



## **WESTAR QUARTERLY REPORT**

Reporting Period: 3<sup>rd</sup> Quarter 2014

Report Date: October 24, 2014

EPA Grant No. XA-00T68001

EPA Grant No. XA-00T82602

EPA Grant No. XA-99T15201

NPS Agreement No. P14AC00099

Task 1: P14AC00133-TA

Task 2: P14AC01122-TA

BLM/JFSP Agreement No. L14AC00008

BLM Agreement No. L14AC00077

BLM Agreement No. L14AC00059

Regardless of funding source, all of the projects and activities conducted by WESTAR are consistent with and intended to achieve the purposes of the organization spelled out in Article 2 of WESTAR's Articles of Association, including: to promote the exchange of information related to air quality management; to develop procedures to meet air quality objectives and to protect environmental resources; to establish workgroups to investigate specific topics, and; to develop recommendations for the consideration of the membership. This report summarizes activities and outcomes for this reporting period.

### Reporting Organization:

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### Contents

- 1) [EPA Core Grant 2011-13](#) (XA-00T68001)
- 2) [EPA Novation Agreement](#) (XA-00T82602)
- 3) [EPA Core Grant 2014-16](#) (XA-99T15201)
- 4) [NPS Cooperative Agreement](#) (P14AC00099)
  - [Task 1](#): P14AC00133-TA
  - [Task 2](#): P14AC01122-TA
- 5) [BLM/JFSP Cooperative Agreement](#) (L14AC00008)
- 6) [BLM Drill Rig NO2 Monitoring Project](#) (L14AC00077)
- 7) [BLM MT/Dakotas Oil and Gas EI Project](#) (L14AC00059)
- 8) [Other Significant WESTAR Activities](#)
- 9) [Consolidated Expense Summary](#)

## 1. EPA CORE GRANT 2011-13

### a. Activity Summary: Operations Project

The purpose of the Operations project is to provide technical, policy, and administrative support to WESTAR members. Funding for this project comes entirely from member state contributions.

#### 1) Status of work plan activities

<i>Expected Result for CY2014</i>	<b>Results/Outcomes</b>	
	<i>2014 Q3</i>	<i>Year-to-date</i>
<b>10</b> air director conference calls, documented with minutes posted on WESTAR's website	<b>2</b>	<b>8</b>
<b>2</b> business meetings, documented with minutes and presentations posted on WESTAR's website	<b>1</b>	<b>2</b>
<b>24</b> Committee conference calls	<b>6</b>	<b>18</b>
<b>16</b> Ad hoc Work Group conference calls	<b>2</b>	<b>17</b>
<b>1</b> specialty conference on a technical and/or policy topic	<b>0</b>	<b>0</b>
<b>1</b> meetings held to address priority, emerging topics	<b>0</b>	<b>1</b>
<b>2</b> trips by committee representatives to attend national meetings and report back to WESTAR membership	<b>0</b>	<b>0</b>

#### 2) Other Significant Activities:

- WESTAR continued to facilitate discussions on the National Modeling Platform among its membership, through a joint Planning/Technical Committee ad-hoc work group and with EPA
- WESTAR continued to host and participate in discussions on the Woodheater NSPS with its members and outside organizations.

b. Activity Summary: Training Project

WESTAR’s Training Program addresses the near-future training needs of western air quality agencies by identifying critical needs, and offering training courses and workshops that closely match these needs. To accomplish these tasks and responsibilities, the WESTAR Training Manager works closely with WESTAR Committee members, Air Directors, WESTAR’s staff, western air agency staff, and reviews written comments/suggestions on course evaluations.

WESTAR’s Training Program offers two types of educational opportunities:

- i. State/Local Directed:
  - a. Western state/local air agencies are asked to review agency business objectives for the upcoming year;
  - b. Assist WESTAR’s Training Manager in reviewing the objectives, agendas, and topics of numerous training courses to identify the education opportunity that most closely matches agency business objectives;
  - c. Conducted as geographically close to the agency as possible in order to reduce barriers and enhance opportunity for staff cross training; and,
  - d. These State/Local Directed educational opportunities generally utilize a standardized course format;
- ii. Specialty Courses:
  - a. Subject matter for Specialty Courses are generally identified by Air Directors and WESTAR’s committees;
  - b. These specialty courses address new/emerging air quality issues requiring extensive course development activities.

1) Status of work plan activities

<i>Expected Result for CY2014</i>	<u>Results/Outcomes</u>	
	<i>2014 Q3</i>	<i>Year-to-date</i>
<b>25</b> educational opportunities developed and delivered:	9	14
<ul style="list-style-type: none"> <li>* July 15: Metal Parts Production (NACT 231)</li> <li>* July 15: Continuous Emission Monitoring (NACT 221)</li> <li>* July 16: Stationary ICE (NACT 271)</li> <li>* July 16: Observing Source Tests (NACT 224)</li> <li>* July 17: Landfill Gas (NACT 285)</li> <li>* July 17-18: Aggregate, Asphalt, Concrete (NACT 246)</li> <li>* July 18: MACT Background (NACT 290)</li> <li>* Sept 9-11: Principles &amp; Practices of AP Control (APTI 452)</li> <li>* Sept 30: Dry Cleaning (NACT 287)</li> </ul>		
<b>500</b> students trained	209	347
<b>1100</b> student training days	328	866

## 2) Other Activities this Quarter

- WESTAR staff, in order to help improve our member agency staffs' understanding of the requirements, timing, and program elements, stays informed of EPA's Carbon Pollution Standards for new (111(b)) and existing (111(d)) power plants. Unlike 111(b), for which the impacts on our member agencies are expected to be limited, 111(d) will affect most of WESTAR's member agencies, and will require extensive resource commitment.
- WESTAR staff worked closely with member agency staff to understand specific 111(d) topics that are most important to the member agency staff, and with staff from the Western Interstate Energy Board (WIEB) and Regulatory Assistance Project (RAP) to offer 111(d) conference calls for WESTAR's member agencies. WESTAR/WIEB/RAP held four conference calls covering:
  - Ramifications of 111(d) on Western States;
  - 2012 Base Year
  - Building Block #2: Redispatch
  - Impacts of Energy Efficiency (EE) and Renewable Energy (RE)
- WESTAR staff continues to serve as a committee member on EPA's LMS Maintenance/Enhancement/Technical Issues workgroup. Hour long conference calls are held every other Tuesday. The goal of the workgroup is to help EPA and its contractor improve the overall experience of EPA's APTI-Learn.net Learning Management System (LMS) for the end-user by identifying updates, enhancements, and maintenance issues, and identifying workable and resource-wise solutions.
- WESTAR staff participates on the National Training Strategy workgroup. Conference calls are held at least once a month, or more often when needed. The group is comprised of MJOs, NACAA representatives, AAPCA and EPA. The purposes of the group are to review/prioritize long-term higher-level issues, identify potential opportunities and solutions, and identify cooperative working opportunities.
- WESTAR staff participates on four subcommittees of the National Training Strategy workgroup. Conference calls are held at least once a month, or more often when needed. The group is comprised of MJOs, NACAA representatives, AAPCA and EPA. The purposes of the group are to develop processes for specific issues as identified by the NTS workgroup.
- WESTAR staff actively participates on NACAA's Joint Training Committee.

### c. Activity Summary: Regional Technical Support Project

The purpose of the Regional Technical Support project is to provide technical support to member agencies related to analysis of monitoring data, analysis and preparation of emissions inventories, regional modeling analyses, and operation and maintenance of web databases – all for member agencies to use in their air quality management and planning activities.

1) Status of work plan activities

The WRAP Technical Steering Committee, federal agency WRAP project sponsor representatives, and western regional air pollution subject matter experts from among WRAP member agencies formed a Work Plan Drafting Team and began preparing the WRAP 2014-18 Integrated Work Plan as a group in June after the May WRAP/WESTAR meetings. WESTAR/WRAP staff and Work Plan Drafting Team members prepared and presented a draft work plan for WRAP regional technical and planning support work to be addressed in the 2014-18 timeframe, and accomplished with sufficient resources based on the regulatory landscape known at this time; click [here](#) for the Work Plan. A detailed presentation was given at the [WESTAR/WRAP meetings in mid-September](#). The next steps with completing the Work Plan will be addressed on the November and December 2014 WRAP Board calls.

<i>Expected Result for Project Period</i>	<i>Results/Outcomes</i>	
	<i>2014 Q3</i>	<i>Project Period Total</i>
<b>15</b> Regional technical analysis/planning conference calls	<b>3</b>	<b>3</b>
<b>12</b> Technical Steering Committee conference calls	<b>6</b>	<b>6</b>
<b>6</b> Face-to-face WRAP Board meetings	<b>1</b>	<b>1</b>
<b>30</b> Travel support provided to local agency and tribal WRAP Board members	<b>4</b>	<b>4</b>

2) Other Activities this Quarter

- Staff conducted 4 calls with state and regional EPA staff about specific regional technical efforts for the Regional Haze plans due July 2018.
- Updated the West-wide Jumpstart Air Quality Modeling Study ([WestJumpAQMS](#)) web page with additional materials, documenting the ongoing series of follow-up workshops, including presentation materials.

d. Budget Summary and Status

The following tables summarize the status of WESTAR’s Core Grant budget, comparing cumulative grant awards since the inception of the current grant (September 1, 2011) through the end of the most recent quarter. While authority to spend against the new grant began on September 1, 2011, WESTAR continued to spend down the prior grant through November 2011. Thus expenditures for the first two months of the project period were paid out of the prior grant.

**EPA Core Grant 2011-13  
Cumulative Grant Awards by Project**

<b>Project Title</b>	<b>Total Anticipated Project Period Cost</b>	<b>Total Awards Project Period to Date as of 9/30/2014</b>	<b>Percentage</b>
Operations	840,000	830,312	99%
Training	1,102,500	1,102,500	100%
Regional Tech Support	0	147,208	
State Travel Support	410,961	348,627	85%
<b>Totals</b>	<b>2,353,461</b>	<b>2,428,647</b>	<b>103%</b>

**EPA Core Grant 2011-13  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget<sup>1</sup></b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	644,623	44,646	651,517	101%
2. Fringe Benefits	172,051	10,439	155,588	90%
3. Travel	740,189	58,041	477,487	65%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	114,037	3,857	113,460	99%
7. Construction	0	0	0	
8. Other	351,727	8,363	344,767	96%
9. Indirect Expenses	406,020	46,791	445,840	110%
<b>Totals</b>	<b>2,428,647</b>	<b>172,136</b>	<b>2,188,659</b>	<b>90%</b>

<sup>1</sup> WESTAR has received approval from EPA Region 9 on budget revisions in light of sequestration reductions, proposed revisions to the cost allocation plan, and the expectation of additional awards from the National Park Service and Bureau of Land Management. Percent of total budget figures are based on original work plan budget.

e. Other Significant Activities – EPA Core Grant 2011-13

- Staff participated in meetings with representatives from the northeast states and the Hearth Patio and Barbecue Association to identify potential issues with implementation of pending EPA regulations. The meetings, conducted under Chatham House Rules, culminated in a set of recommendations presented to the EPA Assistant Administrator.
- WESTAR’s fall business meeting was held in Girdwood, Alaska. [Click here](#) for the meeting summary, which includes links to presentations.

## 2. EPA NOVATION AGREEMENT

### a. Activity Summary

Under this agreement, WESTAR has agreed to be bound by the terms and conditions contained in EPA's predecessor grant with the Western Governors Association and to carry out the remaining tasks and activities set forth in that grant work plan. Western states and tribes are relying on WESTAR, through WRAP, to assist them in developing Regional Haze SIPs under CFR Sections 51.308 and 51.309, which are the requirements to implement visibility protection for Federal Class I areas under 169A of the Clean Air Act. Commitments include:

Commitment: Periodic progress reports to EPA on the status of objectives

- WESTAR prepares quarterly activity summaries and posts reports on the WESTAR website at [www.westar.org/ActivityReports.html](http://www.westar.org/ActivityReports.html).

Commitment: Conference calls and meetings for WRAP members to coordinate on the execution and applications of the studies and projects

- WESTAR/WRAP staff and Technical Steering Committee members prepared and presented a comprehensive description of elements for regional technical and planning support work to be included in the WRAP 2014-18 Integrated Work Plan; the presentation occurred at the [WESTAR/WRAP meetings in mid-September](#).
- Staff conducted 4 calls with state and regional EPA staff about specific regional technical efforts for the Regional Haze plans due July 2018.

Commitment: Dissemination of reports, data, and summary results via the [WRAP website](#)

- WRAP staff and Technical Steering Committee members worked on the 2014-18 Integrated Work Plan through a series of calls and an in-person meeting. The Work Plan is available at: <http://www.wrapair2.org/WorkPlan.aspx>.
- Updated the West-wide Jumpstart Air Quality Modeling Study ([WestJumpAQMS](#)) web page with additional materials, documenting the ongoing series of follow-up workshops, including presentation materials:
  - [Oregon](#) (Modeling Results [PDF](#), and Western AQ Studies [PDF](#)) August 20, 2014
  - [Maricopa County, AZ](#) ([Ozone 101](#) and [Ozone 301](#)), September 4, 2014
  - [Nevada](#) ([Agenda](#), Modeling Results [PDF](#), and Western AQ Studies [PDF](#)) September 23, 2014
  - See previous quarterly report for a summary of prior presentations

b. Budget Summary and Status

**EPA Novation Agreement  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	42,192	7,224	40,923	97%
2. Fringe Benefits	14,514	1,005	5,444	38%
3. Travel	7,230	4,301	13,777	191%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	0	0	0	
7. Construction	0	0	0	
8. Other	10,372	4,598	7,466	72%
9. Indirect Expenses	36,494	8,017	43,193	118%
<b>Totals</b>	<b>110,802</b>	<b>25,145</b>	<b>110,802</b>	<b>100%</b>

**3. EPA CORE GRANT 2014-16**

*Note: While the initial award from this grant was received in Quarter 3, work on activities and spending against this grant will not begin until October 2014. This section summarizes the grant work plan tasks/activities and funding related to this new grant.*

a. Activity Summary: 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.



1) Status of work plan activities

*Work on this grant will begin in October 2014.*

<i>Expected Result for Project Period</i>	<i>Results/Outcomes</i>	
	<i>2014 Q3</i>	<i>Project Period Total</i>
<b>27</b> Air director conference calls, documented with minutes posted on WESTAR's website	<b>0</b>	<b>0</b>
<b>6</b> Business meetings, documented with minutes and presentations posted on WESTAR's website	<b>0</b>	<b>0</b>
<b>120</b> Committee and ad hoc workgroup conference calls	<b>0</b>	<b>0</b>
<b>12</b> Trips by committee chairs to brief air directors on committee activities	<b>0</b>	<b>0</b>
<b>3</b> Specialty conferences on a high priority topics	<b>0</b>	<b>0</b>
<b>3</b> Meetings held to address emerging topics	<b>0</b>	<b>0</b>
<b>9</b> Trips by committee representatives to attend national meetings and report back to WESTAR membership	<b>0</b>	<b>0</b>

2) Other Activities this Quarter

*Work on this grant will begin in October 2014.*

b. Activity Summary: 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) Status of work plan activities

*Work on this grant will begin in October 2014.*

<i>Expected Results for Project Period</i>	<i>Results/Outcomes</i>	
	<i>2014 Q3</i>	<i>Project Period Total</i>
<b>69</b> educational opportunities developed and delivered:	0	0
*		
<b>1,800</b> students trained	0	0
<b>3,450</b> student training days	0	0

2) Other Activities this Quarter

*Work on this grant will begin in October 2014.*

c. Activity Summary: Regional Technical Support Project

The purpose of the Regional Technical Support project is to provide technical support to member agencies related to analysis of monitoring data, analysis and preparation of emissions inventories, regional modeling analyses, and operation and maintenance of web databases – all for member agencies to use in their air quality management and planning activities.

1) Status of work plan activities

*Work on this grant will begin in October 2014.*

<i>Expected Result for Project Period</i>	<i>Results/Outcomes</i>	
	<i>2014 Q3</i>	<i>Project Period Total</i>
<b>15</b> Regional technical analysis/planning conference calls	<b>0</b>	<b>0</b>
<b>12</b> Technical Oversight Committee conference calls	<b>0</b>	<b>0</b>
<b>6</b> Face-to-face WRAP Board meetings	<b>0</b>	<b>0</b>
<b>30</b> Travel support provided to local agency and tribal WRAP Board members	<b>0</b>	<b>0</b>

2) Other Activities this Quarter

*Work on this grant will begin in October 2014.*

d. Budget Summary and Status

The following tables summarize the status of WESTAR’s Core Grant budget, comparing cumulative grant awards since the inception of the current grant (September 1, 2014) through the end of the most recent quarter. While authority to spend against the new grant began on September 1, 2014, WESTAR continued to spend down the prior grant through September 2014.

**EPA Core Grant 2014-16  
Cumulative Grant Awards by Project**

<b>Project Title</b>	<b>Total Anticipated Project Period Cost</b>	<b>Total Awards Project Period to Date as of 9/30/2014</b>	<b>Percentage</b>
Operations	840,000	274,934	33%
Training	1,102,500	367,500	33%
Regional Tech Support	457,452	152,484	33%
State Travel Support	410,961	120,820	29%
<b>Totals</b>	<b>2,761,500</b>	<b>915,738</b>	<b>33%</b>

**EPA Core Grant 2014-16  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	657,106	0	0	0
2. Fringe Benefits	178,098	0	0	0
3. Travel	731,738	0	0	0
4. Equipment	0	0	0	0
5. Supplies	0	0	0	0
6. Contractual	105,000	0	0	0
7. Construction	0	0	0	0
8. Other	338,488	0	0	0
9. Indirect Expenses	751,070	0	0	0
<b>Totals</b>	<b>2,761,500</b>	<b>0</b>	<b>0</b>	<b>0</b>

**4. NPS COOPERATIVE AGREEMENT**

Under this agreement, WESTAR/WRAP has agreed to cooperate with the National Park Service 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.

Projects and activities under this 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.

**TASK 1: 3-State Study Coordination and Data Warehouse (P14AC00133)**

a. Activity Summary

Under this Task Agreement, WESTAR/WRAP provides collaboration and coordination services for states, tribes, local air agencies, and federal agencies across the Western U.S. under the leadership of the 3-State/Federal Leadership Forum (3-State/FLF). The 3-State/FLF is implementing the Western AQ Study with the following objectives:

- 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 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.

WESTAR/WRAP staff, serving as project coordinator for the 3-State Air Quality Study (3SAQS), conducted the following activities related to the furtherance of these objectives over the reporting period:

*Activities related to preparing project status reports for the NPS and the 3-State Study partners:*

- Provided staff support for July 17<sup>th</sup> 3-State Study Steering Committee meeting.
- Organized and executed two day-long 3-State Technical Committee meetings.

*Activities related to coordinating 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 Data Warehouse:*

- Extensive efforts were implemented through weekly conference calls and other project management tools, resulting in completion of the Pilot Study and version 1 of the 3-State Data Warehouse during September 2014, aligning with the deliverables listed in the 2012-14 3SAQS work plan.
- Regional modeling studies for 2008, 2011, and future projections were largely completed in the 3<sup>rd</sup> quarter 2014, to provide databases for subsequent studies by cooperating agencies, their contractors, and other users – for NEPA and other air quality planning efforts.
- Transfer protocols for modeling data and inputs to external users were prepared and file transfers to outside users began in the 3<sup>rd</sup> quarter 2014.
- Daily work on the construction and implementation of the data, web database, visualization tools, associated metadata, and web pages to access and use the Data Warehouse was accomplished by the technical contractor team – with review by the 3-State Technical Committee at their 2 meetings during this quarter.

*Activities related to organizing and attending meetings, webinars, and calls for the 3-State Study:*

- More than a dozen conference calls were held this quarter to manage the work of the technical support contractor team including Colorado State University (CSU)-Cooperative Institute for Research in the Atmosphere (CIRA), the University of North Carolina (UNC), and ENVIRON International Corp.
- ENVIRON, with UNC as a subcontractor, was awarded a contract for Phase I modeling services under the 3SAQS 2014-17 Work Plan, covering Oct. 2014 through July 2015.

- Outreach efforts with states and federal agency offices in the region surrounding the 3SAQS area, to develop relationships and identify common needs with those agencies.
- b. Budget Summary and Status

**Task 1 - NPS 3-State Study Coordination and Data Warehouse  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	35,178	8,048	30,872	88%
2. Fringe Benefits	4,968	1,120	4,342	87%
3. Travel	950	73	318	33%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	0	0	0	
7. Construction	0	0	0	
8. Other	1,734	2,719	6,539	377%
9. Indirect Expenses	37,032	8,528	36,963	100%
<b>Totals</b>	<b>79,862</b>	<b>20,488</b>	<b>79,034</b>	<b>99%</b>

**TASK 2: Three State Air Quality Study (P14AC01122)**

*Note: While this task award was received in Quarter 3, work on activities and spending did not begin until very late in the quarter.*

WESTAR/WRAP will work toward meeting the Study objectives which include:

- Provide consistent protocols for technical data and its analysis for air quality impacts to be performed by the Western AQ Study partner agencies.
- Operate and maintain a consistent set of technical information in a data warehouse.
- 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, including training, 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 and future year projections.
- Assist NPS, 3-State/FLF Study Governing Board, and other potential public agency partners 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 3-State/FLF Steering Committee and Governing Board, and assist and facilitate involvement of additional public agencies and development of future oversight entities for the Western AQ Study.

a. Activity Summary

WESTAR/WRAP staff, serving as project coordinator for the Western Air Quality Study conducted the following activities related to the furtherance of these objectives over the reporting period:

*Activities related to study coordination:*

Note: work on this task did not begin until very late in Quarter 3.

<i>Expected Result for Project Period</i>	<b>Results/Outcomes</b>	
	<i>2014 Q3</i>	<i>Project Period Total</i>
<b>6</b> Conference calls with Governing Board or Steering Committee	<b>0</b>	<b>0</b>
<b>5</b> Face-to-face meetings	<b>0</b>	<b>0</b>
<b>4</b> Technical milestones requiring special communication effort	<b>0</b>	<b>0</b>

*Activities related to ambient monitoring activities in the Utah portion of the Study region:*

- Work on activities and spending did not begin until very late in the Quarter.

*Activities related to air quality modeling for the Study region:*

- Work on activities and spending did not begin until very late in the Quarter.

b. Budget Summary and Status

**Task 2 - NPS 3-State Study Coordination and Data Warehouse  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	75,493	1,992	1,992	3%
2. Fringe Benefits	16,553	273	273	2%
3. Travel	2,192	0	0	0%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	778,186	778,186 <sup>1</sup>	778,186	100%
7. Construction	0	0	0	
8. Other	3,456	0	0	0%
9. Indirect Expenses	75,493	1,626	1,626	2%
<b>Totals</b>	<b>951,373</b>	<b>782,076</b>	<b>782,076</b>	<b>82%</b>

<sup>1</sup> WESTAR has drawn the approved contractual amount as an advance, and, in future quarterly reports, will provide summaries of expenses paid to contractors as work tasks are completed, reviewed, and approved by the Project Manager.

## 5. BLM/JFSP COOPERATIVE AGREEMENT (PMDetail)

Under this cooperative agreement, WESTAR, through WRAP, is charged with delivering innovative and useful technical products in the form of a quantitative assessment of prescribed and other fire types' effect on likely PM standards, both 24-hour and annual average for each of three historic years and 2008 alternate future scenarios. This assessment will rank fire contributions by locations. The planned PM exceedance vulnerability matrix will enable federal land management agencies to evaluate future real-world decisions about prescribed burning effects on air quality.

### a. Administrative Status

The budget and work plan for this project was submitted to the Joint Fire Sciences Program (JFSP) and the Idaho State Office of the Bureau of Land Management as the grant award entity in November and December 2013. The grant monies were then awarded in February and March 2014, in two increments. Contracts with the four technical support organizations (Air Sciences, Inc.; ENVIRON; Colorado State University; and Carnegie-Mellon University) were executed shortly after the award.

### b. Activity Summary

As noted in the section above (Administrative Status), the transition of this project from WGA to WESTAR resulted in a significant disruption of the work being conducted under this project. As a result, WESTAR will be working with the BLM Project Officer to revise the delivery dates listed below.

**Deliverable:** Updated FETS website, including empirical analysis results for 2002, 2008, and 2011.

**Delivery Dates:** Jan/Oct 2013 and May 2014

**Status and Activities:**

- 2002 results completed June 2014

**Deliverable:** Online tools, including regulatory analysis/assessment results with case studies

**Delivery Dates:** October 2014

**Status and Activities:**

- Analysis of 2008 case studies for publishing results on the [WRAPTools](#) website will be completed in the fourth quarter of 2014.

**Deliverable:** Training, including webinar-style training to FLMs on use of online PMDetail tools



**Delivery Dates:** December 2014

**Status and Activities:**

- No activity

**Deliverable:** Data and results

**Delivery Dates:** Summer 2015

**Status and Activities:**

- Selection of 2008 filter sample days/locations with large modeled Particulate Matter impacts from fire activities.
- 2011 air quality modeling and evaluation.
- 2011 modeling is underway.

**Deliverable:** Submit summary of methodology and findings of PMDETAIL to refereed publication(s)

**Delivery Dates:** Summer 2015

**Status and Activities:**

- Website, tools, training, and data results will be added, as appropriate, on a quarterly basis in the July 2014 through the September 2015 end point of the project.
- Scoping activities on tools has begun.
- Additional analysis capabilities and data from 2008 have been added to the project webpage.

c. Budget Summary and Status

WESTAR “inherited” the funds remaining in the PMDETAIL project originally awarded to WGA. WESTAR’s budget for this project is based on an updated Scope of Work reflecting the work completed under the WGA award and the work that remains to be completed under the WESTAR award.

**BLM/JFSP Cooperative Agreement – PMDETAIL Project  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	14,449.00	1,177.10	2,618.21	18%
2. Fringe Benefits	2,040.92	162.32	368.38	18%
3. Travel	1,900.00	0.00	1,239.28	65%
4. Equipment	0.00	0.00	0.00	
5. Supplies	0.00	0.00	0.00	
6. Contractual	400,039.06	67,861.98	83,324.63	21%
7. Construction	0.00	0.00	0.00	
8. Other	7,455.00	353.46	1,077.23	14%
9. Indirect Expenses	15,211.00	1,144.43	2,970.38	20%
<b>Totals</b>	<b>441,094.98</b>	<b>70,699.29</b>	<b>91,598.11</b>	<b>21%</b>

## 6. BLM DRILL RIG NO<sub>2</sub> MONITORING STUDY

### a. Activity Summary

WESTAR received initial funding from the American Petroleum Institute (API) in late 2013 to organize a workgroup and develop a work plan and schedule to execute a Study to collect ambient measurements adjacent to drilling rigs to evaluate actual 1-hour NO<sub>2</sub> impacts from drilling operations. In addition, sufficient data would be collected regarding drilling operations that could be used to verify NO<sub>2</sub> air quality models. The Study will focus on short term episodes.

In May 2014, WESTAR/WRAP responded to a funding opportunity notice from the Bureau of Land Management (BLM) for this Study. A funding proposal was prepared and submitted by WESTAR/WRAP and was then awarded by the BLM as Task 1 under the BLM-WESTAR Cooperative Agreement. The BLM funding is allocated for travel and communications for WESTAR/WRAP staff to support the Study. The BLM funding is also allocated to pay the salary of a 50% full-time equivalent WESTAR contract employee. In August 2014, API transferred funding resources to WESTAR for the bulk of the Colorado field sampling contract

Activities this quarter included:

- In September, the Study Management Team completed review and selected a field sampling contractor for the Colorado drill rig site sampling effort through a WESTAR RFP process. The contract was awarded to URS/AECOM on September 15, 2014.
- NO<sub>x</sub> and ozone monitors have been loaned from the States of MT, ND, and UT, as well as from API and the UT BLM office to reduce sampler rental costs.
- Sampler deployment began in late September for the Colorado drill rig site.
- The BLM Study Management Team member has coordinated the planning of the parallel field sampling study on the Alaska North Slope with representatives of the Alaska BLM office, the State of Alaska Air Quality Division, and North Slope Oil & Gas operators.
- The WESTAR/WRAP contract employee was hired and started July 1, 2014, to plan and manage the field sampling activities.
- Review of Study activities by the larger workgroup is scheduled for November 2014.
- Field sampling in Alaska is planned to begin in July and run through December 2014.
- Field sampling in Colorado is planned to begin in early Oct. and completed in Nov. 2014.
- A Study web page has been set up to track ongoing Study activities; see current web page content below.

### [Drill Rig 1-hour NO<sub>2</sub> Collaborative Monitoring Study](#)

The purpose of this Study is to collect ambient measurements adjacent to operating drilling rigs to evaluate actual 1-hour NO<sub>2</sub> impacts from drilling operations. In addition, sufficient data would be collected regarding emissions from drilling operations that could be used to verify NO<sub>2</sub> air quality models. The 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).

- Study Organization call – November 2013 ([PDF](#))
- Company Assistance Needed for Ambient Air Quality NO<sub>2</sub> Drill Rig Field Study Program – May 2014 ([PDF](#))
- Drill Rig 1-hour NO<sub>2</sub> Emissions and Air Quality Study Outreach - May 2014 ([PDF](#))
- Collaborative Drill Rig 1-hour NO<sub>2</sub> Impacts Study presentation – EPA/State/Local Modelers Meeting – May 2014 ([PPTX](#))
- WESTAR RFP #2014-01 for Drill Rig NO<sub>2</sub> Monitoring Project – June 20, 2014 ([PDF](#))
- Questions and answers from pre-proposal call about WESTAR RFP #2014-01 – June 28, 2014 ([PDF](#))
- Alaska Field Study Design - Drill Rig 1-Hour NO<sub>2</sub> Collaborative Study - August 2014 ([PDF](#))

b. Budget Summary and Status

The combination of funding for WESTAR personnel by BLM and field sampling contract support from API is the combined funding for this project. Start-up funding for this project has been provided by API for Phase 1 of the Study. This financial support was provided for WESTAR/WRAP to organize the workgroup, and to develop a work plan and schedule to execute the remaining phases of the Study. The BLM Task 1 funding provides staff support to the entire Study and, coupled with API field study funding, enables implementation of Phase 2 of the Study. Unspent API Phase 1 funds has been applied to Phases 2 through 4, combined with additional resources that will be needed for these phases.

**BLM Drill Rig NO<sub>2</sub> Monitoring Study  
BLM Cooperative Agreement  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	16,800	5,866	5,866	35%
2. Fringe Benefits	6,222	814	814	13%
3. Travel	8,426	481	481	6%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	68,244	8,960	8,960	13%
7. Construction	0	0	0	
8. Other	1,463	1,912	1,912	131%
9. Indirect Expenses	18,845	6,283	6,283	33%
<b>Totals</b>	<b>120,000</b>	<b>24,316</b>	<b>24,316</b>	<b>20%</b>

**API Startup Funding  
BLM Drill Rig NO<sub>2</sub> Monitoring Study  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel			3,444	
2. Fringe Benefits			469	
3. Travel			0	
4. Equipment			0	
5. Supplies			0	
6. Contractual			0	
7. Construction			0	
8. Other			0	
9. Indirect Expenses			4,328	
<b>Totals</b>	<b>20,000</b>	<b>0</b>	<b>8,241</b>	<b>41%</b>

**API Field Study Funding  
BLM Drill Rig NO<sub>2</sub> Monitoring Study  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel				
2. Fringe Benefits				
3. Travel				
4. Equipment				
5. Supplies				
6. Contractual	230,000			
7. Construction				
8. Other				
9. Indirect Expenses				
<b>Totals</b>	<b>230,000</b>	<b>0<sup>1</sup></b>	<b>0</b>	<b>0</b>

<sup>1</sup> WESTAR has contracted with URS for field work associated with this project. The contract was executed in late Quarter 3. Contract expenses will begin in Quarter 4 and will be reported on WESTAR's next quarterly report.

c. Other significant activities

- Field study resources for the Alaska North Slope study site sample collection operations have been volunteered by Conoco-Phillips and BP, reducing the costs to Study sponsors

## 7. BLM MONTANA-DAKOTAS OIL AND GAS EI PROJECT

Under this agreement with the BLM Montana-Dakotas Office, WESTAR/WRAP will develop oil and gas (O&G) emissions inventories for the Williston Basin in North Dakota, South Dakota, and Montana, and the Montana North Central (Great Plains) Basin. The WRAP, with expert contractor assistance, will build and report the inventories using the [WRAP Phase III methodology](#) employed in large active basins in the intermountain West. The result will be an accurate, comprehensive criteria pollutant inventory of actual emissions for most major point and area sources associated with exploration and production of O&G in the MT North Central (Great Plains) and ND-SD-MT Williston Basins for year 2011, as well as a mid-term projection year. One benefit of the project is development of more accurate regional O&G emission inventory data based on input from knowledgeable sources. The project will also contribute to regional air quality modeling efforts and streamline future National Environmental Policy Act (NEPA) reviews by reducing the need for project-specific modeling.

### a. Activity Summary

The Williston and Great Plains Basin Project was completed in early September 2014. Project results were delivered via a conference call with dozens of participants from industry, states, federal agencies and the project team. Here is the posting from the [Williston and Great Plains Basin Project web page](#):

### **Project Results presentation ([PDF](#)) for Sept. 3, 2014 WRAP Oil & Gas Workgroup call**

**Basin Specific Reports:** These Technical Memos contain a description of the sources included in each inventory, the data collection methodology, the inventory preparation procedures and summary tables of the results. The Data Summary spreadsheets contain the summary emissions inventory data itself, including the detailed county-level emissions, emissions by source category and by SCC, permitted and unpermitted emissions if available, and tables and charts of the emissions in similar format to those presented in the report documentation for each basin.

- **Great Plains Basin**
  - 2011 Baseline and 2015 Projection Technical Memo – August 2014 ([PDF](#))
  - 2011 Baseline Data Summary Spreadsheet – August 2014 ([XLSX](#))
  - 2015 Projection Data Summary Spreadsheet – August 2014 ([XLSX](#))
- **Williston Basin**
  - 2011 Baseline and 2015 Projection Technical Memo – August 2014 ([PDF](#))
  - 2011 Baseline Data Summary Spreadsheet – August 2014 ([XLSX](#))
  - 2015 Projection Data Summary Spreadsheet – August 2014 ([XLSX](#))

b. Budget Summary and Status

**BLM MT-Dakotas O&G EI  
Expenses by Object Class through 9/30/2014**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative</b>	<b>Percentage</b>
1. Personnel	4,818	2,703	4,839	100%
2. Fringe Benefits	1,011	377	675	67%
3. Travel	329	0	0	0%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	36,819	23,010	33,207	90%
7. Construction	0	0	0	
8. Other	2,191	1,216	1,216	56%
9. Indirect Expenses	4,832	4,447	6,926	143%
<b>Totals</b>	<b>50,000</b>	<b>31,753</b>	<b>46,864</b>	<b>94%</b>

**8. OTHER SIGNIFICANT ACTIVITIES**

- As discussed earlier in this report, WESTAR/WRAP is developing a comprehensive technical work plan that, once completed and approved by the membership, will provide a clear framework within which technical projects and activities will be conducted in future years. In part, this framework will help the members identify the work that can be done with the assets and resources currently available, as well as the work that needs to be done to meet member needs. WESTAR’s goal is to complete the work plan in the coming quarter.

## 9. CONSOLIDATED EXPENSE SUMMARY

### Cumulative Expenses by Object Class and Funding Source through 9/30/2014 All Active Accounts

Object Class	EPA Core Grant 2011-2013	EPA Core Grant 2014-2017	EPA Novation	NPS Task 1 3-State	NPS Task 2 3-State	BLM/JFSP PMDetail	BLM/API Drill Rig NO2 Startup	BLM/API Drill Rig NO2 Field Study	BLM Project 1 Drill Rig NO2	BLM MT Dakotas Oil & Gas	Totals
1. Personnel	651,517	-	40,923	30,872	1,992	2,618	3,444	-	5,866	4,839	742,071
2. Fringe Benefits	155,588	-	5,444	4,342	273	368	469	-	814	675	167,973
3. Travel	477,487	-	13,777	318	-	1,239	-	-	481	-	493,301
4. Equipment	-	-	-	-	-	-	-	-	-	-	-
5. Supplies	-	-	-	-	-	-	-	-	-	-	-
6. Contractual	113,460	-	-	-	778,186 <sup>1</sup>	83,325	-	-	8,960	33,207	1,017,138
7. Construction	-	-	-	-	-	-	-	-	-	-	-
8. Other	344,767	-	7,466	6,539	-	1,077	-	-	1,912	1,216	362,978
9. Indirect	445,840	-	43,193	36,963	1,626	2,970	4,328	-	6,283	6,926	548,128
<b>Cumulative Expenses</b>	<b>2,188,659</b>	<b>-</b>	<b>110,802</b>	<b>79,034</b>	<b>782,076</b>	<b>91,598</b>	<b>8,241</b>	<b>-</b>	<b>24,316</b>	<b>46,864</b>	<b>3,331,590</b>
<b>Budget</b>	<b>2,428,647</b>	<b>2,761,500</b>	<b>110,802</b>	<b>79,862</b>	<b>951,373</b>	<b>441,095</b>	<b>20,000</b>	<b>230,000</b>	<b>120,000</b>	<b>50,000</b>	<b>7,193,279</b>
<b>Balance Avail</b>	<b>239,988</b>	<b>2,761,500</b>	<b>(0)</b>	<b>828</b>	<b>169,297</b>	<b>349,497</b>	<b>11,759</b>	<b>230,000</b>	<b>95,684</b>	<b>3,136</b>	<b>3,861,689</b>

<sup>1</sup> WESTAR has drawn the approved contractual amount as an advance, and, in future quarterly reports, will provide summaries of expenses paid to contractors as work tasks are completed, reviewed, and approved by the Project Manager.

**Expenses by Object Class and Funding Source  
July 1 – September 30, 2014  
All Active Accounts**

Object Class	EPA Core Grant 2011-2013	EPA Core Grant 2014-2017	EPA Novation	NPS Task 1 3-State	NPS Task 2 3-State	BLM/JFSP PMDetail	BLM/API Drill Rig NO2 Startup	BLM/API Drill Rig NO2 Field Study	BLM Project 1 Drill Rig NO2	BLM MT Dakotas Oil & Gas	Totals
1. Personnel	44,646	-	7,224	8,048	1,992	1,177	-	-	5,866	2,703	71,656
2. Fringe Benefits	10,439	-	1,005	1,120	273	162	-	-	814	377	14,190
3. Travel	58,041	-	4,301	73	-	-	-	-	481	-	62,895
4. Equipment	-	-	-	-	-	-	-	-	-	-	-
5. Supplies	-	-	-	-	-	-	-	-	-	-	-
6. Contractual	3,857	-	-	-	778,186 <sup>1</sup>	67,862	-	-	8,960	23,010	881,875
7. Construction	-	-	-	-	-	-	-	-	-	-	-
8. Other	8,363	-	4,598	2,719	-	353	-	-	1,912	1,216	19,161
9. Indirect	46,791	-	8,017	8,528	1,626	1,144	-	-	6,283	4,447	76,835
<b>Total Expenses</b>	<b>172,136</b>	<b>-</b>	<b>25,145</b>	<b>20,488</b>	<b>782,076</b>	<b>70,699</b>	<b>-</b>	<b>-</b>	<b>24,316</b>	<b>31,753</b>	<b>1,126,613</b>

<sup>1</sup> WESTAR has drawn the approved contractual amount as an advance, and, in future quarterly reports, will provide summaries of expenses paid to contractors as work tasks are completed, reviewed, and approved by the Project Manager.