The path to today’s CSD/ESRL

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Origins of CSD/ESRL

✧ Reorganizations are “disruptive” – used for positive transformations

✧ Internal reorganizations to augment, buttress, and expand capabilities

✧ Provide opportunities for scientific growth and scientist’s growth
CSD/ESRL Science: Use inspired research

Use-inspired: with clear tangible outcomes
New science: not just using what is known
Integrated: emphasized interrelations between climate change, air quality, and stratospheric ozone

GOALS: Provide information to support decision-making at different levels—national, regional, state, and international

Approach:
• Maintain core capabilities (USE INSPIRED)
• Be cognizant of, and anticipate, needs (USE)
• Focus on strengths… develop necessary strengths… partner with strength (PROVIDE RELEVANT INFORMATION WHEN NEEDED)

USERS AND ISSUES COME TO THOSE WITH CAPABILITIES AND UNDERSTANDING
Usable Information: Emissions and Beyond

✓ Key handle on environment
✓ Policy makers ask for it
✓ Is a major science issue

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Useful, usable information for science, policy, and management:

➢ Quantify– location and time specific
➢ Understand- Evaluate applicability to other places and times
➢ Evaluate species transport- For interpretation and use elsewhere
➢ Inventories- Usable information
➢ Future emission- scenario development and validation (science!)
Evolution of new capabilities

Emissions from Deepwater Horizon:
• Information for national need in time of crisis
• Science
• New capability

Emissions from oil and gas activities
Air quality assessments
Role of aerosols in climate and AQ

**Bottom line:**
CSD was formed and transformed to address nations needs by bringing together capabilities, developing new capabilities, and morphing as necessary.