

1. The meeting was opened by Marianne Rossio, WESTAR President; and Randy Ashley, Confederate Salish, Pend d'Oreilles and Kootenai Tribes and Gordon Pierce, WRAP Co-Chairs.
2. The webinar recordings for all sessions can be found here: <http://www.westar.org/downloads.html> .
3. The Business meeting began with committee and organization status reports:
 - WRAP Board welcome (Randy Ashley, Confederated Salish, Pend d' Oreilles, and Kootenai Tribes, WRAP Tribal Co-Chair and Gordon Pierce, CO, WRAP State Co- Chair)
 - WESTAR Council welcome (Marianne Rossio, President)
 - Introductions around the room and on Zoom
 - [Welcome to New Mexico presentation](#) (Liz Bisby-Kuehn, NM)

Business and Organizational Activities

- [Staff Reports](#) (Tom Moore, Jay Baker, Jeff Gabler, (WRAP and WESTAR))
 - Committee reports (Liz Ulrich, MT, [Planning Committee](#); Kristen Martin, OR, [Technical Committee](#); Tom Moore, [IMPROVE Steering Committee](#); Gordon Pierce, [National Monitoring Committee](#))
 - [Status of WRAP Budget, Workplan Scopes, and Project Funding Requests](#) (Tom Moore)
 - Upcoming Meetings and Events (Mary Uhl)
 - [Financial report](#) (Daniel Czecholinski, AZ, Treasurer)
4. The afternoon of the first day of the meeting started with a session on Environmental Justice:
 - [EPA's Diverse EJ initiatives](#) (Tina Ndoh, EPA OAQPS Community and Tribal Programs)
 - [Satellite Data for Environmental Justice](#) (Susan Anenberg/Gaige Kerr, George Washington University)
 - [Oil and Gas Emissions and Community Outreach](#) (Celerah Hewes/Shaina Oliver, Moms Clean Air Force)

5. Followed by a session on the NAAQS review:

- [CASAC update](#) (Jim Boylan, CASAC)
- [EPA update](#) (Erika Sasser, EPA OAQPS)

6. The final session of the first day covered applications of regional modeling analyses:

- [Regional Modeling Analyses](#) (Tim Allen, FWS)
- [TCEQ near-real-time forecasting tools](#) (Ralph Morris, Ramboll)
- [Overview of EPA 2016v2 modeling platform and changes to western region emissions input](#) (Tom Moore, WESTAR/WRAP)

7. The second day of the meeting started with a session on wildfire smoke:

- [ORD wildfire smoke and health impacts research update](#) (Bryan Hubbell and Sherri Hunt, EPA ORD)
- [Improving wildfire smoke forecasts](#) (Dr. Matt Pace, AZ DEQ)
- Quantifying Pollution from Small and Prescribed Fires (Dr. Amber Soja, NASA)
- [Bringing High-Frequency Satellite Data into AirNow: Improvements for tracking wildfire smoke](#) (Phil Dickerson and Barron Henderson, EPA)

8. Followed by a session on improving emissions inventories:

- [Satellite-based NOx Emissions](#) (Dan Goldberg, George Washington University)
- [Conceptual Model for Long-Term Fire Data Support project](#) (Matt Mavko, Air Sciences Inc.)

9. The afternoon of the second days started with the OAQPS update ([Scott Mathias](#) and [Chet Wayland](#), EPA OAQPS).

10. The next session covered exceptional events:

[Exceptional Events analyses and satellite data support](#) (Dan Jaffe, U of WA-Bothell)

11. The final session of the day covered emerging air quality impacts, hazards, and vulnerabilities:

- [Communication of air quality impact risk and strategies for mitigating public exposure and impacts](#) (Jack Broadbent, BAAQMD)
- [CARB programs to address air quality impacts of a changing climate](#) (Michael Benjamin, CA)
- [Air quality hazards of the Aridification of Southern New Mexico](#) (Armando Paz,

NM)

- [Air Quality impacts of the Drying of The Great Salt Lake](#) (Bryce Bird, UT)

12. The WRAP Board covered the following on Thursday morning:

- 8:00 WRAP Board/TSC Meeting (all WESTAR-WRAP members welcome)
- Welcome, Agenda Review, Overview of the WRAP today – Gordon Pierce and Randy Ashley, WRAP Board Co-Chairs
 - Technical Steering Committee and Work Group Updates
 - TSC coordination update and overview of Workplan Scopes: Co-Chairs – Darla Potter and Julie Simpson
 - Work Group reports by Co-Chairs (up to 10 mins. each)
 - Fire & Smoke: Rhonda Payne/Bob Kotchenruther/Paul Corrigan
 - Oil & Gas: Amanda Brimmer/Mark Jones
 - Tribal Data: Emma Ruppell/Lori Howell
 - Regional Technical Operations: Mike Barna/Gail Tonnesen/Kevin Briggs
 - Regional Haze Planning – David Stroh/Amber Potts
 - Updates to WRAP organizational docs
 - Report on TSC documents status - Julie
 - Discussion of Board documents - Gordon
 - Discuss funding and budget / garnering additional resources – Gordon
 - IWDW-TSS support as western regional air quality resource - Tom
- 9:30 Break
- 9:45 Implementation of Regional Haze plans / changes to the Regional Haze program
- Lightning round of Round 2 RH SIP work (3 minutes/agency for answers to questions) – facilitated by Tom
 - [Overview of Most Important Points for Future of Visibility Protection Program \(Round 3\)](#) – Jay Baker
- 11:30 WRAP into the Future discussion – Gordon and Randy
- 11:55 WRAP-up
- 12:00 pm Adjourn

The meeting was adjourned at 12 noon MST on December 9.

Participants:

WESTAR and WRAP members

Tim Allen, FWS

Phil Allen, OR DEQ

Mary Anderson, ID DEQ
Randy Ashley, Confederated Salish and Kootenai Tribes
Michael Baca, NMED
Mike Barna, NPS
Mark Bassett, SCAQMD
Michael Benjamin, CARB
Bryce Bird, UT DEQ
Patricia Bobo, NVDEP
Kevin Briggs, CDPHE
Jack Broadbent, BAAQMD
Carl Brown, ID DEQ
Mara Burstein, CABQ
Neal Butt, NMED
May Cai, NV DEP
Chelsea Cancino, UT DAQ
Weston Carloss, CDPHE
Anya Caudill, WA DOE
Margee Chambers, Spokane Regional
Becky Close, UT DAQ
Catherine Collins, FWS
Charis Cooper, BLM
Paul Corrigan, USFS
Daniel Czecholinski, AZ DEQ
Andrew Daffern, CABQ
Robert Dengel, WA DOE
Ranil Dhammapala, SCAQMD
Zachary Dorn, AZ DEQ
Kelly Dorsi, MT DEQ
Danilo Dragoni, NV DEP
Alice Edwards, AK DEC
Scott Epstein, SCAQMD
Barbara Escobar, Pima County DEQ
Mary Fauci, Nez Perce Tribe
Rebekka Fine, CARB
Mark Fitch, NPS
Tiffany Floyd, ID DEQ
Kyrstin Fornace, SCAQMD
Mark Gagen, WY DEQ
Mark Gilbert, WY DEQ
Lisa Gover, Campo EPA

Martha Hankins, WA DOE
Lori Howell, Shoshone-Bannock Tribes
Sally Hunter, ID DEQ
Sig Jaunarajs, NV DEP
Aislinn Johns, ID DEQ
Mark Jones, NMED
Mel Joseph, LPPSR
Gary Kaufman, CDPHE
Cara Keslar, WY DEQ
Kirsten King, NPS
Josh Korth, CDPHE
Liz Kuehn, NMED
Pete Lahm, USFS
Zheng Li, Clark County DES
Mike Madsen, HI Dept of Health Clean Air Branch
Melissa Maestas, SCAQMD
Kristen Martin, OR DEQ
Shayna Martin, Shoshone-Bannock Tribes
Brandon McGuire, MT DEQ
Steven McNeece, NV DEP
Pleas McNeel, USFS
Steve Miller, ID DEQ
Ken Miller, CABQ
Jaron Ming, FWS
Ali Mirzakhali, OR DEQ
Ursula Nelson, Pima County DEQ
Jason Olds, AK DEC
Matthew Pace, AZ DEQ
Rupesh Patel, Pima County DEQ
Maxine Paul, Pueblo of Santa Ana
Leif Paulson, WY DEQ
Taylor Pavlu, NV DEP
Rhonda Payne, MT DEQ
Armando Paz, NMED
Gordon Pierce, CDPHE
Brad Poirez, MDAQMD
Darla Potter, WY DEQ
Amber Potts, WY DEQ
Araceli Pruett, Clark County DES
Damon Reyes, CABQ

Kyrik Rombough, SD DANR
Anita Rose, USFS
Marianne Rossio, HI Dept of Health
Emma Ruppell, Bishop Paiute Tribe
Brian Schath, NMED
Mike Silverstein, RAQC
Julie Simpson, Nez Perce Tribe
Jeff Sorkin, USFS
Glade Sowards, UT DEQ
Robert Spillers, NMED
Jeffrey Stocum, OR DEQ
David Stroh, ND DEQ
Hasan Tahat, Yakima Regional
Barbara Trost, AK DEC
Andrew Tucker, NV DEP
Liz Ulrich, MT DEQ
Nancy Vehr, WY DEQ
John Vimont, NPS
Jason Walker, Shoshone Bannock Tribe
Darold Wallick, Pala Tribe Environment Dept.
Pascale Warren, ID DEQ
Ben Way, WY DEQ
Jill Webster, USFS
Dan Welsh, CDPHE
Bo Wilkins, MT DEQ
Scott Windsor, Spokane Regional
Jacob Wolf, ID
Tiffany Wolfe, Pechanga Band of Luiseno Indians

EPA:

Clayton Bean, R8
Gina Bonafacino
Amanda Brimmer, R8
Sandra Brozusky, R10
Mark Evangelista
Athena Godfrey, R10
Barron Henderson, OAQPS
Bryan Hubbell, ORD
Scott Jackson, R8

Vera Kornylak, OAQPS
Chet Wayland, OAQPS
Scott Mathias, OAQPS
Bob Kotchenruther, R10
Andrew Leith
Matt Mahler
Gobeail McKinley
Erin McTigue, R10
Chris Misenis, OAQPS
Tina Ndoh, OAQPS
Beth Palma, OAQPS
Jason Sacks, ORD
Erika Sasser, OAQPS
Denise Scott, OAQPS
Panah Stauffer, R9
Joe Stein
Brian Timin, OAQPS
Gail Tonnesen, R8
Krishna Viswanathan, R10
Katie Walther, R4

WESTAR staff:

Mary Uhl
Tom Moore
Jackie Gadret
Jay Baker
Jeff Gabler

Others:

Susan Anenberg, George Washington University
Dan Goldberg, George Washington University
Celerah Hewes, Moms Clean Air Force
Dan Jaffe, U of Washington, Bothell
James Boylan, GA DNR
Ralph Morris, Ramboll
Amber Soja, NASA
Shaina Tallas, BIA
Emma Yates, NASA