



# **Western Regional Air Partnership 2009-10 Work Plan**

**August 7, 2009**

## EXECUTIVE SUMMARY

The Western Regional Air Partnership (WRAP) is working on behalf of its members to facilitate and assist with the completion of the regional haze implementation plans across the West during 2009-10. The Technical Systems' Operations and Related Projects grouping delivers regionally comparable, complete, consistent, and transparent data and analysis results for regional haze planning and implementation. The Haze SIP Completion Support project grouping delivers specific results to assist states and EPA with completion of the foundational regional haze implementation plans and continues tracking of emissions reductions and website support.

### Deliverables

This 2009-10 workplan addresses the following projects, some continuing from the [WRAP 2008-09 Workplan](#):

#### Technical Systems' Operations and Related Projects

- [Emissions Data Management System](#) (EDMS) Operations
- [Phase III O&G Inventory](#) Reporting by Basin
- Operations of [Technical Support System](#) (TSS) & [Visibility Information Exchange Web System](#) (VIEWS)
- [Fire Emissions Tracking System](#) (FETS) Operations

#### Haze SIP Completion Support

- Tech System Support to IWG
- Modeling Results and TSS Support
- [Four Factor Analysis](#)
- [PRP 2018b Inventory](#)
- [Modeling Support for §308 and §309 SIPs](#)
- [§309 Milestone Reports](#)
- [Web Site Maintenance](#)

These deliverables and progress on these projects are described in Section III of this workplan.

## **I. INTRODUCTION**

The effort on the continuing regional technical projects listed in this 2009-10 work plan were reviewed by the WRAP's Oversight Committees, Forums, and Workgroups in early 2009, as part of a larger work planning process for 2010 and 2011. This workplan also contains descriptions of the status of the projects continuing from the [2008-09 WRAP workplan](#). The projects in this 2009-10 workplan are continuing technical support efforts or complete key work to assist the states and EPA with the foundational regional haze implementation plans. The 2009-10 workplan is intended to identify the activities to be conducted under grant monies to be awarded as noted in Appendix A.

This workplan summarizes ongoing activities and expenditures of the WRAP, including current projects and those planned for the remainder of 2009 and all of 2010. The total amount of EPA's FFY09 funding for the WRAP's regional haze work is currently \$152,484. This document will be submitted to EPA in support of WGA's grant application. There are FFY09 supplementary funds to be provided by WRAP region member states in Fall 2009, through an EPA grant. This workplan will need to be amended when the total of those supplementary funds is known and EPA provides a "please apply" letter for those funds.

The \$152,484 in this FFY09 grant award, when combined with existing FFY08 resources, will provide WRAP a strictly limited ability to provide regional technical support for the review, approval, and ongoing implementation of haze plans on behalf of WRAP members.

For this work plan, WGA staff developed the budget for the WRAP organization to provide funding for staff, travel support, and project management through December 2010. With no EPA funding currently available to NTEC for the WRAP project, there will be no support for the Tribal Caucus and tribal participation by NTEC. As an interim measure, the WGA air quality program and project managers will expand outreach to tribes through Committee, Forum and project E-Mails and conference calls.

In developing this work plan, the WRAP Committees, Forums, and Workgroups recognized that the grant funds covered by this work plan will be the funds WGA receives to assist in the transition from completing the development of the individual regional haze plans, through their review and approval by EPA, and for the parallel implementation of regional haze plan commitments. The individual regional haze implementation plans rely upon the WRAP's regional technical work, and the data and decision support systems underpinning the long-term effort to track progress and analysis additional measures to reduce regional haze.

**Table 1 – WRAP 2009-10 Budget and Financial Status Report (Expenditures are through May 2009)**

Project Title	Contract Amount	Expenditures	FFY09 Grant for 2010 Expenses
<b>Technical Systems</b>			
EDMS Hosting / Operation (ARS)	408,518	276,804	0
Phase III O&G Inventory Reporting by Basin (ENVIRON)	45,650	33,375	0
TSS Operations plus Fire Tracking (CIRA)*	373,451	312,010	125,000
VIEWS 2009 operations - \$30k/RPO (CIRA)**	150,000		
FETS Hosting / Operation (Air Sciences)***	75,000	N/A	0
<b>Haze SIP Completion</b>			
Tech System Support to IWG / Document PRP 18b scenario - (ARS)	60,000	37,341	0
Modeling Results and TSS Support (ENVIRON)	34,999		0
Four Factor Analysis (ECR)	54,869	50,839	0
PRP 2018b Inventory (ERG)	65,000	63,023	0
Modeling for §308 and §309 SIPs - PRP18b/18cmv model runs (UCR)	232,630	144,620	0
§309 Milestone Reports (Perrin Quarles)	54,825	35,211	0
Web Site Maintenance (Brad Bissey)	61,300	39,252	0
<b>Subtotal for Projects Underway</b>	<b>1,616,242</b>	<b>992,475</b>	<b>125,000</b>
		<b>Available Budget</b>	
<b>Administrative</b>			
Travel Reimbursements		38,835	0
Conference Calls and Meetings		24,026	0
Direct Salaries and Benefits		216,220	19,172
Overhead & Other Expenses		119,789	8,312
<b>Subtotal for Administrative</b>		<b>398,870</b>	<b>27,484</b>
<b>Total Remaining for Projects and Administrative Available Budget</b>		<b>1,022,637</b>	<b>152,484</b>

\* - FETS operations are currently included and funding is in place as a CIRA subcontract to the TSS project through September 2009 (see 3rd footnote). TSS operations are funded through December 2009.

\*\* - FFY08 grant funding across all 5 RPOs covers 2009 VIEWS operations, no FFY09 inter-RPO funding is available. With the TSS built on top of VIEWS, WRAP resources of \$125,000 will be used to jointly support the CIRA staff that operate and maintain the interwoven VIEWS-TSS technical data systems.

\*\*\* - FETS operations contract for October 2009 through December 2010 will be issued separate from the TSS.

## **II. Background**

### **1. Charter and Bylaws**

The WRAP Charter and Bylaws set forth the organizations goals, principles, and operating procedures and are posted on the WRAP website at <http://www.wrapair.org/about/index.html>.

### **2. WRAP Organization**

The WRAP is composed of several Committees, Forums, and Workgroups. All these groups include participation from the WRAP membership (states, tribes, and federal agencies) and interested stakeholders (industry, environmental groups, local governments, academia, etc.). Committee and forum members are expected to represent and communicate with their agencies and constituents. Forum and committee members are responsible for establishing mechanisms that will ensure this communication occurs. These mechanisms may involve working through trade groups, state and tribal organizations such as the Western States Air Resource Council (WESTAR Council), the National Tribal Environmental Council (NTEC), and intra- and inter-agency forums.

### **3. Project Management**

Committees and forums direct much of the work of the WRAP. The oversight committees monitor forum and work group activities to ensure that work products are developed in a timely manner and that stakeholder participation remains representative, balanced, and fair. Contractors hired with EPA grant funds are relied upon to expand the resources of the WRAP. Committees and forums direct the work of WRAP staff and contractors. Staff support services to the WRAP come from the National Tribal Environmental Council (NTEC) and the Western Governors' Association (WGA).

WGA and NTEC staff provide overall project management for the WRAP, including preparing and managing grant applications, funds, requests for proposals (RFPs), contracts, travel reimbursements, meetings, conference calls, public and media inquiries, press releases, web sites, requests to participate in the WRAP, and report publications. WGA and NTEC staff routinely attends the meetings of the various committees and forums. WGA and NTEC jointly or separately perform tasks related to WRAP and serve as primary contact points by responding to media and public inquiries.

Staff positions include the WRAP Co-Directors (WGA and NTEC) who oversee other staff, share general management responsibilities, work with stakeholders to ensure the WRAP's processes are fair and equitable, and serve as the primary points of contact for EPA, the media, and the general public. State and tribal caucus coordinators are hired with WRAP funds through WESTAR and NTEC, respectively. WGA also employs an air quality program manager and air quality project manager to support the oversight committees, forums, and work groups.

Under a separate EPA grant, NTEC has historically assisted with tribal participation in the WRAP by arranging and facilitating Tribal Caucus meetings; providing coordination among tribal representatives of various committees and forums; performing legal, policy and technical analyses on various WRAP issues; and securing contractor assistance for additional policy and technical analysis. This includes providing staff support to the Tribal Caucus within the WRAP. With no EPA funding currently available to NTEC for the WRAP project, there will be no support for the Tribal Caucus and tribal participation by NTEC. As an interim measure, the WGA air quality program and project managers will expand outreach to tribes through Committee, Forum and project E-Mails and conference calls.

### **4. Contract Management**

WRAP staff at WGA will continue to work with the forums to manage WRAP contracts. WGA, as the recipient of EPA grants, is responsible for executing and administering contracts and ensuring that work products are completed. These responsibilities are met with input from forums and work groups. Forums and work groups may create balanced subgroups for purposes of contract management.

It is the responsibility of the forums and work groups and their respective oversight committees to develop the scope of work for each contract. All contracts are to be developed in accordance with the work plans approved by the WRAP and submitted to EPA. Once the scope of work has been properly developed, it is transmitted to WGA who are responsible for developing an RFP or sole source justification. All RFPs are sent to known contractors, posted on the WRAP Web site, and published in the Federal Business Opportunities publication as appropriate. Bidders are provided 30 days to respond.

### **III. 2009-10 PROJECT SUMMARIES**

#### **Technical Systems Projects**

The projects described assist with regional haze planning and implementation by providing technical data and analytical results in support of implementation plan completion, review, approval, and tracking.

#### **Emissions Data Management System (EDMS) Operations**

The ongoing maintenance and operation of the Emissions Database Management System (EDMS) will continue through 2010. The EDMS is currently acquiring updated data from state and tribal agencies, and several functions have been improved in response to previously identified deficiencies. The EDMS is a data support system integral to completion, review, approval, and ongoing implementation of regional haze plans. The EDMS is used to track emissions reduction obligations identified in the plans (including BART), assess the effectiveness of control strategies, house updates to existing inventories, address new inventory needs for pollutants of regional concern, and track trends.

The operation and maintenance budget includes the annual cost for a contracted database administrator to operate the EDMS, provide data analysis products, user assistance, quality assure new data, update database versions, resolve data overlaps between state and tribal data, and prepare standard reports. In addition, a host site is employed to provide the necessary hardware, including servers, and to ensure data security and archiving. With EPA developing a new improved National Emissions Inventory format to be implemented for 2008 data, the EF will also consider what functions to retain in the EDMS.

#### **Phase III O&G Inventory Reporting by Basin**

In Fall 2007, the Independent Petroleum Association of Mountain States (IPAMS) initiated the concept of funding a Phase III regional oil and gas emission inventory project for the Intermountain West, in conjunction with the WRAP, to build on, improve, and address inventory issues in the WRAP Phase I and Phase II projects. The result from Phase III will include all criteria pollutant emissions for all point and area sources associated with the exploration, production, and gathering operations of oil and gas in the major basins throughout the six-state (CO, MT, NM, ND, UT, and WY) study region for year 2006 as well as future projection years. IPAMS and WRAP will coordinate the data collection and analysis, review and discussion, and inventory data file preparation for each major basin. WRAP has contracted with the IPAMS technical support contractor to provide review and discussion of the draft and final documents on each O&G Basin as they are prepared.

#### **Operations of the Technical Support System (TSS) and Visibility Information Exchange Web System (VIEWS)**

The TSS is the decision support system for regional haze planning and implementation across the WRAP region. It is fully integrated with the VIEWS data support system and partially integrated with the EDMS and FETS data support systems, and presents monitoring, emissions, source apportionment, and air quality modeling

data and results from WRAP regional analysis projects like the RMC. The VIEWS/TSS systems are maintained and operated by staff from the Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University. CIRA has considerable expertise in web-based delivery of complex technical data using on-line relational databases. The VIEWS/TSS systems are leveraged with extramural projects funded by NASA and EPA OAQPS. The TSS portion of these systems is also directly supported by limited scope external contractor efforts to assist haze implementation planners at the states and EPA with analysis and interpretation of the regional emissions and modeling results, due to the large number of Class I areas and diverse mix of sources and transport affecting these areas.

The national VIEWS data system for all Class I areas was developed and historically funded by the 5 Regional Planning Organizations (RPOs). From the EPA FFY08 grant cycle, WRAP and the other four RPOs each contributed \$30,000 for VIEWS operations in 2009. WRAP staff manages that work on behalf of the other RPOs. With no FFY09 EPA grant funds available from the other four RPOs for VIEWS operations in 2010, WRAP is covering minimum “bare bones” joint operations of VIEWS/TSS, \$125,000 of the resources identified in Appendix A.

#### Fire Emissions Tracking System (FETS) Operations

The FETS for the WRAP region has been on-line since September 2007 and data providers continue to be added. The FETS is designed to be the data support system for tracking fire emissions for regional haze reasonable progress requirements, and will be the primary source of future fire inventories. Through September 2009, the FETS project will be managed as a subcontract under the CIRA TSS contract. At that time, a new separate contract will be issued for FETS, for direct project control by WGA staff, and to reduce the already low overhead cost of a subcontract through CIRA. The new contract will cover FETS operations from October 2009 through December 2010.

#### Haze SIP Completion Projects

The projects described assist with regional haze planning and implementation by providing analyses and results for direct application in support of implementation plan completion, review, approval, and tracking.

#### Tech System Support to IWG

This project to support the WRAP Implementation WorkGroup (IWG) responsible for haze implementation plan preparation, review, and implementation is one of two limited scope external contractor efforts to assist haze implementation planners at the states and EPA with training on the analysis tools and interpretation of the regional analysis results, due to the large number of Class I areas and diverse mix of sources and transport affecting these areas. The primary purpose of this project is to assist haze planners with documentation and training on regional emissions and modeling analysis scenarios. This project also provides limited resources for training o state, EPA, and FLM users. This project was requested by IWG and is critical to assist states and EPA with the review, approval, and ongoing implementation of the haze plans.

#### Modeling Results and TSS Support

This project to support the WRAP Implementation WorkGroup (IWG) responsible for haze implementation plan preparation, review, and implementation is the second of two limited scope external contractor efforts to assist haze implementation planners at the states and EPA with interpretation of regional emissions, source apportionment, and air quality modeling results, including documentation of impacts on specific Class I areas. This project was requested by IWG and is critical to assist states and EPA with the review, approval, and ongoing implementation of the haze plans.

#### Four Factor Analysis

Section 308(d)(1) of the Regional Haze Rule requires States to set reasonable progress goals toward meeting a national goal of natural visibility conditions in Class I areas by the year 2064. The first reasonable progress goals will be established for the planning period 2008 to 2018. The Regional Haze Rule identifies four factors which should be considered in evaluating potential emission control measures to meet visibility goals. As listed in §308(d)(1)(i) these four factors are as follows:

1. Cost of compliance
2. Time necessary for compliance
3. Energy and non-air quality environmental impacts of compliance
4. Remaining useful life of any existing source subject to such requirements

The purpose of this project is to provide to those WRAP States who requested it, help in evaluating these four factors for additional control measures (beyond BART). States participating in this project include AK, AZ, CO, ID, ND, NM, SD, WA & WY (NV observing). These States first requested evaluation of a series of General Source Categories, while five (CO, ND, NM, SD & WY) also identified specific Stationary Sources located within their respective states for which they wanted a detailed control evaluation conducted. The list of General Source Categories consisted of the following:

- i. Reciprocating Internal Combustion Engines and Turbines
- ii. Oil & Gas Exploration & Production Field Operations
- iii. Natural Gas Processing Plants
- iv. Coal or Oil Fired Industrial Boilers (six category bins by size, then by age)
- v. Wood Fired Industrial Boilers
- vi. Gas Fired Industrial Boilers
- vii. Cement Manufacturing Plants
- viii. Sulfuric Acid Manufacturing Plants
- ix. Pulp & Paper Plant Lime Kilns
- x. Petroleum Refinery Process Heaters

#### [PRP 2018b Inventory](#)

The objective of this project was to make a second and final revision to the 2018 emissions inventory projections for point and area sources in the WRAP region to provide the most current assessment of the reasonable progress toward visibility goals by the WRAP. The focus of this project was to address specific changes that have occurred since completion of the PRP18a inventory in 2007. The resulting product is the second version of the WRAP region 2018 Preliminary Reasonable Progress emissions inventory, known as PRP18b.

The PRP18b inventory revisions included the following elements:

- Included all updated BART information available:
  1. Incorporated all available formal BART determinations;
  2. Made and incorporated estimates of expected BART control levels where BART determinations had not been finalized (BART estimates made for both SO<sub>2</sub> and NO<sub>x</sub>);
  3. Addressed all “BART-eligible” or “Subject to BART” sources, both for EGUs and for the Non-EGU universe;
- Revised projections of “future” fossil-fuel plants needed to meet federal electrical generation demand forecasts in 2018 (used updated EIA projections of 2018 energy requirements – for the first time incorporated Renewable Energy Portfolios where available - determined that existing WRAP region electric generating capacity, when added to existing State/Local agency EGU permits, was sufficient to meet 2018 demand without addition of any new future EGU units);
- Incorporated all new rulemaking, permit limits, and consent decrees instituted since 2007; and

- Corrected other outstanding issues that were identified by the federal, state, or local agencies within the WRAP domain as needing to be revised/updated:
  1. Modification of various inventory data to be consistent with the Plan 02d emissions inventory (name changes, updated stack parameters, new or removed sources, etc.)
  2. Revision of a limited number of area source categories (i.e., fuel combustion emissions in South Dakota and California, gasoline distribution emissions in Idaho, residential wood combustion emissions in Washington, construction dust in [Clark County] Nevada).
  3. Revision of facility information (e.g., facility IDs, facility names, unit IDs, process IDs, SCCs, SICs, etc.) based upon agency input.
  4. Revision of stack parameters based upon agency input.
  5. Addition of WRAP Phase II oil and gas project emissions to PRP 18a Area Source Emission Summaries in order to provide relevant comparisons to the emission totals in PRP 18b which also contained O&G emission totals.

### [Modeling Support for §308 and §309 SIPs](#)

The operation and modeling analysis work of the Regional Modeling Center (RMC) are the activities covered in this project. The RMC is completing nine years of regional modeling development and analysis work for WRAP members. The remaining work under this project is the regional emissions processing, air quality modeling, and documentation for those efforts for the last of the 2018 emissions projection inventories (PRP18b and PRP18cmv) for the foundational haze implementation plans.

### [§309 Milestone Reports](#)

The four §309 states (AZ, NM, UT, WY) have been tracking and verifying emissions for sources in the SO<sub>2</sub> Milestone Program since their SIPs were originally submitted in December 2003. Reports have been completed for 2003, 2004, 2005, 2006, and 2007 as well as a SO<sub>2</sub> Milestone Tracking Process Audit report. This project budget covers preparation of the SO<sub>2</sub> Milestone Reports for calendar years 2008 and 2009.

The 2007 report compares the 2005-2007 sulfur dioxide emissions with the 2007 milestone for the four §309 states participating in the Western Emissions Backstop Trading Program. This is a transitional report comparing emissions against the 2007 milestone as calculated under the original 2003 State Implementation Plans (SIPs), as well as against the revised 2007 milestone as calculated under the current plans (Utah & Wyoming have submitted revised SIPs, while Arizona and New Mexico are in the process of completing their revisions). Only stationary sources emitting greater than 100 tons per year are included in the program. Results indicate that the 2005-2007 average emissions were about 33% below the revised 2007 milestone for the four §309 states.

### [Web Site Maintenance](#)

The WRAP's website is one of its primary communications tools. The budgeted funds will be used by WRAP staff to continue the contract with the WRAP's webmaster through 2010.

## Appendix A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105  
July 1, 2009

Region 9 Tracking #: 09-468

Pam Inmann  
Executive Director  
Western Governor's Association  
1600 Broadway, Suite 1700  
Denver, Colorado 80202

Dear Ms. Inmann:

The U.S. Environmental Protection Agency has reserved \$152,484 of Federal Clean Air Act (CAA) grant funds for the Western Governor's Association (WGA). This funding is targeted for continuing WGA's work in developing Regional Haze State Implementation Plans under SFR Section 51.308 and 51.309, which are the requirements to implement visibility protection for Federal Class 1 areas under 169A of the Clean Air Act.

These funds will be awarded by the Region 9 Air Division as an amendment to your existing grant, XA-96999301-1. Please apply for \$152,484 of federal funds following the standard application procedures used for CAA Section 103 grant assistance. The application kit (including instructions) for available through the internet at <http://www.epa.gov/region09/funding/applying.html>. If you require a hard copy of the application kit, please contact the Grant Assistant at (415) 972-3702. The CFDA number for this grant is 66.034. Please check that the R9 Tracking # (located in the upper-right hand corner of this guidance letter) is reflected on the upper-right hand corner of the application (SF-424).

The application and budget attachments should contain sufficient detail to identify the purpose of the expenditures in the budget. The original and one copy of your final application and work plan should be submitted to the address below by July 15, 2009:

Grants Management Office, MTS-7  
Management & Technical Services Division  
U. S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105-3901

You may obtain a copy of the Code of Federal Regulations (CFR), Title 40, Parts 1-49, and the Office of Management and Budget (OMB) Circulars, which are applicable to your grant of cooperative agreement, at your local U.S. Government Bookstore, or from the U.S. Government Printing Office at (202) 512-1800, or through the internet at <http://www.epa.gov/region9/funding>.

Questions regarding administrative matters should be referred to your EPA Grants Management Specialist, Renee Chan, at (415) 972-3675. Please call Roy Ford, Project Officer at (415) 972-3997 with programmatic questions.

Sincerely,

Stephanie Valentine  
Manager  
Grants And Program Integration Office  
Air Division

Cc: Patrick Cummins, WGA  
Tom Moore, WGA