

Western States Air Resources Council Consolidated Workplan

FY2014 – 2016

Western States Air Resources Council
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Alaska·Arizona·California·Colorado·Hawaii·Idaho·Montana·Nevada·NewMexico·NorthDakota·Oregon·SouthDakota·Utah·Washington·Wyoming

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Program Description

Purpose

The WESTAR Council is a non-profit regional association composed of delegates from fifteen western State Air Quality Agencies and, on an *ex officio* basis, federal Land Management Agencies, local air pollution control agencies, and tribes located in the western U.S. The Council's objectives are to:

- Promote the exchange of information between states;
- Serve as a forum to discuss western regional air quality issues of common concern;
- Share resources for the common benefit of the members;
- Coordinate research;
- Develop and deliver relevant air quality related training programs; and
- Develop air quality-related policy and guidance.

WESTAR receives funding through grants and contracts to achieve these objectives. This work plan, covering calendar/fiscal years 2014 through 2016, summarizes the actions and deliverables to be completed in the coming years. Currently, the funds used to support this work plan include:

- EPA - Core Operating Grant, comprising:
 - Operations: funding to provide basic membership services
 - Training: funding for operation of the western regional training center
 - Regional Technical Support: funding for operation of the Western Regional Air Partnership
 - State Travel Support
- EPA – Regional Haze Technical Support Grant
- NPS – Core Grant (Cooperative Agreement to Coordinate and Develop Air Quality Products and Strategies)
 - Task Agreement 1: 3-State Federal Leadership Forum
 - Task Agreement 2: Pending
- BLM/JFSP – Research Agreement: PMDETAIL (Particulate Matter Deterministic Empirical Tagging Assessment of Impact on Levels)
- BLM – Williston-Great Plains Basins Oil and Gas Update
- BLM – Cooperative Agreement (under development)
 - Task Agreement: Drill Rig 1-hour NO₂ Collaborative Study

Members

WESTAR's Articles of Association define two classes of membership – voting members and ex officio members. Voting members of WESTAR include the Air Program Administrator (or designee) from the 15 western states:

WESTAR Voting Members

Alaska
Arizona
California
Colorado
Hawaii

Idaho
Montana
Nevada
New Mexico
North Dakota

Oregon
South Dakota
Utah
Washington
Wyoming

Historically, WESTAR’s ex officio membership included representatives from the four federal Land Management Agencies: USDI Bureau of Land Management, USDI National Park Service, USDI Fish and Wildlife Service, and USDA Forest Service. With the merger of WESTAR and WRAP in late 2013, the ex officio membership of WESTAR has expanded. WRAP’s current membership can be found on WRAP’s website at <http://www.wrapair2.org/membership.aspx> .

WRAP Members – May 2014

	States	Tribes	Local Air Agencies	Federal Agencies
1	Alaska	Pueblo of Acoma	Maricopa County Air Quality Department	National Park Service
	Arizona	Campo Kumeyaay Nation	Pima County DEQ	Fish & Wildlife Service
	California	Confederated Salish and Kootenai Tribes	Pinal County AQCD	Bureau of Land Management
	Colorado	Confederated Tribes of the Umatilla Indian Reservation	Bay Area Air Quality Management District	U.S. Forest Service
5	Hawaii	Fort Belknap Indian Community	Butte County Air Quality Management District	Environmental Protection Agency
	Idaho	Hopi Tribe	Great Basin Unified APCD	
	Montana	Hualapai Tribe	Imperial Co. Air Pollution Control District	
	Nevada	Kashia Band of Pomo Indians of Stewarts Point Rancheria	Mojave Desert AQMD	
10	New Mexico	Lone Pine Paiute-Shoshone Reservation	Monterey Bay Unified APCD	
	North Dakota	Nez Perce Tribe	North Coast Unified AQMD	
	Oregon	Northern Cheyenne Tribe	Northern Sonoma County APCD	
	South Dakota	Ohkay Owingeh Pueblo	Placer County Air Pollution Control District	
15	Utah	Orutsararmiut Native Council (ONC)	Sacramento AQMD	
	Washington	Pechanga Band of Luiseno Indians	San Diego County APCD	
	Wyoming	Pyramid Lake Paiute Tribe	San Luis Obispo County APCD	
		Shoshone-Bannock Tribes	Santa Barbara County APCD	
Pueblo of Zuni		Tehama County APCD		
20			Yolo-Solano Air Quality Mgmt. District	
			Clark County Dept. of Air Qual. & Env. Mgmt.	
			Lane Regional Air Protection Agency	

Northwest Clean Air Agency
Olympic Region Clean Air Agency
Puget Sound Clean Air Agency
Southwest Clean Air Agency
Spokane Regional Clean Air Agency
Yakima Regional Clean Air Agency

Common to all WESTAR member agencies is an interest in managing air quality - to protect against unhealthful levels of air pollution and to protect against adverse impacts on air quality related values within parks, wildlife preserves, wilderness areas, and other federal lands and on tribal lands. The WESTAR Council offers a unique and important opportunity for governmental entities to coordinate their efforts and work towards integrating air quality management strategies.

The WESTAR Executive Board directs and oversees WESTAR staff on behalf of the Council, and acts for the Council on matters not requiring action by the full membership. The duties of the WESTAR Executive Board are as follows:

President	The Council President is responsible for: supervision of the Executive Director and coordination of Council business with the Office of the Executive Director; approval of agendas and chairing Council meetings; and general oversight of Council activities.
Vice President	The Council Vice President is responsible for conducting the duties of the President in his or her absence. The Vice President automatically assumes the Presidency at the first WESTAR Council business meeting each year.
Treasurer	Responsibilities of the Treasurer include oversight of the Council's finances in coordination with the Office of the Executive Director.

Staff

There are currently five permanent WESTAR staff members:

Executive Director: The Executive Director's responsibilities include: establishment of grants and contracts on behalf of the Council; management of the financial affairs of the Council under the oversight of the Treasurer; preparing agendas for Council meetings (for the President's approval); and preparation and distribution of minutes. As authorized by the membership or the officers of the Council, the Executive Director is authorized to negotiate and enter into agreements and contracts with other organizations and to conduct projects and studies authorized by the Council. The Executive Director

is responsible for preparation of quarterly reports describing Council activities, financial status and other Council business matters. The Executive Director is supervised by, and reports directly to the President of the Council.

Senior Policy Analyst: The Senior Policy Analyst manages the association's technical projects; provides staff assistance to Committee Chairs; prepares reports, surveys, letters, and recommendations to the Council on policy and technical matters; assists the Training Manager and Technical Projects Manager, when needed; acts as liaison with other regional bodies, including NACAA; and prepares work plans and budgets for review by the Executive Director and consideration by the Council.

Training Manager: The Training Manager's primary responsibility is to plan for, prepare, and deliver high quality, relevant air quality related training to WESTAR members and others through the Western Regional Training Center; coordinate with other training organizations to leverage other course offerings; keep abreast of the training needs of its members; assists the Senior Policy Analyst and Technical Projects Manager, when needed; and prepare work plans and budgets for review by the Executive Director and consideration by the Council.

Technical Projects Manager: The Technical Projects Manager staffs, coordinates, and manages regional air pollution analyses, and supports planning for air quality in the western states. This is accomplished by tracking the regional air quality technical and planning requirements of western air quality management agencies and providing technical analysis and results through work accomplished in regional air quality projects. In addition, the Technical Projects Manager assists the Senior Policy Analyst and Training Manager when needed, and prepare work plans and budgets for review by the Executive Director and consideration by the Council.

Office Manager: The Office Manager handles the administration of the WESTAR home office; handles accounts payable; maintains files and records for review by Grantors; assists the Executive Director with calendaring, scheduling, meeting and conference call arrangements; prepares routine correspondence; makes arrangements for twice annual business meetings; and assists the Technical coordinator and Training Manager as needed.

Committees and Workgroups

Committees within WESTAR and WRAP address key technical and policy issues important to the members. There are currently two active standing committees in WESTAR – the Planning Committee and the Technical Committee – and there is currently one standing committee in WRAP – the Technical Oversight Committee. The general purpose of these committees is described below, and more detail can be found on the WESTAR and WRAP websites. Each of the committees is charged with identifying and, if appropriate, addressing issues related to their assigned areas of responsibility, through:

- Sharing of information amongst states;
- Tracking the activities of NACAA and other air quality management organizations;
- Identifying the need for, and where appropriate, recommending and advocating for policy change; and
- Developing guidance documents and compiling and sharing information.

WESTAR Planning Committee

The mission of the WESTAR Planning Committee is to serve as a forum for education and information exchange among western state air quality agencies; to identify air quality issues that have a direct impact on western states and ensure western concerns are considered in national air quality planning actions. In order to accomplish this mission the Planning Committee focuses on NAAQS and associated implementation and SIP related actions, especially those affecting exceptional events, regional haze and western pollution transport.

WESTAR Technical Committee

The mission of the WESTAR Technical Committee is to serve as a forum for education and information exchange among western state air quality agencies; to identify air quality issues that have a direct impact on western states and ensure western concerns are considered in national air quality actions. In order to accomplish this mission the Technical Committee focuses on monitoring, emissions inventory and modeling related air quality issues. WESTAR also supports a western state representative on the National Ambient Air Monitoring Committee who works with agency monitoring staff through the Technical Committee.

WRAP Technical Oversight Committee

The WRAP Technical Steering Committee (TSC) provides oversight for WRAP technical projects and workgroups. The activities of the projects and workgroups will be documented for review by the Board and the TSC. Day-to-day management of WRAP technical projects will primarily be conducted by WRAP staff. The TSC provides oversight of technical projects by reviewing and directing the work of WRAP staff to manage these projects, via routine status reports, a workplan and budget, and periodic interaction with the contractors operating these systems. WRAP workgroups recommended by the TSC and authorized by the WRAP Board will have Chairs and members from WRAP member organizations that track and execute the activities associated with the individual workgroup. Some workgroups will have significant participation by industry and environmental stakeholders. The TSC membership is periodically updated and can be found at: <http://www.wrapair2.org/TSC.aspx>.

Activities and Projects

WESTAR's core mission is to provide services and assistance to its members in their efforts to address air quality management issues. Services and assistance may take the form of policy assessment, technical analysis, training, or simply providing a forum for members to discuss issues of common interest. For the last 20 years, financial support for WESTAR's core mission has been provided primarily through grants from EPA. With the merger of WESTAR and

WRAP, WESTAR is receiving additional financial support through Cooperative Agreements with the National Park Service and the Bureau of Land Management. WESTAR may receive additional financial support from others, including but not limited to states, other federal agencies, and the private sector, to conduct specific projects that are consistent with the organization's core mission.

EPA – Core Grant

WESTAR's Core Grant from EPA is comprised of financial support that would otherwise fund state and local agencies directly to implement Clean Air Act programs. Prior to the submission by WESTAR of a grant application to EPA, each member state is asked to affirm their willingness to defer a portion of the Section 105 grant, to be pooled with funding from other member states in support of WESTAR. Historically, funds have been set aside in this manner for WESTAR Operations, Training, State Travel Support, and recently, for Regional Technical Support. Funding levels have remained stable for the last decade, and WESTAR's grant application for 2014 – 2016 EPA funding assumes continued funding at these levels.

While Regional Technical Support funding is new to WESTAR, these funds have supported WRAP activities for many years. With WRAP joining WESTAR in late 2013, this funding will be folded into WESTAR's Core Grant, dedicated to providing comparable services and support as WRAP has provided through the years.

State Travel Support funds have been included as a part of WESTAR's core grant for many years. At their discretion, states set aside additional funding to support staff travel. WESTAR manages these fund on behalf of contributing members.

Operations Project

The purpose of the Operations project is to develop, implement, and support the policy and technical activities at WESTAR that benefit member states. Funding for this project comes entirely from member state contributions. In addition, personnel from member states and federal land management agencies contribute their time and expertise to many of the tasks performed under this project. For example, members of WESTAR's committees are often asked to review and draft documents for consideration by other committee members, and make presentations on conference calls and at meetings. While funds from WESTAR's Operations project pay for the conference call itself, the time spent by staff doing research on the issue, and the time spent on conference calls are additional "in-kind" contributions by WESTAR members. Un-reimbursed staff time working on Operations projects is vital to our success.

1. Meetings

The WESTAR Council will meet as often as needed to address priority activities. Scheduled meetings include the Spring and Fall Business meetings (face to face) and monthly conference calls.

Participants in both the face to face meetings and monthly conference calls include WESTAR members and invited staff (typically deputies and/or lead planners or technical staff).

In addition, WESTAR expects to host one to three unscheduled meetings each year related to specific priority topics - meetings that will involve some or all of the WESTAR directors as well as staff working in the program area addressed by the meeting. For example, in recent years meetings were held on improvements to the regional haze program, New Source Performance Standards for wood burning devices, and implementation of the exceptional events rule. Meetings of this nature are difficult to schedule in advance, as they typically address emerging issues or are in response to actions taken by EPA or others that impact air quality management in western states. For planning purposes, we will assume that WESTAR will host one such meeting each year.

2. Specialty Conference

Each year, WESTAR identifies a topic for discussion by staff and managers from WESTAR states. Generally, the topic is technical, but will often include policy discussions as well. Funds are earmarked for speakers, facilities, and to provide travel support to state staff. In general, the topic for the annual specialty conference is determined through discussions on monthly conference calls and bi-annual business meetings. We estimate 40 or more people will participate in each of the specialty conferences, people whose role within their state will relate to the topic being addressed in the conference. WESTAR traditionally provides travel support for two representatives from each state to attend the meetings.

3. Committee Activities

WESTAR's operating committees address priority issues and emerging topics. While these priorities are constantly evolving, each committee has anticipated issues within their assigned areas of responsibilities that are especially important to focus on in the coming year, either because of the importance of the issue to western states, the timeliness of the issue (for example, pending EPA guidance or rules), or both. A general outline is provided below as an approach for each committee to carry out its assigned responsibilities:

- Conduct and document periodic conference calls;
- Conduct face-to-face committee meetings as needed, with the primary objective to identify emerging issues and to develop a recommended list of priority activities for consideration by the Council;
- Brief the air directors on committee activities at the spring and fall business meetings;
- Sponsor committee members' participation in key national or regional meeting(s);
- Provide a forum for members of regional and national committees to share information with other states.

In addition to these "core" activities, committees may form ad hoc workgroups to address specific topics. Ad hoc workgroups are formed at the request of the WESTAR Council, sometimes based on a standing committee recommendation. These workgroups are intended to

focus on specific problems and their solutions and convene for a limited period of time. For example, ad hoc workgroups have been formed to develop regional haze SIP templates and exceptional events rule and guidance assessments. Funding support for workgroup activities is provided through the parent committee. While we do not know if additional ad hoc workgroups will be established in the coming years, for planning purposes, we anticipate the need for one new ad hoc workgroup, or the re-activation of a previously active workgroup, in each of the coming 3 years to address high priority topics.

4. Expected Results

The following results are expected from the activities described above in 2014-16*:

Expected Results from EPA Core Grant – Operations Project

Activity	2014	2015	2016
Air director conference calls documented on website	9	9	9
Business meetings documented on website	2	2	2
Committee and ad hoc workgroup conference calls	40	40	40
Annual specialty conference on high priority topic	1	1	1
Meetings to address emerging topics	1	1	1
Committee representatives sponsored to attend national meetings and report back to WESTAR membership	3	3	3
Trips by committee chairs to brief air directors on committee activities	4	4	4

* Based on projected funding levels as detailed in the Budget and Staffing Plan section below.

Training Project

The purpose of the Training Project is to: (1) deliver high quality training courses/workshops that meet the needs and expectations of state and local air agency staff within the fifteen-state WESTAR region; (2) develop needed, cost-effective, responsive, and western-states-focused training opportunities; and (3) act as the main point of contact for information and educational training opportunities related to air quality training.

1. Assessment

To assure that training provided by WESTAR meets the needs of member states and local air agencies, the WESTAR Training Manager routinely participates on WESTAR’s committee conference calls and in other activities where training needs may be discussed. In addition, the WESTAR Training Advisory Committee which is comprised of staff from member states works closely with the WESTAR Training Manager to identify state-specific training priorities.

2. Training Courses, Seminars, and Workshops

WESTAR anticipates conducting 20 to 25 training courses, workshops, and seminars each year throughout the grant period. The exact number of courses funded during an individual year is variable since the number is largely dependent on the subject matter and duration of courses requested by western agencies.

WESTAR's Training Manager works with state and local agency staff to: (1) determine high priority training needs and identify available training opportunities that closely match the need, (2) assist in fine-tuning the agenda and agenda topics, (3) establish timing of the training opportunity, and (4) determine training facility and location. This training needs identification process utilized allows WESTAR to address fundamental air quality training needs as well as critical, new or newly promulgated rules/standards/guidance/ issues that will affect western air agencies in a timely, flexible, and resource-wise manner.

WESTAR's annual training schedule is typically comprised of both standardized educational opportunities, and pioneering (never before seen) educational opportunities designed and developed by WESTAR's staff. Both types of educational opportunities are important components to WESTAR's training program, and to the professional and personal development of western air staff. Standardized courses assist staff in becoming familiar with, and gaining a solid understanding of foundational issues and information. These standardized courses help staff perform day-to-day job responsibilities more effectively and efficiently, and get inexperienced staff up-to-speed. The pioneering courses assist staff in understanding on new regulations, guidance, rules, and emerging "hot topics", and in becoming acquainted with lessons learned by other air agencies.

3. Expected Benefits

WESTAR anticipates that the following agency personnel performance benefits will result from awarding the requested funds to WESTAR:

- Directors and planning staff have better information to use in planning and in decision-making processes;
- Air monitoring personnel are better equipped to perform equipment deployment and maintenance, data collection, analysis, and quality assurance/quality control tasks;
- Permit engineers are better equipped to review permit applications, assess potential environmental impacts of proposed operations, and ensure that adequate controls are required on air pollution sources;
- Compliance and enforcement personnel are better equipped to assess and promote compliance, initiate enforcement actions, and return facilities to compliance, and have a better understanding of the options for creating effective and balanced compliance and enforcement programs;
- Relationships between agencies and permittees are enhanced as staff display higher levels of confidence, knowledge, and sensitivity in dealing with the regulated community.

Additionally, awarding the requested funds to WESTAR contributes to member agency performance (see above) resulting in the following environmental benefits:

- Reductions in emissions of criteria and hazardous air pollutants;
- Improvements in local, regional, and national air quality;
- Greater degree of conformance with ambient air quality standards;
- Smaller percentage of the population exposed to harmful levels of criteria and hazardous air pollutants;
- Improved facility performance;
- Improved compliance rates

WESTAR will provide Course Summary Reports to EPA for all training courses, workshops and conferences offered during the period, and funded through this award. All completed evaluations are maintained by WESTAR for a period of three (3) years following the actual training.

4. Expected Results

The following results are expected from the activities described above for 2014-16*:

Expected Results from EPA Core Grant – Training Project

Activity	2014	2015	2016
Number of educational opportunities developed and delivered	25	23	21
Estimated number of students trained	650	600	550
Estimated number of student training days	1250	1150	1050
Number of training courses developed/updated	0	1	0

* Based on projected funding levels as detailed in the Budget and Staffing Plan section below.

Regional Technical Support Project

Beginning in October 2013, WESTAR took over WGA’s former role of administering the Western Regional Air Partnership (WRAP). WRAP will continue work during 2014-16 on behalf of its members across the West to facilitate and assist with the ongoing implementation of state and EPA regional haze plans, and continue regional technical support for new and revised National Ambient Air Quality Standards (NAAQS) and associated state planning needs. Funding covers WESTAR staff time, travel support, and project management to manage the WRAP air quality program activities as described below. The WRAP air quality program receives in-kind and separate funding by states, federal land managers, and industry for several technical projects directly related to western regional air quality analysis and planning. WRAP projects will be coordinated with all WRAP members through calls and meetings with the WRAP Board, Technical Steering Committee, the general membership, as well as technical project E-Mails and website postings.

1. WRAP Membership Activities

At the direction of the WRAP Board, a WRAP 2014-18 Integrated Workplan linking together various existing WRAP projects and identifying emerging needs of WRAP members is in preparation during Spring and Summer 2014. A complete draft will be reviewed at the May 2014 WRAP membership meeting with further Workplan development to culminate at the September 2014 WRAP membership meeting with adoption of the Workplan, and recommendation to WESTAR to execute and track Workplan activities, and to pursue funding for projects and activities not currently funded.

2. Project Management and Coordination

The WRAP Board and TSC will provide oversight and direction to WRAP staff. Additional topical workgroups may be formed as a result of preparing the Workplan. WRAP will provide regional technical analysis and planning support calls on western air quality issues. The number of calls is described below. These calls and meetings will align with the WRAP Workplan goals and objectives. Many of these communication and coordination efforts will be framed in the specific individual projects described later, while providing a coherent, interconnected record of technical and planning support across the diverse membership and interests of WRAP member agencies.

3. Expected Results

The following results are expected from the activities described above for 2014-16*:

Expected Results from EPA Core Grant – Regional Technical Support Project			
Activity	2014	2015	2016
Regional Technical Analysis/Planning conference calls	5	5	5
Technical Oversight Committee conference calls	4	4	4
WRAP Board face-to-face meetings	2	2	2
Travel support provided to tribal and local agency WRAP Boar members	10	10	10

* Based on projected funding levels as detailed in the Budget and Staffing Plan section below

State Travel Support

Some states provide additional funding to WESTAR (beyond their member contributions) as a means to ensure that funds are available to support travel to meetings, training courses and workshops. State air directors advise their EPA Regional office to set aside funds for this purpose. These funds are available at the request of specific state agencies to support travel. All travel using these funds must be in accordance with WESTAR's travel policies.

BLM/JFSP – Prescribed Fire PMDETAIL

The Prescribed and Other Fire Emissions: Particulate Matter Deterministic & Empirical Tagging & Assessment of Impacts on Levels (PMDETAIL) project are hosted on the WRAPTools website at: <https://pmdetail.wraptools.org/>. The original PMDETAIL proposal is found at: https://pmdetail.wraptools.org/pdf/PMDETAIL_Attachment_1_Technical%20Proposal11_18_2011final.pdf.

1. Project Objective

The 3-year PMDETAIL project will quantify the impact of prescribed and other fire sources on particulate matter (PM) levels across the continental U.S. It will also develop new fire emissions inventories and computational modules for chemical transport models to simulate the atmospheric transformations of these emissions. The resulting models (CAMx and PMCAMx) and inventories will be evaluated against field measurements for 2002, 2008, and 2011. CAMx is a publicly-available chemical transport model (CTM) used for regulatory purposes, while PMCAMx is its research version developed by Carnegie Mellon University (CMU). We will leverage and significantly extend emission inventory development and CAMx modeling from a recently-completed JFSP study, [Deterministic and Empirical Assessment of Smoke's Contribution to Ozone](#) (DEASCO₃).

2. Approach

To develop ranges of future fire impacts, we will analyze and assess the contribution of prescribed and other fire types to elevated PM episodes using the DEASCO₃ and new inventories and the regulatory CAMx and research PMCAMx models from three historic years (2002, 2008, and 2011) and alternate future scenarios. PMDETAIL will deliver both regulatory assessments and investigate research-grade variations of the inventories and modeling tools and provide detailed comparisons of the two approaches in the predicted PM impacts. From the 3 historic years and 3 alternate future emission scenarios, we will identify up to 30 “episode areas” that capture a broad range of relationships of prescribed and other fire emissions on PM concentrations on an annual and/or 24-hour basis, with the intent of characterizing fire’s contribution across a wide geographic area of the continental U.S. Based on these results, we intend to publish fire emissions inventories’ data and results from CAMx and PMCAMx, in the form of technical products (e.g., maps, charts, tables, probability functions, etc) and as a “PM exceedance vulnerability matrix” or PM-EVM that rank orders the potential impact of prescribed fire emissions by location. This will enable FLMs to evaluate the effect of historic and future real-world decisions about prescribed burning and its effects on air quality in the context of both exceptional events and nonattainment SIPs for the PM standards, analogous to situations that FLMs will encounter in the future. This leveraging and coalescing of work from the JFSP-funded DEASCO₃ and other JFSP projects and synergies with other regional emissions and modeling studies underway will provide comprehensive regulatory and research results for multiple historic years and alternate future scenarios of fire activity and associated emissions based on historic patterns.

3. Project Team

WRAP, under the auspices of WESTAR, collects and analyzes data, maintains databases, and conducts studies to understand current and evolving regional air quality issues for state and federal agencies in the context of the Clean Air Act (CAA) and its Amendments. Team members for the PMDETAIL Project include: National Park Service and U.S. Forest Service national air quality programs' fire analysts, modeling, and program management staff (all FLM time is in-kind), Air Sciences, Inc. (experts in developing fire emission inventories); ENVIRON International Corporation (experts in chemical transport modeling), Carnegie-Mellon University (CMU – experts in atmospheric chemistry, biomass burning emissions, chemical transport modeling), and Colorado State University (CSU – experts in atmospheric chemistry, air sampling and laboratory analysis).

4. Milestones, Tasks, Timeline

This project started in Fall 2012 and ran under the administrative support of Western Governors' Association through December 2013. The project then re-started in February 2014 under the administrative support of WESTAR, to be completed in Fall 2015.

Project Milestone	Delivery Dates
2002 Emissions, Modeling, and Empirical Analysis complete	July 2013
CSU Filter Marker tests	Fall 2013
2008 DEASCO ₃ / CMU, and 2011 "Round 1" DEASCO ₃ Emissions ready for Modeling	March 2014
2008 Modeling complete, selection of 2008 case studies, CSU Filter Marker tests	June 2014
2008 Empirical Analysis complete, draft design for analysis tools	Summer 2014
2011 DEASCO ₃ and CMU "Round 2" emission inventories ready for Modeling	Fall 2014
2011 "Round 1" Modeling / Empirical Analysis complete, CSU Filter Marker tests, first implementation of tools	December 2014
Cross-cutting analysis/assessment of 3 years and selection of 2011 Case Studies	February 2015
Complete 2011 "Round 2" Modeling	March 2015
Additional empirical analyses of 2008/2011/future scenarios' Case Studies	May 2015
Compile and release regulatory results for 3 study years and "future scenarios based on 2011" via Online Tool	June 2015
Compile and release results for all case studies via Online Tool	August 2015
Project Report and manuscript submitted to refereed publication	September 2015

NPS – Coordinate and Develop Products and Strategies of Mutual Interest on Western U.S. Air Quality Issues (NPS Core Grant)

1. Project Objective

The objective of this project is to advance the cooperators' and the public understanding of air quality formation, transport and effects, advancing the missions of both National Park Service (NPS) and WESTAR/WRAP. Under a Cooperative Agreement between NPS and WESTAR/WRAP, specific tasks will be undertaken by WESTAR/WRAP to meet the Agreement's objectives. NPS and WESTAR/WRAP will cooperate in furthering the understanding of air quality formation, transport and effects in the western U.S. which includes but is not limited to ambient monitoring and data reporting, creation and operation of databases, development of emission inventories, performance of air quality modeling to understand the effects of pollution and to facilitate discussion of possible mitigation, and the development of outreach and education products toward bettering the understanding of Western air quality by the public and stakeholders.

2. Approach

WESTAR/WRAP and NPS will work together to meet the objectives of their Cooperative Agreement:

NPS agrees to:

- Provide financial assistance.
- Work cooperatively and collaboratively with WESTAR/WRAP to support project work and help advance the understanding of air quality and to disseminate that knowledge through agreed-upon projects.
- Make available NPS staff to participate substantively in the various projects.
- Provide administrative support for funding mechanisms.

The NPS and WESTAR/WRAP jointly agree to:

- Coordinate on outreach, research activities, and education projects that further the purposes of the Agreement.
- Meet at least twice a year to discuss, identify and coordinate projects that further the purposes of the Agreement.

The projects or activities under the Agreement will be individually authorized by separate Task Agreements, with each project or activity having a separate work plan and budget developed cooperatively between the NPS and WESTAR/WRAP. The WESTAR/WRAP work under the Agreement is described next in the Task Agreements.

Task Agreement 1: Federal Leadership Forum 3-State Study Coordination

A detailed Scope of Work for this Task is posted on WESTAR's website – [click here](#).

1. Task Objective

WESTAR/WRAP acts as the project manager with NPS to provide “**3-State Study Coordination**” for the common and shared benefit of NPS, WESTAR, and the other 3-State Study partners which includes the Bureau of Land Management, the U.S. Forest Service, the Environmental Protection Agency, and the States of Utah, Colorado and Wyoming. The objectives of this Study are:

- Provide storage and access to consistent, sufficient, comparable and high-quality technical data.
- Provide consistent protocols for technical data and its analysis for air quality impacts to be performed by the Three-State Study partner agencies.
- Initiate and support collaborative work by the federal and state partners on National Environmental Policy Act (NEPA) air quality analyses relative to energy development and for a broad range of air quality planning activities, including emissions, meteorological, and air quality modeling.
- Develop technical capacity and improved data sets for the cooperating agencies using standardized reproducible data collection, quality assessment, analysis and storage protocols.
- Identify, document and apply criteria for base year(s) and future year projections.
- Assist NPS and Three-State Study Governing Board in identifying ways and means of ongoing funding to support the data warehouse when operational.
- Identify the mechanisms to be used by the technical work groups to report to the Steering Committee and Governing Board for the Three-State Study.

A Technical Committee and work groups will be coordinated operated to include air quality modeling, emission inventories, ambient monitoring and data warehouse topics. Other work groups may be necessary as time goes on.

2. Approach

WESTAR/WRAP will:

- Serve as the project coordinator for the 3-State Study.
- Prepare project status reports for the NPS and the 3-State Study partners.
- Coordinate the efforts of the NPS, 3-State Study partners, and the Data Warehouse technical contractor team to design, assemble, test, populate, and plan further development of the Warehouse.
- Organize and attend meetings, webinars, and calls for the 3-State Study.

WESTAR/WRAP and the National Park Service agree to:

- Work together to develop projects, tasks, products and timelines related to the 3-State Study.
- Facilitate communication and information sharing between the NPS, the WGA, the EPA, the FS, the BLM, the States of Colorado, Utah, and Wyoming, and other interested parties and stakeholders as needed.

3. Activities and Timeline

Over the period of this Task Agreement (January 1, 2014 through February 28, 2015), WESTAR will complete the following activities:

Activity	2014	2015
Conduct conference calls with Governing Board or Steering Committee	2	2
Conduct face-to-face meetings of Governing Board or Steering Committee	2	1
Present technical milestone results to interested parties	4	4

BLM – Regional Modeling Framework (Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project Management)

The materials for the Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project (Project) will be posted on a project page to be added at:

<http://www.wrapair2.org/emissions.aspx>. The Project described next was proposed to the BLM at their request in May 2014 and leverages nominal funding already in hand from the American Petroleum Institute (API) for Project workplan development.

1. Project Objective

The purpose of the Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project (Project) is to respond to the objectives of the Bureau of Land Management's (BLM) interest in completing scientific studies to further the state of science for air quality modeling in the United States. The proposed scope of work will focus on managing, executing, and accomplishing the Project. The purpose of the Project is to collect ambient measurements adjacent to operating drilling rigs to evaluate actual 1-hour NO₂ impacts from drilling operations. In addition, sufficient data would be collected regarding drilling operations that could be used to verify NO₂ air quality models. The proposed study is designed to focus on short term episodes as opposed to a long term monitoring program. Long term monitoring is not practical because of the short duration that a drilling rig is at a single location (less than 30 days). The project will provide accurate scientific data that would otherwise not be available; this study is a rare and infrequent

opportunity to systematically collect and evaluate data for drilling operations. In addition to this proposal, WESTAR has limited funding from the American Petroleum Institute (API) for project workplan development; more funding for the field study and data analysis portions of the project is expected from API. The Project materials and detailed technical scope of work will be posted at: <http://www.wrapair2.org/emissions.aspx>.

2. Approach

WESTAR/WRAP staff will serve as the Project manager to develop this Project to include field study sites and sample data collection, data analysis, and technical consultant work plans, budgets, and contracts. The Project will be executed in a timely manner and provide quarterly reports on progress and any potential issues and how we plan to resolve those. We will prepare reports on the Project, organize and document discussions, participate in calls and meetings, and assist in presenting Project results with WRAP/WESTAR members, Project participants, other stakeholders, and interested parties. Regulators from state air quality agencies and U.S. EPA are also integral to the Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project; they will benefit from much better data as input into their air quality planning and regulatory decisions. Industry benefits from accurate data that takes into account changes in production in the different basins over time, rather than assumptions about levels of production and potential to emit calculations which often assume an unrealistically high worst case scenario.

From the Project results, BLM, industry, and regulators will be better able to discuss and determine how to manage air quality and provide meaningful reductions in air emissions in a more efficient, economical manner. In support of enhancing BLM's ability to enable scientifically sound decision-making that is protective of public lands, the Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project will provide improved capabilities to analyze current atmospheric air quality conditions and predict impacts of federal actions on air quality as part of the planning and environmental review process. Specifically, the Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project will address BLM's objectives to: 1) improve the analysis of air emissions from Oil & Gas development; (2) Develop and enhance reusable modeling frameworks; and 3) improve emissions factors for drill rig emission sources. The Oil & Gas Drill Rig NO₂ Monitoring and Model Evaluation Project will supply usable factors and data used to support informed decision making by the BLM and other agencies. The overall objective of this project is to implement a Regional Modeling Framework for the western U.S., a platform that could be used by WESTAR/WRAP members and other funding providers to evaluate air quality impacts from current and future activities.

3. Timeline and Activities

Activity	Target Date
Continue Project steering committee activities.	Start date though May 2015
Finalize Project schedule / workplan, identify / acquire leveraged funding (API, others), issue RFP and award contract for field study technical consultant support using leveraged funding (API, others).	Start date through August 2014
Begin field studies in Colorado and Alaska.	July through September 2014
Continue with field studies in other Basins.	September through December 2014
Develop RFP for technical consultant contract to be funded with leveraged funding (API, others) for data analysis, model evaluation, and reporting	November 2014
Award technical consultant contract using leveraged funding (API, others), for data analysis, model evaluation, and reporting, and conduct those activities, culminating in Project reports.	December 2014 through May 2015

Activity	2014	2015
Project activity conference calls	7	5
Field study site support	4	0
Data analysis	1	3

BLM - Oil and Gas EI for Williston and Great Plains Basins

The materials for the Oil and Gas Emission Inventories for Williston and Great Plains Basins project are posted at: <http://www.wrapair2.org/ND-SD-MT.aspx>.

1. Project Objective

Oil and gas (O&G) development in the inter-mountain western United States has undergone rapid increases over the last decade. This is especially true in the Bakken Shale formation in Montana and North Dakota where oil production has increased dramatically over the last few years. O&G development releases emissions of oxides of nitrogen (NO_x), volatile organic compounds (VOCs), carbon monoxide (CO), sulfur dioxide (SO₂), hazardous air pollutants (HAPs) and greenhouse gases (GHG). These emissions can lead to elevated air pollution levels that may threaten National Ambient Air Quality Standards (NAAQS), cause HAPs levels that

may cause health effects and have potential adverse effects on air quality related values (AQRVs), which include visibility and acid deposition. To address these potential air quality and AQRV impacts requires an accurate and comprehensive emissions inventory of O&G sources. Over the last several years, the Western Regional Air Partnership (WRAP) and the Western Energy Alliance (WEA) have jointly sponsored the development of detailed and comprehensive O&G emissions inventories for 8 basins in the inter-mountain West (the [WRAP Phase III project](#)). To date, WRAP Phase III O&G emissions have been developed for the 2006 baseline year for the South San Juan Basin in New Mexico, the North San Juan, Piceance and Denver-Julesburg Basins in Colorado, the Uinta Basin in Utah, and the Greater Green River, Powder River and Wind River Basins in Wyoming. The WRAP Phase III emissions inventories are proving to be a valuable resource for air quality modeling and planning including BLM Resource Management Plans (RMPs) and Environmental Impact Statements (EISs) and the Denver ozone State Implementation Plan (SIP).

The BLM Montana/Dakotas state office will need to perform RMPs in the near future to address the potential air quality and AQRV impacts associated with oil and gas development in the three states. They need a comprehensive O&G emissions inventory that can be used for air quality modeling and planning. The objective of this work is to develop a detailed and comprehensive O&G emissions inventory for the 2011 baseline year and a projection to the year 2015 using the WRAP Phase III methodology and procedures. This work will allow the BLM to obtain more accurate air quality and AQRV impact assessments due to current and future O&G development activities in the Montana/Dakotas region.

2. Approach

The technical approach is based on WRAP/WESTAR's and the Contractor's experience compiling the draft Williston Basin and Great Plains Basin emission inventories and experience reviewing minor source registration data collected by EPA. This work follows on from the previous Williston Basin and Great Plains Basin inventory development. More details on the WRAP Phase III O&G emission development methodology can be found in the numerous reports, spreadsheets and displays on the WRAP's Phase III project web page: http://www.wrapair.org/forums/ogwg/PhaseIII_Inventory.html. In general the technical approach for the compilation of EPA Tribal minor source well site registration data and final baseline and midterm projected inventories follows a two-step process: Step 1: Tribal emissions data aggregation, analysis, and integration; and Step 2: Inventory finalization.

3. Timeline and Activities

Activities and target dates included in the Scope of Work for this project are presented below. WESTAR anticipates completing the technical work by August 2014 and stakeholder outreach activities by the end of September 2014.

Activity	Target Date
Compile Tribal Well Site Data	May 2014
Compile Tribal Well Site Emissions	June
Complete Tribal Data Technical Memo	June
Complete Emissions Inventories	July
Complete Draft Final Report	July
Complete Final Reports/Spreadsheets	August
Stakeholder Conference Call / Optional Workshop	September

Following the technical work, WESTAR/WRAP will reach out to stakeholders to discuss the results of the project. This outreach will include the preparation of a stakeholder summary and one or more conference calls/webinars, and may include an optional stakeholder workshop. The outreach phase will be completed by the end of September 2014.

Budget and Staffing Plan

This Consolidated Workplan presents an overall picture of WESTAR's operations for 2014 through 2016. WESTAR's operations are funded through Grants, Cooperative Agreements, and contracts with several funding entities. Each funded project/activity contributes to WESTAR's mission and to the financial viability of the organization. Additionally, all of the individual workplans and budgets are interrelated. Failure to achieve the objectives under one project will effect WESTAR's ability to achieve its objectives under other projects.

Current Funding

Status of WESTAR Funding as of April 1, 2014

<u>Project/Activity</u>	<u>4/1/14 Balance</u>	<u>Expiration Date</u>
EPA Core Grant 2011-13	\$678,663	09/30/2014 ¹
EPA Regional Haze Support	76,333	12/31/2014
BLM/JFSP PMDETAIL	440,648	08/31/2015
NPS 3-State Study Coordination	72,725	02/28/2015
BLM MT-Dakotas Oil and Gas EI	50,000	09/30/2014
BLM Regional Modeling Framework	17,292	N/A

¹ WESTAR has requested a no-cost extension to 1/31/15

In summary, WESTAR receives financial support from several entities to provide services as detailed in workplans associated with each project, with budgets and timeframes spelled out in each Award Agreement. The following sections provide detail for each of these existing Agreements.

EPA Core Grant 2011-13

TITLE: EPA Core Grant 2011-13

STATUS: Ongoing; grant application for 2014-16 under development

EXPIRATION: 09/30/2014 (extension requested to 1/31/2015)

INITIAL GRANT: \$2,443,611.00 (3 years)

ACTUAL AWARD: \$2,428,647

BALANCE ON 4/1/2014: \$678,663

EPA Core Grant 2011-13 Balances by Cost Category

<u>Cost Category</u>	<u>4/1/14 Balance</u>
Personnel	34,559
Fringe Benefits	14,079
Travel	379,384*
Contractual	14,732
Other	67,994
Overhead	<u>167,916</u>
Total	\$678,663

- * The State Travel Support balance available in the 2011-13 Core Grant as of April 1, 2014 was \$323,078, made up of the remaining balances available to participating states: Arizona, Colorado, Hawaii, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, and Wyoming.

Based on WESTAR's current expenditure rates we anticipate the EPA Core Grant 2011-13 will be depleted in the October/November 2014 timeframe.

EPA Regional Haze Technical Support

As part of the move of WRAP to WESTAR in October 2013, funding remained at Western Governors' Association for tasks and activities funded from an on-going EPA grant. Funding for the on-going activities under the prior grant with WGA is now included in WESTAR's grant (above) as the Regional Technical Support Project. The remainder of the 2012 EPA grant with WGA has been awarded to WESTAR under a so-called Novation Agreement, based on WESTAR's agreement to complete the work that remains to be done under the WGA agreement.

Western states and tribes are relying on WESTAR to assist them in developing Regional Haze State Implementation Plans addressing visibility protection for Federal Class I areas under 169A of the Clean Air Act. Under this agreement, WESTAR provides technical data and analytical results in support of implementation plan completion, review, approval and tracking.

Status of EPA Regional Haze Technical Support Budget as of 4/1/2014

TITLE: Regional Haze Technical Support
STATUS: Awarded
EXPIRATION: 12/31/2014
ORIGINAL AWARD: \$110,802
BALANCE ON 3/1/2014: \$76,333

EPA Regional Technical Support Project Balances by Cost Category

<u>Cost Category</u>	<u>4/1/14 Balance</u>
Personnel	25,271
Fringe Benefits	12,446
Travel	5,246
Contractual	0
Other	10,223
Overhead	<u>23,147</u>
Total	\$76,333

At WESTAR's current expenditure rate, which assumes that 35% of the Technical Projects Manager's time is allocated to this project, we anticipate that the funds from this grant will be depleted by June 2014.

BLM/JFSP Prescribed Fire PMDETAIL Project

TITLE: BLM/JFSP Prescribed Fire PMDETAIL Project
STATUS: Awarded
EXPIRATION: 8/31/2015
ORIGINAL AWARD: \$423,707
SUPPLEMENTAL AWARD: \$17,388
BALANCE ON 4/1/2014: \$440,648

BLM/JFSP PMDETAIL Project Balances by Cost Category

<u>Cost Category</u>	<u>4/1/14 Balance</u>
Personnel	14,236
Fringe Benefits	2,010
Travel	1,900
Contractual	400,039
Other	7,455
Overhead	<u>15,008</u>
Total	\$440,648

At WESTAR's current expenditure rate, which assumes that 10% of the Technical Projects Manager's time is allocated to this project, we anticipate that the funds from this grant will be depleted by August 2015.

NPS Core Grant – Task 1: 3-State Study Coordination

TITLE: NPS Core Grant (Coordinate and Develop Products and Strategies of Mutual Interest on Western U.S. Air Quality Issues)

STATUS: Initial award for Task 1: 3-State Study Coordination Project

EXPIRATION: 2/28/2015¹

ORIGINAL AWARD: \$79,862

BALANCE ON 4/1/2014: \$72,725

NPS 3-State Study Coordination Project Balances by Cost Category

<u>Cost Category</u>	<u>4/1/14 Balance</u>
Personnel	30,320
Fringe Benefits	4,280
Travel	950
Contractual	0
Other	1,734
Overhead	35,440
Total	\$72,725

¹ This is the expiration date for Task Agreement P14AC00133, the 3-State Study Coordination project. The NSP “Umbrella” Agreement, under which individual tasks are funded, expires 12/31/2018.

At WESTAR’s current expenditure rate, which assumes that 45% of the Technical Projects Manager’s time is allocated to this project, we anticipate that the funds from this grant will be depleted by September 2014.

BLM Regional Modeling Framework Project

The Regional Modeling Framework project has begun with financial support provided by the American Petroleum Institute (API). The API funds are being used to develop a scope of work for, and as an initial investment in the work needed to evaluate the actual 1-hour NO₂ impacts from oil and gas drilling operations. This project is included in this WESTAR Consolidated Workplan because a portion of the funds provided by API will be used to reimburse WESTAR for staff time associated with this effort.

Status of BLM Regional Modeling Framework Budget as of 4/1/2014

TITLE: BLM Regional Modeling Framework Project

STATUS: Initial funding from private sector; grant application submitted to BLM pending

EXPIRATION: N/A

ORIGINAL AWARD: \$20,000

BALANCE ON 4/1/2014: \$17,292

WESTAR expects to complete the scope of work for this project by June 2014. 10% of the Technical Projects Manager’s time will be allocated to this project until the scope of work is completed, leaving a projected balance for further work on this project of between \$12,000 and \$13,000.

BLM Oil and Gas EI for Williston and Great Plains Basins

Funding for the Oil and Gas Emission Inventory for the Williston and Great Plains Basins project was awarded on April 24, 2014.

TITLE: BLM Oil and Gas Emission Inventory for the Williston and Great Plains Basins Project

STATUS: Awarded

EXPIRATION: 4/23/2019

ORIGINAL AWARD: \$50,000

BALANCE ON 4/24/2014: \$50,000

BLM Williston/Great Plains O&G EI Project Balances by Cost Category

<u>Cost Category</u>	<u>4/24/14 Balance</u>
Personnel	4,818
Fringe Benefits	4,011
Travel	329
Contractual	36,819
Other	2,191
Overhead	<u>4,832</u>
Total	\$50,000

At WESTAR’s current expenditure rate, which assumes that 10% of the Technical Projects Manager’s time is allocated to this project, we anticipate that the funds from this grant will be depleted by September 2014.

Future Funding

In this section, predictions of future funding are presented that collectively establish the assumed financial foundation for WESTAR/WRAP. At the most basic level, the collective sources of financial support are expected to provide sufficient funding to ensure the on-going operation of the organization for the three year term of this consolidated.

EPA Core Grant 2014-16

Funding to support WESTAR’s Core Grant activities in 2014, 2015, and 2016 is comprised of the balance remaining of previously awarded funding, and new funding, for which a grant application will be submitted after approval of a workplan and budget by WESTAR’s membership.

EPA Core Grant 2014-16 Budget

TITLE: EPA Core Grant 2014-16
STATUS: Application due 6/16/2014
EXPIRATION: 12/31/2016 (anticipated)
GRANT REQUEST: \$2,761,500 (3 years)

Projected Budget EPA Core Grant 2014-16				
	Year			
Cost Category	2014	2015	2016	Total
Personnel	217,944	219,033	220,129	657,106
Fringe Benefits	56,494	59,319	62,285	178,097
Travel	289,796	276,244	252,255	828,295
Contractual	35,000	35,000	35,000	105,000
Other	55,097	56,750	58,453	170,300
Overhead	266,169	274,154	282,379	822,702
Total	920,500	920,500	920,500	2,761,500

NPS Core Grant

The NPS Core Grant includes awards for projects related to coordinating and developing products and strategies of mutual interest on western U.S. air quality issues. In addition to the current task (Task 1: 3-State Study Coordination discussed earlier in this workplan), WESTAR anticipates project awards under this agreement in the coming years.

Beginning in August 2014, WESTAR/WRAP expects to implement Task Agreement 2, under which several key projects will be conducted, including:

- Data warehouse operation and maintenance
- Ambient monitoring
- CMAQ modeling for 2011
- Winter ozone analysis
- Improve model performance for 2011
- Source Apportionment for 2011
- Develop 2014 inventory protocols and procedures
- Planning for 2014 and future year modeling

Beginning in the first quarter of 2015, WESTAR/WRAP expects to implement projects under Task Agreement 3, including, in addition to the continued implementation of projects under Task Agreement 2:

- Additional ambient monitoring
- Further analysis of winter ozone

- Emissions inventory development for 2014
- Base 2014 and future modeling

NPS Core Grant 2014-16 Budget

TITLE: NPS Core Grant 2014-16
 STATUS: Proposed Budget
 EXPIRATION: 3/31/2016 (anticipated)
 GRANT REQUEST: \$1,566,756 (17 months)

Projected Budget¹			
NPS Cooperative Agreement			
	Year		
	2014	2015	2016
Cost Category	(Sep-Dec)	(Jan-Dec)	(Jan-Feb)
Personnel	18,880	56,650	9,440
Fringe Benefits	4,140	12,420	2,070
Travel	3,000		
Contractual	778,186	600,000	
Other	6,000		
Overhead	18,880	56,650	9,440
Total	829,086	725,720	11,950

¹ The projected funding levels in this table are for planning purposes only. No formal commitment has been made by the National Park Service with respect to future funding for WESTAR/WRAP nor has WESTAR/WRAP committed to future task assignments or projects beyond those funded under current awards.

BLM Regional Modeling Framework

BLM Regional Modeling Framework Grant 2014-16 Budget

TITLE: BLM Regional Modeling Framework 2014-16
 STATUS: Proposed Budget
 EXPIRATION: 9/30/2016 (anticipated)
 GRANT REQUEST: \$120,000 (first of 3 years)

Projected Budget¹			
BLM Regional Modeling Framework 2014-16			
	Year		
	2014	2015	2016
Cost Category	(Jul-Dec)	(Jan-Dec)	(Jan-Dec)
Personnel	9,440	18,880	18,880
Fringe Benefits	2,070	4,140	4,140
Travel	4,210	8,420	8,420
Contractual	34,120	68,240	68,240
Other	720	1,440	1,440
Overhead	9,440	18,880	18,880
Total	60,000	120,000	120,000

¹ The projected funding levels in this table are for planning purposes only. No formal commitment has been made by the Bureau of Land Management with respect to future funding for WESTAR/WRAP nor has WESTAR/WRAP committed to future task assignments or projects beyond those funded under current awards.

Other Projects

We anticipate that other funding opportunities will be available in the coming months and years, opportunities to fund projects and activities that will advance WESTAR/WRAP’s capacity to provide assistance to our members. These funding opportunities will be awarded on a competitive basis. We cannot predict how many opportunities might be available in the coming years, the award level, or our success in competing for these awards. In addition to the future funding predictions listed above, WESTAR has recently submitted two grant applications, the responses to which are pending at this time: 1) a follow up to the BLM/JFSP PMDETAIL project to be conducted 2015-17 with a total budget of \$500,000, and 2) an evaluation of the application of NASA earth observation tools and knowledge for air quality management, to be conducted between late 2014 through late 2016 with a total budget of \$787,000.

Staffing Plan

2014		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EPA													
	Core Grant 2011-13					2.00	2.00	2.45	2.45	2.45	2.45		
	Core Grant 2014-16											2.45	2.45
	Regional Haze Tech					0.35	0.35						
NPS													
	NPS Coop Agreement					0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
BLM/JFSP													
	PMDETAIL					0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
BLM													
	MT-Dakotas O&G					0.10	0.10	0.10	0.10	0.10			
BLM													
	API funding					0.10							
	Project Management							0.15	0.15	0.15	0.15	0.15	0.15
	Drill Rig Project							0.65	0.65	0.65	0.65	0.65	0.65
	Overhead FTEs:					1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
	Direct FTEs:					3.10	3.00	3.90	3.90	3.90	3.80	3.80	3.80
2015		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EPA													
	Core Grant 2014-16	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
NPS													
	NPS Coop Agreement	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
BLM/JFSP													
	PMDETAIL	0.10	0.10	0.10	0.10	0.10	0.10	0.10					
BLM													
	Project Management	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Drill Rig Project	0.65	0.65	0.65									
	Overhead FTEs:	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	Direct FTEs:	3.8	3.8	3.8	3.15	3.15	3.15	3.15	3.05	3.05	3.05	3.05	3.05
2016		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EPA													
	Core Grant 2014-16	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
NPS													
	NPS Coop Agreement	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
BLM													
	Project Management	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Overhead FTEs:	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	Direct FTEs:	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05