



## **WESTAR QUARTERLY REPORT**

Reporting Period: 4th quarter 2021

Report Date: January 31, 2022

EPA Grants No. XA-99T67301-0

NPS Agreement No.

P19AC01205

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 promoting the exchange of information related to air quality management, developing 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:

Name: Western States Air Resources (WESTAR)  
DUNS#: 1460040020000  
Address: 3 Caliente Road #8  
Santa Fe, NM 87508  
Telephone: (505) 954-1160

### Contents

- 1) [EPA Core Grant 2017-21 \(XA-99T67301-0\)](#)
- 2) [NPS Cooperative Agreement  
P19AC01205](#)
- 3) [Other Significant WESTAR Activities](#)
- 4) [Consolidated Expense Summary](#)

## **1. EPA CORE GRANT 2017-2019**

*Note: Work on activities and spending against this grant began December 2017.*

### a. 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 (October 1, 2017) through the end of the most recent quarter.

**EPA Core Grant 2017-21  
Expenses by Object Class through 12/31/2021**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative Expenses</b>	<b>Percentage</b>
1. Personnel	1,948,513	124,112	1,593,097	82%
2. Fringe Benefits	520,484	30,474	390,301	75%
3. Travel	607,505	20,575	377,337	62%
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	1,044,711	37,148	1,124,751	108%
7. Construction	0	0	0	
8. Other	689,250	28,217	650,061	94%
9. Indirect Expenses	1,398,853	56,824	1,089,778	78%
<b>Totals</b>	<b>6,209,316</b>	<b>297,350</b>	<b>5,225,325</b>	<b>84%</b>

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 – Operations Project

<i>Expected Result for Project Period</i>	<u>Results/Outcomes</u>	
	<i>2021 Q4</i>	<i>Project Period Total</i>
<b>47</b> Air director conference calls, documented with minutes posted on WESTAR’s website	<b>2</b>	<b>41</b>
<b>10</b> Business meetings, documented with minutes and presentations posted on WESTAR’s website	<b>1</b>	<b>8</b>
<b>175</b> Committee and ad hoc workgroup conference calls	<b>4</b>	<b>129</b>
<b>20</b> Trips by committee chairs to brief air directors on committee activities	<b>2</b>	<b>18</b>

5	Specialty conference on a high priority topic	0	1
5	Meetings held to address emerging topics	0	3
15	Trips by committee representatives to attend national meetings and report back to WESTAR membership	1	4

2) Other Activities this Quarter – Operations Project

\*WESTAR participated in the EPA Residential Woodsmoke Conference Calls

\*WESTAR staff continued participating in the Four Corners Air Quality Oversight Group calls. They also presented and facilitated at the Group’s annual meeting in November.

\*WESTAR staff worked with EPA staff, states, and other MJOs to create a better review process for emissions inventories

\*WESTAR collaborated with LADCO, CENSARA, MARAMA and Metro4/SESARM to review EPA’s 206v2 emissions modeling platform. Several states and MJO’s sent comments to EPA.

\*WESTAR staff and states began discussing the Western Visibility Protection and Planning Initiative. The Initiative will result in the formation of recommendations for the future of the Regional Haze program. WESTAR will engage EPA and Federal Land Management agencies in this effort.

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 – Training Project

<i>Expected Result for Project Period</i>	<i>Results/Outcomes</i>	
	<i>2021 Q4</i>	<i>Project Period Total</i>

100 Educational opportunities developed and delivered:	5	62
* Stationary Reciprocating Engine (NACT 272)		
* Baghouses (NACT 282)		
* Theory & Application of Air Pollution Control Devices (NACT 299)		
* Intermediate NSR/PSD		
* BACT Determination		
<b>3000</b> Students trained	<b>176</b>	<b>1720</b>
<b>5750</b> Student training days	<b>295</b>	<b>4342</b>
<b>1</b> Training course developed/updated	<b>0</b>	<b>0</b>

Other Activities this Quarter – Training Project

- WESTAR staff continues its work with state, local and tribal air quality government agencies in the fifteen Western United States to identify each agency’s most important training need(s) for FY2022.
- WESTAR staff works with the JTC Air Quality training group to move classroom training courses to online training to better serve the current needs of state, local and tribal air quality professionals.
- WESTAR staff serves as a member of the JTC Steering Committee. The Steering Committee oversees the operations of four work groups by providing guidance, evaluating resource needs, identifies priorities, assigns projects, provides assessments, and fosters communication. The four work groups are: 1) Communications; 2) Curriculum; 3) Training Delivery; and 4) Learning Management Systems (LMS)
- WESTAR staff is a co-lead for the Training Delivery work group.
- WESTAR staff is a committee member on the Communications workgroup, Learning Management System (LMS) workgroup, and the Curriculum workgroup.

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 – Regional Technical Support Project

Results/Outcomes

<i>Expected Result for Project Period</i>	<i>2021 Q4</i>	<i>Project Period Total</i>
<b>125</b> Work Group and Subcommittee Conference calls	<b>9</b>	<b>344</b>
<b>50</b> Technical Steering Committee conference calls	<b>2</b>	<b>46</b>
<b>10</b> Face-to-face WRAP Board meetings	<b>1</b>	<b>5</b>
<b>50</b> Travel support provided to local agency and tribal WRAP Board members	<b>4</b>	<b>29</b>
<b>5</b> Technical Steering Committee Face-to-face meetings	<b>1</b>	<b>4</b>
<b>50</b> WRAP Board calls	<b>2</b>	<b>36</b>

2) Other Activities this Quarter – Regional Technical Support Project

- The WRAP Regional Technical Center is being implemented through the Intermountain West Data Warehouse (IWDW), linked with the Technical Support System v2 and delivering the modeling results from the Western Air Quality Study, providing access to air quality data of all types and results from regional modeling studies. Regional modeling tasks and deliverables from WESTAR contracts support both the Regional Haze analysis and Western Air Quality Study. Regional Haze modeling work and data transfer was completed as well as all components of 2017 western regional modeling files.
- Staff continued to work with state and federal agencies, including regional EPA offices, to discuss and collect input on regional technical analysis needs in the western U.S. The IWDW is also hosting and distributing the 2016 National Emissions Inventory Collaborative emissions modeling platform “beta” and “v1” versions with future year projections, and associated data files for distribution.
- Dissemination of reports from projects, meetings, and calls, as well as data and summary results were also conducted via the WRAP website for Work Groups and the Technical Steering Committee.
- The WRAP Technical Steering Committee and the 5 Work Groups (Fire & Smoke, Oil & Gas, Tribal Data, Regional Technical Operations, and Regional Haze Planning) under their direction met regularly.
- The Technical Steering Committee and Co-Chairs of WRAP Work Groups and Subcommittees meet monthly on a Coordination call.

The Technical Steering Committee and Work Groups have been implementing the WRAP Board-approved “Future project prioritization topics” from the Board’s December 2, 2020 meeting. In September 2021, the Technical Steering Committee updated the Board-approved topics with a status report to be used to track progress on those topics going forward, and reported progress at the WRAP Board and TSC meeting on December 9, 2021. WESTAR-WRAP submitted and/or was part of 3 NASA ROSES project proposals which are related to the

Board's topics and would be implemented through the TSC and Work Groups. Funding decisions by NASA are expected in early 2022.

- [Wildland Fire Emissions Data Warehouse](#) (WFEDW, led by WESTAR-WRAP)
- [Organizing Remote Sensing Science Data for a Purpose: Decision Support Systems for Air Quality Management Applications](#) (co-led by Univ. of Alabama Huntsville and WESTAR-WRAP)
- Western Initiative for State relevant Air Research for Decision making (WISARD, led by Univ. of Washington)

## 2. NPS COOPERATIVE AGREEMENT

Under these agreements, WESTAR/WRAP has agreed to cooperate with the National Park Service in furthering the understanding of air quality and air pollution 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)**

This Task was completed on 9/30/2014.

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

This Task was completed on 6/30/2016.

### **TASK 3: Intermountain West Data Warehouse – Western Air Quality Study (IWDW-WAQS) (P14AC01122)**

This Task was completed on 12/31/2019.

### **TASK 4: Intermountain West Data Warehouse – Western Air Quality Study (IWDW-WAQS)**

This task was completed on 12/31/2018.

### **TASK 5: Intermountain West Data Warehouse-Western Air Quality Study (IWDW-WAQS) P18AC01186**

This task was completed on 9/30/2020.

WESTAR/WRAP staff serve as project coordinator for the IWDW-WAQS, at 0.20 FTE time.

#### a. Activity Summary

Contractual resources from this task have been used to complete the 2014-based western regional modeling with 2028 projections for Regional Haze planning, and to complete contract work to develop technical data components of a 2017-based regional modeling platform.

**Intermountain West Data Warehouse-Western Air Quality Study (IWDW-WAQS)  
Agreement P19AC01205**

Under this Agreement, WESTAR/WRAP serves as the project coordinator for the Western Air Quality Study and performs technical tasks through contractors to include:

- Air quality modeling;
- Support and coordination of IWDW operations and maintenance;
- Assistance in education and outreach to stakeholders and the public;
- Organization and participation in meetings, webinars and conference calls.

Beginning in the 4<sup>th</sup> quarter 2020, WESTAR is the sole funding source for IWDW staffing and incremental task work by contractors for WAQS modeling, using resources from this agreement and supplemented by other funding streams within WESTAR. The historic approach of direct funding of IWDW staffing by NPS was completed in the 3<sup>rd</sup> quarter 2020. WESTAR/WRAP staff serve as project coordinator for the IWDW-WAQS, at 0.20 FTE time. This quarterly progress report is prepared by WESTAR-WRAP and provided to the NPS.

WESTAR provided oversight for contractor analyses to develop technical inputs for components of the 2017-based regional modeling platform; those results were released at a December 14, 2021 meeting for WESTAR-WRAP members and the IWDW-WAQS Technical Committee. The WRAP Regional Technical Operations WG’s final Workplan Scope and the [2022-24 IWDW-WAQS draft workplan](#) were presented and discussed on December 14<sup>th</sup>.

**NPS Cooperative Agreement  
P19AC01205  
Expenses by Object Class through 12/31/2021**

<b>Object Class</b>	<b>Budget</b>	<b>This Quarter</b>	<b>Cumulative Expenses</b>	<b>Percentage</b>
1. Personnel	41,202	2,685	15,528	38%
2. Fringe Benefits	11,610	707	3,612	31%
3. Travel	0	0	0	
4. Equipment	0	0	0	
5. Supplies	0	0	0	
6. Contractual	383,495	71,213	351,824	92%
7. Construction	0	0	0	
8. Other	0	0	0	
9. Indirect Expenses	14,756	390	12,333	84%
<b>Totals</b>	<b>451,063</b>	<b>74,995</b>	<b>383,296</b>	<b>85%</b>

### 3. OTHER SIGNIFICANT ACTIVITIES

WESTAR co-chairs the Federal/State Technical Work Collaboration Group and organizes monthly and quarterly conference calls to share information about EPA and MJO technical work.

WESTAR-WRAP significant special meetings, staff activities, presentations, and external meeting participation

- Execution of the Air & Waste Management Association’s Visibility Specialty Conference in Bryce Canyon City, UT on October 5-8, 2021. Thirteen (13) speakers from western U.S. air agencies gave presentations reporting results based on WESTAR-WRAP Regional Haze analysis and planning work.
- 2021 wildfire smoke and regional PM and ozone impacts assessment effort talk for October 14<sup>th</sup> NW-AIRQUEST meeting
- Manager-Planner Workshop - Fire Emissions Data Warehouse for Long-Term Datasets, October 21<sup>st</sup>
- NASA SERVIR Air Quality Panel, October 27<sup>th</sup>
- Panelist, Value of the Community Modeling Analysis System (CMAS) for the Air Quality community, November 1<sup>st</sup>
- IMPROVE Steering Committee meeting – November 9-10
- 4 Corners Air Quality Group meeting (with Jay Baker) – November 15-16

### 4. CONSOLIDATED EXPENSE SUMMARY

#### Cumulative Expenses by Object Class and Funding Source through 12/31/2021 All Active Accounts

Object Class	EPA	NPS	Totals
	Core Grant 2017-22	P19AC01205	
1. Personnel	1,593,097	15,528	1,608,625
2. Fringe	390,301	3,612	393,913
3. Travel	377,337	0	377,337
4. Equipment	0	0	0
5. Supplies	0	0	0
6. Contractual	1,124,751	351,824	1,476,575
7. Construction	0	0	0
8. Other	650,061	0	650,061
9. Indirect	1,089,778	12,333	1,102,110
<b>Cumulative Expenses</b>	<b>5,225,325</b>	<b>383,296</b>	<b>5,608,621</b>
<b>Budget</b>	<b>6,209,316</b>	<b>451,063</b>	<b>6,660,379</b>



<b>Balance Avail</b>	<b>983,991</b>	<b>67,767</b>	<b>1,051,758</b>
----------------------	----------------	---------------	------------------

<sup>1</sup>Total of \$451,063 drawn from advance for contractor expenses; advance balance = \$67,767

### Current Quarter Expenses by Object Class and Funding Source – All Active Accounts

	<b>EPA</b>	<b>NPS</b>	
<b>Object Class</b>	<b>Core Grant 2017-2022</b>	<b>P19AC01205</b>	<b>Totals</b>
1. Personnel	124,112	2,685	126,797
2. Fringe Benefits	30,474	707	31,181
3. Travel	20,575	0	20,575
4. Equipment	0	0	0
5. Supplies	0	0	0
6. Contractual	37,148	71,213	108,361
7. Construction	0	0	0
8. Other	28,217	0	28,217
9. Indirect	56,824	390	57,214
<b>Total Expenses</b>	<b>297,350</b>	<b>74,995</b>	<b>372,346</b>