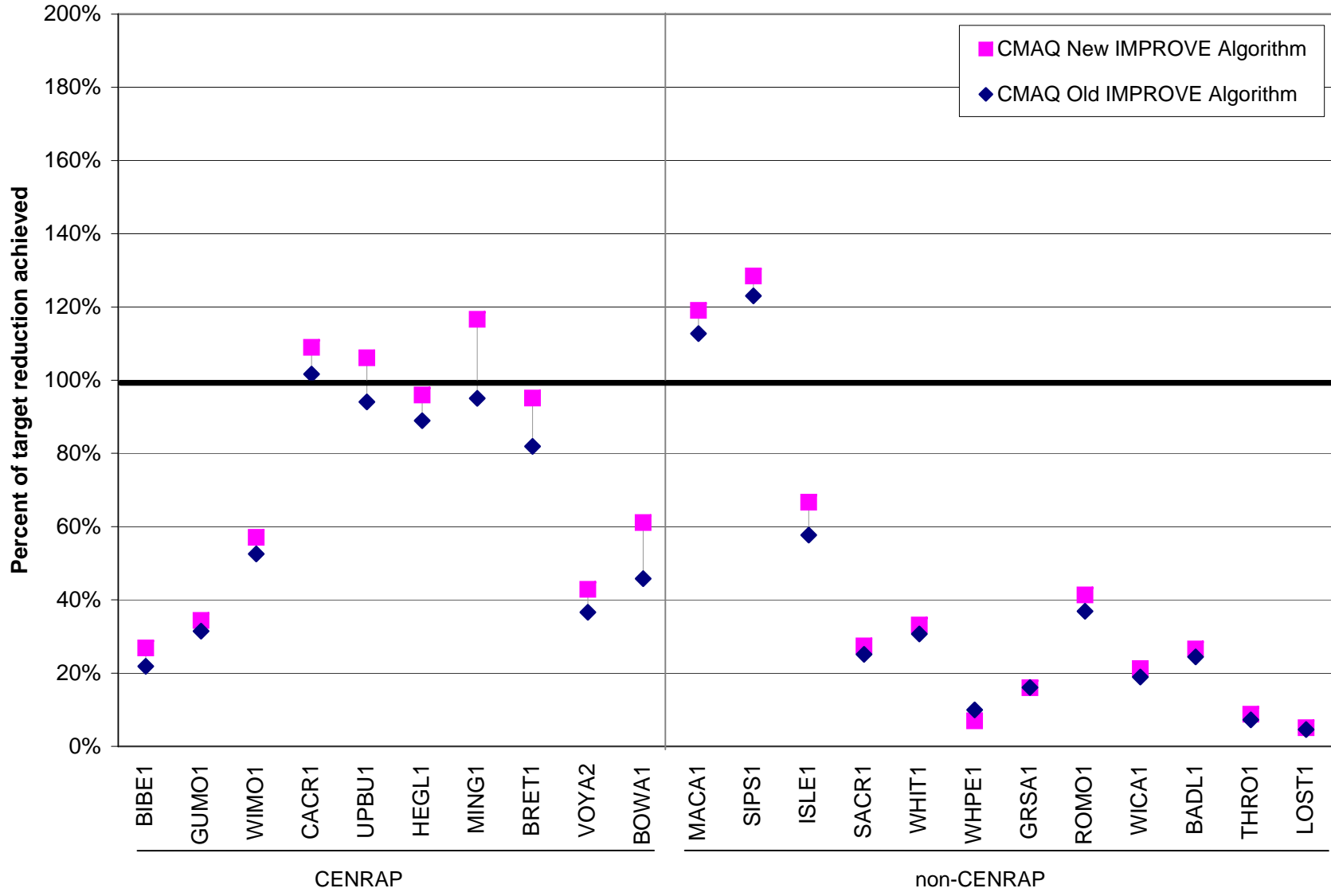
Voyageurs – NO3 AOI-RTD & NOX EIP



Anderson, B. (2006), "Review of Causes of Haze Phases II-III: What Have We Learned So Far?" Presentation prepared for CenSARA/CENRAP CENRAP Workgroup/POG Meeting. February 8, PPT Presentation (Slide 20 of 44). In CENRAP/from FTP/CENRAP_COH_II-III.zip (CENRAP COH II-III [Brett Anderson].ppt)

DRI (2005), Causes of Haze Assessment. Back Trajectory Map Gallery.
www.coha.dri.edu/web/general/trajgallery/trajmapgallery.html

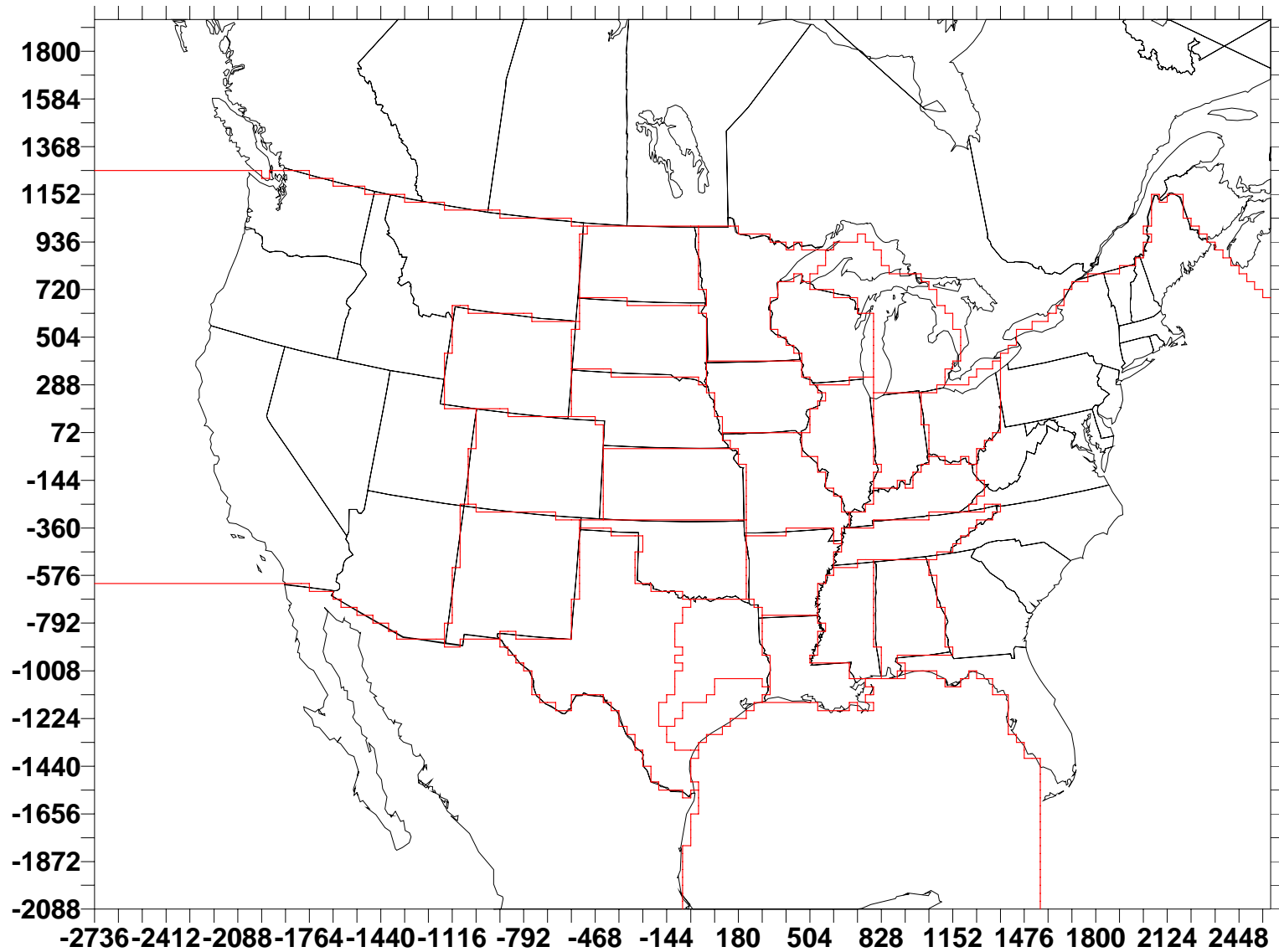
CMAQ Base18f/Typ02f Method 1 predictions for CENRAP+ sites



CENRAP PSAT Simulations

- Purpose:
 - Determine contributions of “States” and Major Source Categories to current (2002) and future (2018) visibility impairment at CENRAP and nearby Class I areas
 - Assist in consultation process
 - Assist in control strategy design
 - Estimate contributions of International Transport and Natural Sources to visibility impairment at CENRAP+ Class I areas
 - Assist in Reasonable Progress determination with alternative 2018 URP goals

30 Source Regions



Source Categories

- Electrical Generating Units (EGUs)
- Non-EGU Point Sources
- On-Road Mobile Sources
- Non-Road Mobile Sources
- Natural Sources
 - Biogenic, Wildfires, Non-Ag Wind Blown Dust
- Area Sources (includes Ag WBD)

Example Cost Curve

Boundary Waters-Voyageurs
SO4/EC/OC/CM/FS AOI-1

