

Executive Summary outline

The WRAP's vision is to be the leading technical and planning information source for air quality management in the western United States. The Partnership continues to promote, support and monitor the implementation of regional haze plans to improve visibility in all Western Class I areas through a process that strives for consensus among its partners and stakeholders. Class I areas in the western states are national treasures constituting 75% of the nation's Class I areas. The WRAP assists its membership to explore, understand, and address a variety of regional air quality issues including regional haze, climate change, ozone, particulate matter, and deposition of nitrogen and mercury.

This Work Plan is intended to describe planned WRAP efforts to develop and maintain critical sets of data and to further define and understand emissions from a number of source sectors relevant to western air quality, for the 2014-18 timeframe.

The WRAP's success depends on the participation of concerned and informed participants that devote their time and energy to this endeavor. The WRAP recognizes that residents have the most to gain from improved visibility and air quality, and that many solutions are best implemented at the local, state, tribal, or regional level with public participation. This plan serves to identify the activities the WRAP intends to undertake to continue its legacy of providing high quality technical support to the members for use in their air quality planning and management efforts in the western states.

- I. Background and Status
 - Reports WRAP purposes, recent history, and current status
 - Outlines key concepts about current status of western regional emissions / air quality
- II. Organization and Structure
 - Describes WRAP structure under current Charter
 - Outlines duties of Board, Technical Steering Committee, Working Groups, WRAP staff
 - Links activities described in the Work Plan to these organizational structures and establishes timing and accountability
- III. Technical and Planning Work Activities
 - A. Regional Haze Planning
 - Describes Regional Haze planning requirements for state plans due July 2018
 - Identifies western regional analyses needed for state Regional Haze planning
 - Links to several Appendices for more detailed technical work descriptions
 - Regional Emissions, Analysis, and Modeling Capabilities
 - Describes status of regulatory requirements affecting western regional analysis
 - Outlines Key planning-related Topics beyond those in Section III.A
 - Links to several Appendices for more detailed technical work descriptions
 - Effects of Changing Sources and Climate on Western Air Quality
 - Outlines Key planning-related Topics beyond those in Sections III.A and III.B
 - Changes and Progression of Oil and Gas Development
 - Changing Temperatures and Shifts in Biologic Resources
 - Shifts in Energy Facility Source Types and Locations
 - International Sources
 - Population Changes and Impacts

- Links to several Appendices for more detailed technical work descriptions

Technical Appendices

- A. Support of Tribal Air Quality Capacity and Tribal Implementation Plan (TIP) Development
 - Describes involvement of tribes in WRAP
 - Review needs of tribes to be addressed by WRAP
 - Suggests outreach efforts and Tribal Data Working Group activities
 - Identifies resources needed
- B. WRAP Regional Haze Data Analysis and Decision Support System (TSS)
 - Identifies monitoring data analysis project for Regional Haze planning
 - Estimates support needed for ongoing operation and needed upgrades to TSS
- C. WRAP Technical Support for WESTAR Regional Haze Planning Working Group
 - Describes technical activities
 - Outlines timeline and deliverables for regional work needed to supports state planning
 - Estimates budgets for WRAP region technical work on Regional Haze
- D. Western Regional Modeling Framework – WRAP Modeling Studies
 - Describes current and expected technical activities needed beyond Regional Haze
 - Outlines parallel efforts needed to extend and leverage existing modeling efforts to complete model evaluation, Ozone and PM_{2.5} NAAQS, nitrogen deposition, and background/transport analyses to support future planning needs of WRAP members
 - Outlines white papers and reports to be prepared, to plan and implement a Western Regional Modeling Framework to completely and comprehensively address regional air quality modeling through a system to be defined.
 - Outlines timeline, deliverables, and estimates budgets for regional emissions and modeling activities needed, in parallel to and extending beyond Regional Haze planning support needs
 - D.1 BLM Cooperative Agreement and [Drill Rig 1-hour NO₂ Study](#) Activities
 - Describes purposes and current work being conducted under the existing umbrella administrative vehicle between WRAP/WESTAR and the national BLM air program, as an example of a methodology to implement and operate the Framework.
 - D.2 NPS Cooperative Agreement and [3-State Air Quality Study / Western Data Warehouse](#)
 - Describes purposes and current work being conducted under the existing umbrella administrative vehicle between WRAP/WESTAR and the NPS national air program, as an example of a methodology to implement and operate the Framework.
 - D.3 State of New Mexico – [Dona Ana County Ozone Nonattainment Modeling Study](#)
 - Describes proposed work currently being implemented for a southern NM ozone modeling study to be conducted under a WRAP/WESTAR-State of NM contract, as an example of a methodology to implement and operate the Framework.
- E. Fire Working Group and Impacts of Natural-Uncontrollable Fire on Western Air Quality

- Describes need for Fire Working Group and associated technical activities
 - Identifies management for Fire Emissions Tracking System (FETS)
 - Links to Sections III.A, III.B, and III.C
 - Outlines timeline, deliverables, and estimates budgets for Fire-related regional work
- F. Oil & Gas Working Group and Better Technical Information for Emissions Control Planning for Oil & Gas Sources
- Describes need for Oil & Gas Working Group and associated technical activities
 - Links to Sections III.A, III.B, and III.C
 - Outlines timeline, deliverables, and estimates budgets for regional Oil & Gas work
- G. Joint Fire Sciences Program Proposal - Real-World Evaluation of Fire SOA Emissions Factors from Fires in a Data Management System ([REFERS-DMS](#)) (submitted December 11, 2013)
- Links to Sections III.B, III.C, and Appendix E
- H. NASA Applied Sciences Program Proposal: Evaluation and Application of ACAST Products and Knowledge in Western U.S. Air Quality Planning and Management (submitted April 24, 2014) ([PDF](#))
- Links to Sections III.B and III.C

Administrative Appendices

- I. [WRAP 2014 Charter](#)
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- J. WRAP Members' and External Review and Comment
- to be completed after comment period
- K. Detailed Work Plan Budget
- Master table of work tasks and budget estimates from all Sections and Appendices