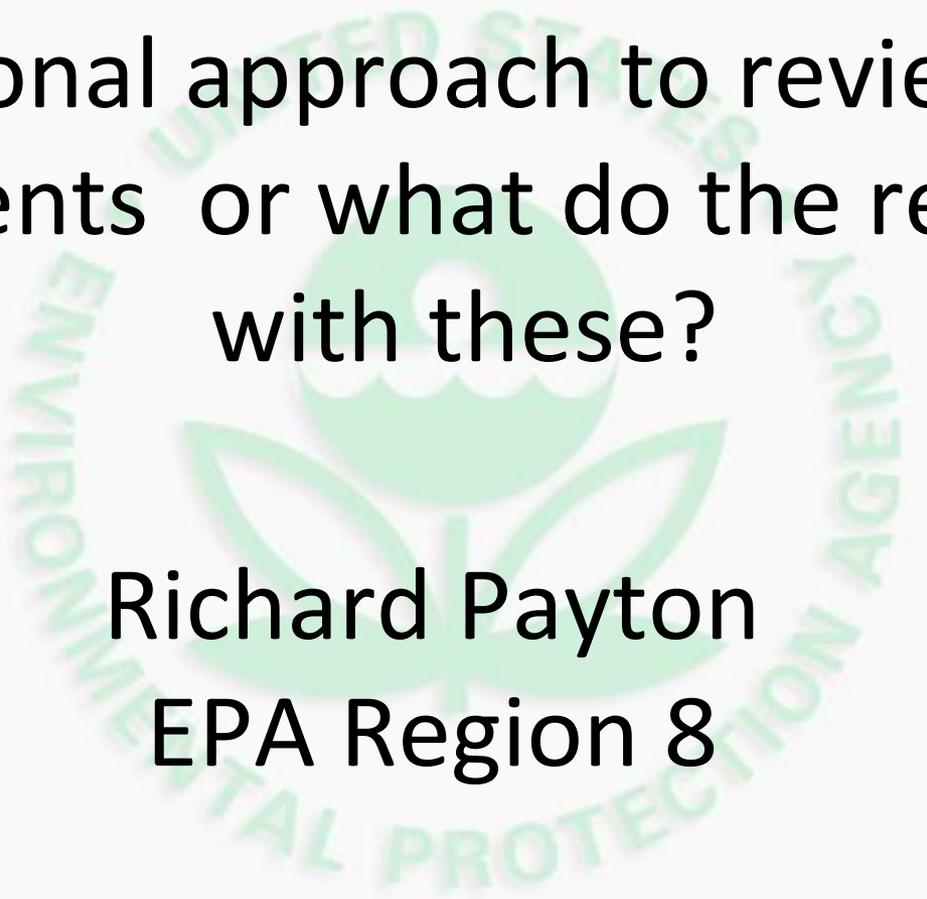


Regional Office Perspective of Network Assessments

Richard Payton
EPA Region 8



Regional approach to review of
assessments or what do the regions do
with these?



Richard Payton
EPA Region 8

Survey: Topics to Cover



- EPA's Assessment of the Assessments
 - Usefulness, Completeness, Worth, etc.
- Checklist for Contents
- What Exactly Does EPA Want?
- Regional Perspective
 - Expectations
 - Minimum Requirements
 - Western State Perspective
 - Large Area
 - Small Population
 - Small Resources
- “Clear Expectations of the Report Contents and Expected Outcomes of the Work is Crucial”

Network Assessment Evolution



- FR 44-27571, May 10, 1979, Part 58, § 58.20:
 - SIP (“Plan”) Change by Jan. 1, 1980 to Establish Monitors
 - Provide for Annual Review of the Monitoring System, Identifying Needed Modifications, Such as:
 - Termination or Relocation of Unnecessary Stations
 - Establishment of Needed Stations
- By 2005 CFR, Network Review also Needed to Cover Any Other Needed SLAMS and SPM Changes
- With 2006 National Monitoring Rule, The Annual Network Review Requirement was Replaced with an Annual Monitoring Plan Requirement
 - Intent to Emphasize Looking Forward Rather than Backwards
- 5 Year Network Assessment Added as Well
 - Opportunity to use more creativity and analytics, on an intermittent basis, to try to find leveraging and other opportunities for synergy



- Appendix D, 1.1.2: The EPA, State and local agencies will periodically collaborate on network design issues through the network assessment process outlined in 58.10
- 58.10(d): Determine, at a minimum, if network meets the monitoring objectives of appendix D
 - New sites are needed?
 - Existing sites are no longer needed?
 - New technologies are appropriate?
 - Existing and proposed sites ability for areas with high populations of sensitive individuals (children, asthmatics)
 - Effect of proposed closures on other users (Nearby states, Tribes, Health effects studies)
- Others: PM₁₀ Sampling Frequency, Ozone Network Design, Pb Waivers

What does EPA want in the Network Assessments?



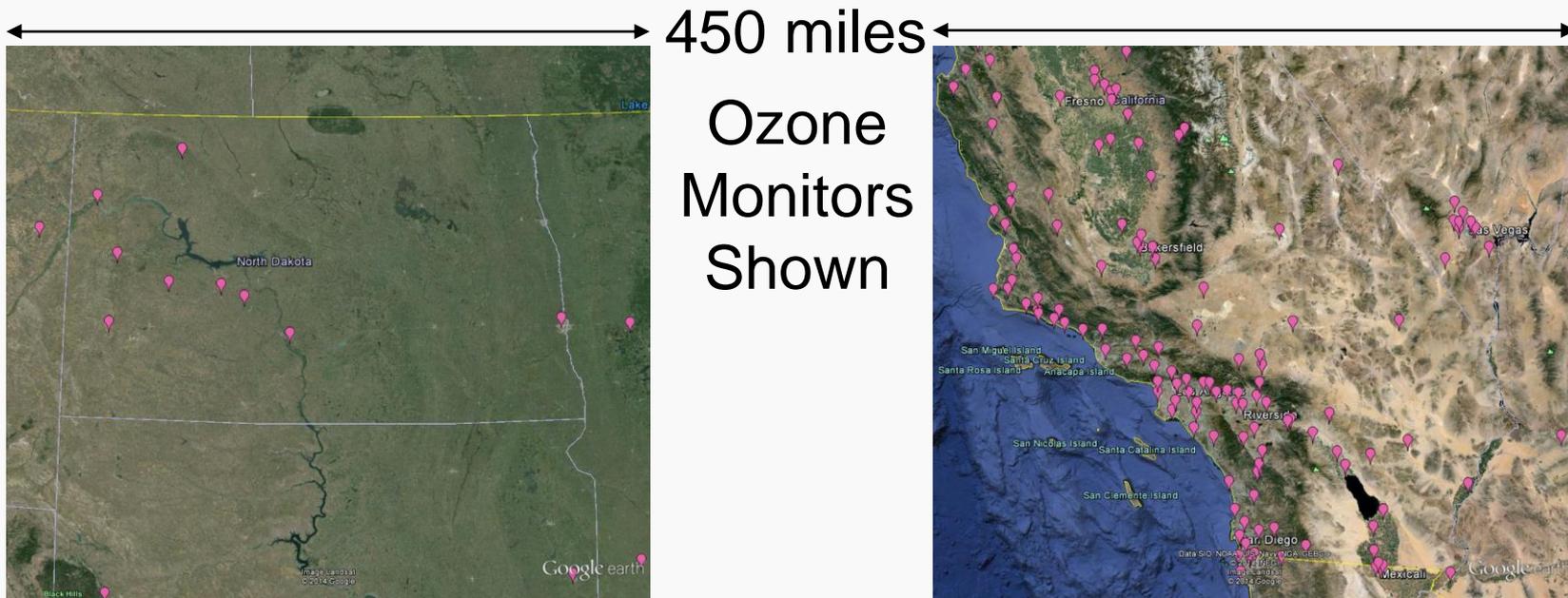
- We want you, who know your network and your local needs best, to periodically really think about how you can best utilize the resources you have to do the most effective job
 - If possible, utilize statistics, GIS, neighbors, partners, new technologies and the kitchen sink to find creative ways to kill more than one bird with one stone*

*Not regulatory language

No One Size Fits All



- State and Local Monitoring Agencies Vary Greatly Across the Country
- Guidance for a Network Assessment in South Coast Air Quality Management District (Los Angeles) Might Not be very Applicable to the North Dakota Department of Health, or Great Basin Air Pollution Control District





- **Make the Network Assessment Work for You**
 - Opportunity for Long Range Planning
 - Look at your population, emission changes and trends
 - Potential future needs vs. resources
- **Ozone has a specific call-out in Appendix D**
 - Make sure you continue to meet Appendix D for Ozone
 - Understand ozone maximum concentration requirements
 - Might have to be addressed if an ozone site is lost between assessments
 - May need more than one maximum concentration site per area
 - Consider Design Value, but go deeper
 - Do sites with same design value exceed on the same days?
Redundant
 - Different days? Unique, you may need both
 - Which sites are key for AQI? Orange Level? Yellow Level?
- **Don't forget stakeholder requirements**
 - Sensitive individuals, Other Data Users

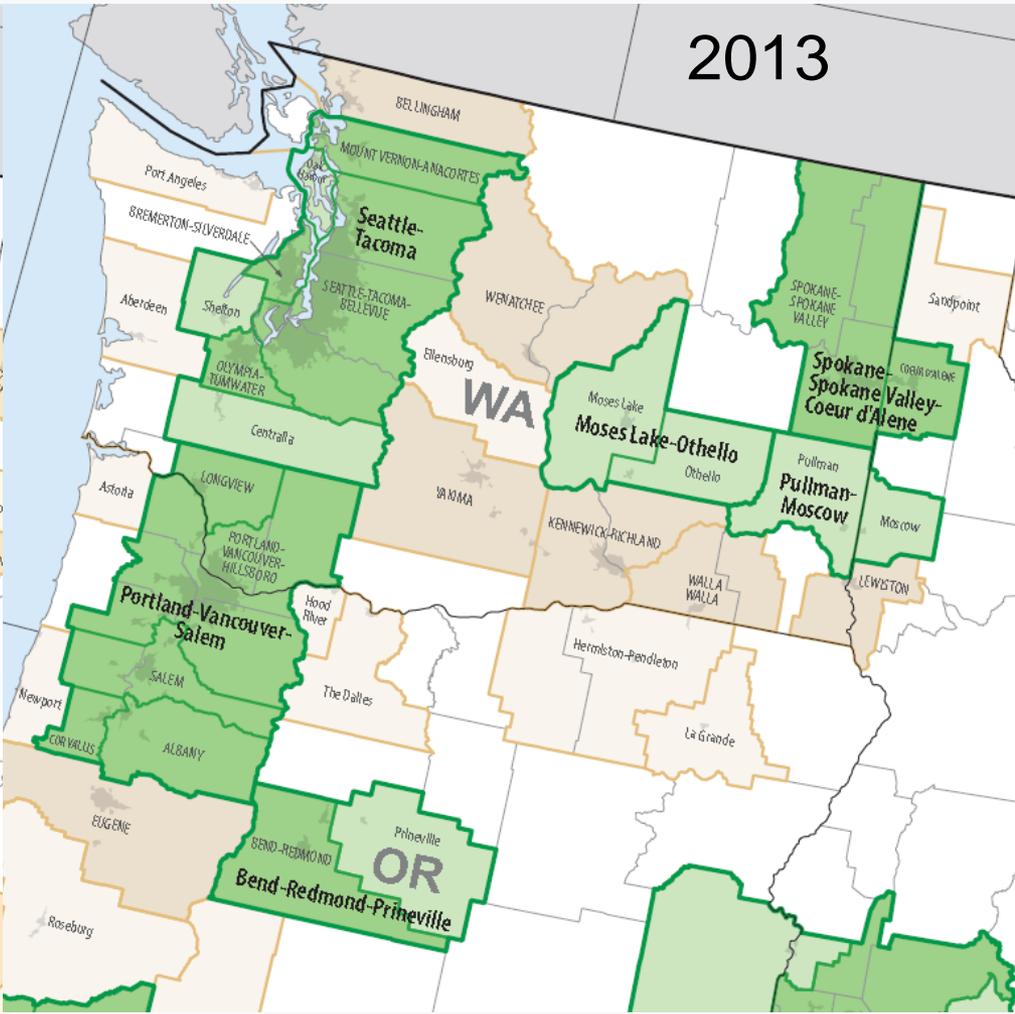
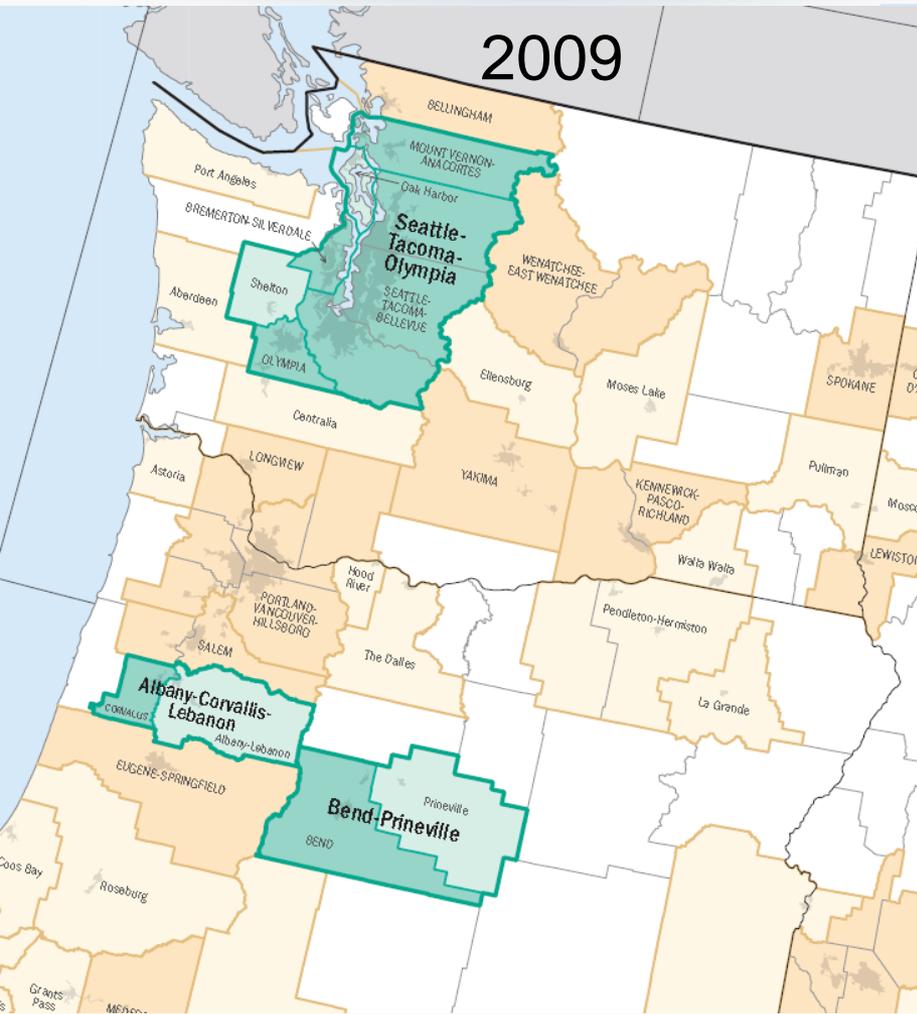


- Appendix D Changes Since 2010 Assessments
 - NO₂ Network, Feb. 9, 2010: Near Roadway, Area Wide, RA-40; Dropped Explicit Maximum Concentration Requirement
 - SO₂ Network, June 22, 2010: Population Weighted Emission Index (PWEI), RA Required Monitors; Dropped Explicit Maximum Concentration Requirement
 - CO Network, August 31, 2011: Near Road, RA Required Monitors; Dropped Explicit Maximum Concentration Requirement
 - PM_{2.5} Network, January 15, 2013: Near Road, Dropped “Community Monitoring Zone (CMZ)”, “Population Oriented”
- All Pollutants:
 - Many New Methods
 - Widespread Deployment of PM_{2.5} FEMs
 - New NO₂ Methods
- OMB Revisions to MSA/CSA Definitions:
 - <http://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf>
 - February 28, 2013



- Appendix D
 - Ozone Minimum Monitor Counts
 - Ozone Max Concentration Monitors
 - PM₁₀ Minimum Monitor Counts
 - PM_{2.5} Minimum Monitor Counts
 - PM_{2.5} Maximum Concentration Monitors
 - Continuous PM_{2.5} Monitoring
 - AQI Reporting

2013 OMB Map Changes



<http://www.census.gov/geo/maps-data/maps/cbsacs.html>

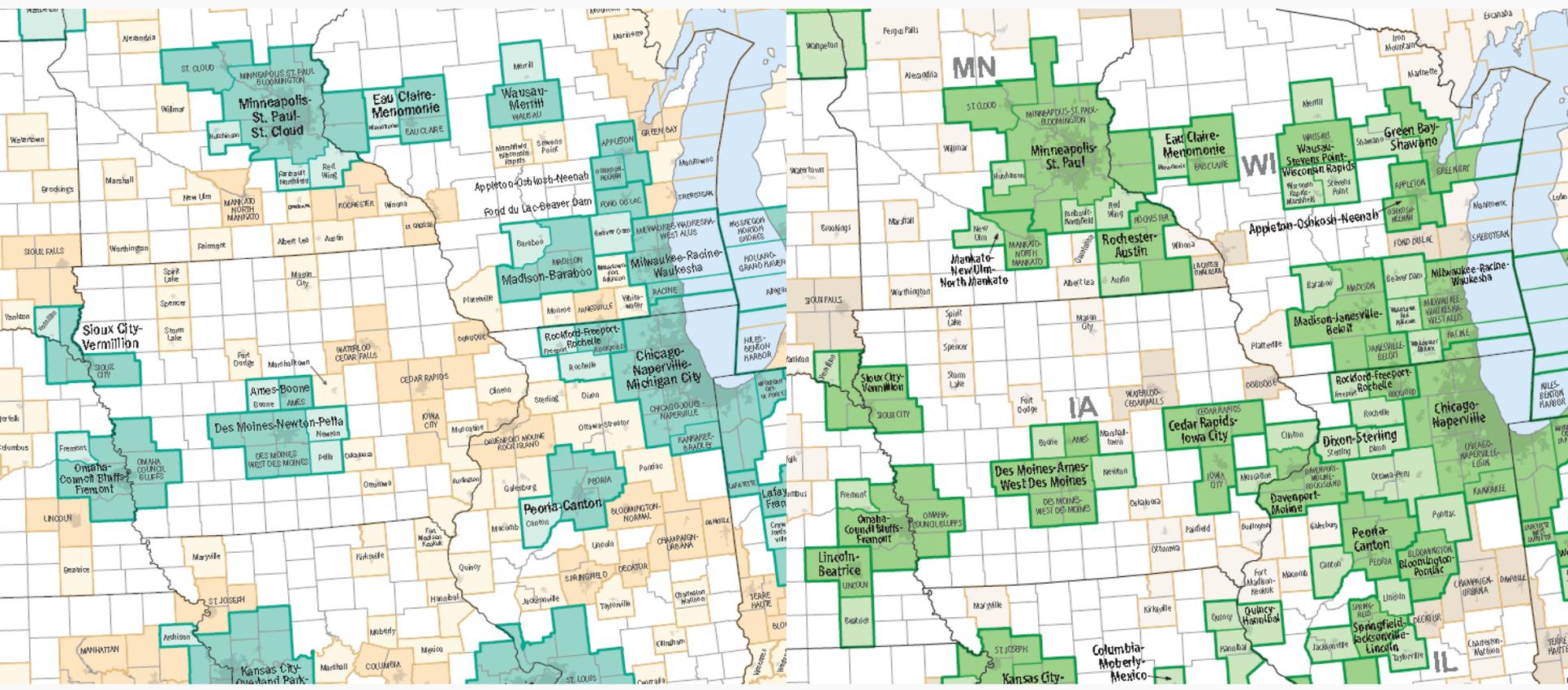
National Ambient Air Monitoring Conference August 2014

2013 OMB Map Changes



2009

2013



<http://www.census.gov/geo/maps-data/maps/cbsacs.html>

National Ambient Air Monitoring Conference August 2014



- Regional approach to review of assessments
 - Has the assessment addressed the Appendix D key points?
 - Has the processed been utilized for the agency to work with the region on current network design issues?
 - Were the other Part 58 specific requirements addressed
- What will the regions do with these?
 - Use the process as a tool
 - Think outside the annual plan box
 - Think about stakeholders
 - Look for leverage and creativity to match needs and resources



Discussion