

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 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