



# WRAP Workplan and Technical Analyses - Update

Julie Simpson, TSC Co-Chair

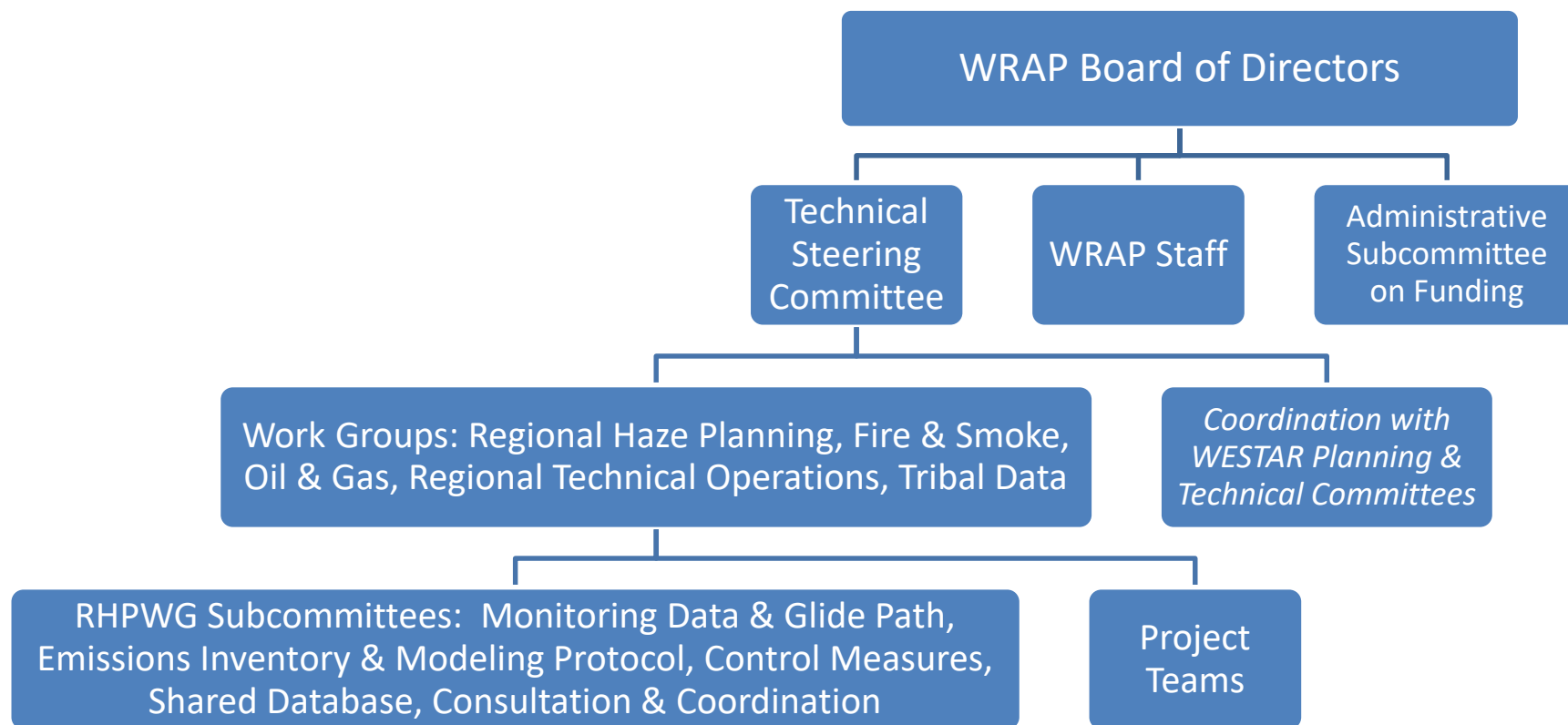
Tom Moore, WRAP/WESTAR

Frank Forsgren, TSC Co-Chair

# WRAP Workplan and Technical Analyses - Update

- Oversight, Direction & Coordination (Julie)
  - Technical Steering Committee Report
- Upcoming projects to support RH SIP/TIP planning (Tom)
- Workplan and Technical Analysis Progress Report (Frank)
  - Work Group Progress
  - Next Steps

# WRAP Organizational Structure



# WRAP TSC Report Summary

- Finalize 2018-2019 WRAP Workplan and Budget – Board approved April 4, 2018
- Continue implementation of March 2015 WRAP Strategic Plan and Vision Statement
- Provide oversight, direction and coordination for Work Groups, WRAP Staff and their projects and tasks
- Provide oversight and coordinate activities conducted under grants, cooperative agreements and WRAP projects

# WRAP TSC Report Summary

- Leverage work of other partner organizations, network with other organizations with common interests and needs
- Conduct comprehensive budget tracking for operations and technical analysis activities
- Provide progress reports and regular recordkeeping

# TSC Oversight, Direction & Coordination

- TSC/Work Group Co-Chair/Subcommittee Lead Monthly Meetings/Calls
- TSC Co-Chairs & WRAP Staff participate in all Work Group & Subcommittee & Project Calls
- Work to bring in representative spectrum of WRAP membership (states, tribes, locals, EPA, FLMs) for participation

# TSC Oversight, Direction & Coordination

- Workplan Implementation Guidance
  - Communication and Coordination Guidance
    - Website posting & Template
    - Communication & Coordination
  - Status Report Guidance and Slide Template
  - Work Products & Deliverables Completion Guidance – in development
- Feedback Survey
  - In development
- 2018-2019 WRAP Workplan Update
  - December Technical Planning Meeting



West Elk Wilderness Area, Colorado



# Upcoming projects\* to support Regional Haze SIP/TIP planning

- Regional Haze Planning Readiness Assessment
- Emissions analysis for Electrical Generating Units
- Regional Modeling and Analysis Platform

\* Technical Project Mgmt. teams to be designated as needed

# Regional Haze Planning Readiness Assessment

- **Supported by Regional Analysis funds from western state air programs (\$25k)**
- **Ramboll Environment & Health**
  - Julia Lester, project lead
- **Scope (complete by Dec. 2018):**
  - Task 1: Review and compile relevant planning documents (Aug.-Sept.)
  - Task 2: Review on-line products of WRAP Regional Haze Planning Work Group and Subcommittees
    - Design and implement a Planning Readiness Survey (Sept.-Oct.)
    - Follow-up with each WESTAR-WRAP state (Oct.)
  - Task 3: Develop a Synthesis Report (late Oct.-Nov.)
    - Draft final report for review and discussion at Dec. 4-6, 2018 Technical Planning Meeting on WRAP Workplan progress
    - Report to identify Regional Haze coordination/communication needs between states, tribes, local air agencies, federal land managers, and EPA
  - Task 4: Organize / upload materials to updated RHPWG web page (Dec.)

# Analysis of EGU Emissions for Regional Haze Planning and Ozone Transport Contribution

- **Funded by Western Energy Supply and Transmission (WEST) Associates** (up to \$50k)
- **September 15, 2018 to March 15, 2019**
- **Center for the New Energy Economy, CSU**
  - Patrick Cummins, project lead
- **Scope:**
  - Develop a comprehensive database of information on the fleet of fossil-fired EGUs in 13 Western states (circa 2014-2017) that contains information on the plants' operating characteristics and emissions; and
  - A projection of future plant utilization and emissions based on expected plant closures, re-powering plans, and additional controls required under a "rules on the books" scenario that includes any controls required by permit or consent decree during the period 2014 (base year) to 2028 (target year).
- **1-day data review /planning workshop for EGU operators and states**
  - Salt Lake City, week of October 29<sup>th</sup>
  - TicketLeap registration and hotel information to be sent this week
  - Travel support for 1 representative from each state

# Regional Haze Modeling and Analysis Platform - WESTAR Request for Proposals:

- Will use detail from [IWDW-WAQS Workplan](#) and [WRAP 2018-2019 Workplan](#)
  - WRAP Workplan approved April 2018
  - IWDW-WAQS Workplan to be approved late Sept.
    - Workplans describe how to apply funds already at / on the way to WESTAR
    - All combined funds from IWDW-WAQS and WRAP Regional Analysis will likely be awarded during next 18 months
  - RFP release in Sept., contract award in Oct.
  - Approval of contract by WESTAR Council prior to award
- Objective of RFP is to scope out costs and timing for the numerous tasks and work products desired by IWDW-WAQS Cooperators and WESTAR-WRAP Member Agencies
  - Many tasks are sequential
  - Not all tasks for IWDW-WAQS and WRAP are the same
    - Some tasks are TSSv2 planning tool-related applications of modeling platform data
  - All results must be transferred to IWDW
    - IWDW to “check off” data and results for completeness and eventual data transfers



# Workplan and Technical Analysis Progress Report





## Tribal Data Work Group

# Tribal Data Work Group

- Co-Chairs:
  - Kris Ray (Colville Tribes)
  - Emma Ruppell (Bishop Paiute Tribe)
- Call Schedule: as needed
- Website:  
<http://www.wrapair2.org/tdwg.aspx> (under development)



# Tribal Data Work Group Work Products and Next Steps

- TDWG Road Map Scope of Work (Institute for Tribal Environmental Professionals)
  - General WRAP outreach, contact list, and map updating
  - Tribal AQS data gap evaluation
  - Tribal NEI data gap evaluation
  - Tribal oil and gas EI evaluation
  - Consultation Protocol
  - WRAP webinars
- Next Steps
  - Kick-off call
  - Leverage ITEP work to connect with National Tribal Air Monitoring Support Center and National Tribal Air Association





## Fire and Smoke Work Group

# Fire & Smoke Work Group

- Co-Chairs:
  - Sara Strachan (ID DEQ)
  - Josh Hall (USFS)
- Call Schedule:
  - Bimonthly, more frequent calls if/as needed
- Website:
  - <http://www.wrapair2.org/FSWG.aspx>

# Fire & Smoke Work Group Work Products

- FSWG Road Map Scope of Work (Air Sciences)
  - Task 1
    - Evaluation of the 2014 NEI
    - Evaluation of adjustments for sensitivity testing
    - Evaluation of usefulness of 2016 EPA inventory effort for understanding the role of fire
  - Task 2
    - Using year specific inventory to develop inventory representative of 5-year baseline
  - Task 3
    - Scaling the representative inventory for sensitivity testing
    - Updating the Fire Emissions Tracking System (FETS)

# Status Report for Fire & Smoke Work Group

- Task 1 2014 WRAP FETS/Fire NEI data review
  - Obtained v2 Fire NEI data
  - Built an evaluation framework for states/tribes to review inventory  
[http://35.163.196.248/2014\\_fire\\_nei\\_eval](http://35.163.196.248/2014_fire_nei_eval)
  - Prepared explanation to accompany tool and a historical/contextual document
- Task 1 2016 WRAP FETS/Fire NEI data review
  - Participate in 2016 EPA Emissions Modeling Platform, Fire Workgroup -- support WRAP region

## Fire & Smoke Work Group Next Steps

- Task 1 2014 WRAP FETS/Fire NEI data review
  - Receive feedback
  - Summarize results with recommendations for holistic inventory updates by 11/1/18
- Task 1 2016 WRAP FETS/Fire NEI data review
  - Apply 2014 evaluation framework to 2016 beta version
  - Draft recommendations for national fire workgroup based on evaluation by December 2018



## Oil and Gas Work Group

# Oil and Gas Work Group

- Co-Chairs:
  - Amanda Brimmer (Denver RAQC)
  - Mark Jones (NM AQD)
  - Darla Potter (WY AQD)
- Call Schedule:
  - WG - 2<sup>nd</sup> Tuesday, every other month @ noon MT
  - Project Management Team (PMT) Calls – as needed
- Website:  
<https://www.wrapair2.org/OGWG.aspx>



# Oil and Gas Work Group Work Products

- Oil and Gas Emission Sources
- OGWG Road Map Scope of Work (Ramboll)
  - I. Identification and Review of O&G Specific Projection Methodologies and Work Products
  - II. Base Year and Future Year O&G Emissions Inventories
  - III. Identification and Review of Member Agency O&G Programs and Emissions Management
- OGWG Road Map: Phase I Report (Ramboll)
  - Appendix – Tabulation of On-the-Books Regulations



# Status Report for Oil and Gas Work Group

- Phase II Task 1: 2014 Base Year O&G Emissions Inventory (Ramboll)
  - Inventory Compilation, Reconciliation, Data Gaps\*
  - 2014 O&G Activity\*

\*Spreadsheets posted on website  
for member review

# Oil and Gas Work Group Next Steps

- Phase II Task 1: 2014 Base Year O&G Emissions Inventory (Ramboll)
  - Literature review to identify emission factors and speciation profiles for O&G sources
  - Finalize state and industry survey
  - Coordinate with states and local industry for response to survey
  - Technical Improvements and Reporting
  - SMOKE-ready Emission 2014 Inventory Files (April 2019)

# Oil and Gas Work Group Next Steps

- Phase II Task 2: Forecast 2028 Oil & Gas Emissions Inventory (Ramboll)
  - Identify historic growth, supply, demand, and production decline
  - Identify a Range of Forecast Year Oil and Gas Scenarios
  - Identify Rule Penetration and Effectiveness for Oil and Gas Sources: National, State, Local, Tribal
  - Implement Regionally-Consistent 2028 Forecast (On-the-Books & On-the-Way controls) Emissions Inventory (based on 2023)
  - SMOKE-ready Emission 2028 Inventory Files (June 2019)



## Regional Technical Operations Work Group

# RTOWG Work Group

- Co-Chairs:
  - Gail Tonnesen (EPA R8)
  - Kevin Briggs (CO CDPHE)
  - Mike Barna (NPS ARD)
- Call Schedule:
  - Monthly
- Website:
  - <http://www.wrapair2.org/RTOWG.aspx>

# RTOWG Work Products

- Model year representativeness study by Ramboll  
[http://www.wrapair2.org/pdf/WESTAR\\_RTOWG\\_Representativeness\\_final.pdf](http://www.wrapair2.org/pdf/WESTAR_RTOWG_Representativeness_final.pdf)
- Regional Modeling Platform
  - RTOWG to act as technical mgmt. group for regional modeling and analysis efforts by contractor team
  - Evaluate historic and future year Regional Haze impacts in the West for planning as described in WRAP Workplan
  - Support NEPA studies by IWDW-WAQS Cooperator agencies
  - Evaluation of “background” ozone and its role in the western US
    - Global/regional sensitivity simulations zeroing out US anthropogenic emissions
    - Simulations can also be used to estimate background haze resulting from natural and international anthropogenic sources

# Status Report for RTOWG

- Initiated monthly calls with EPA OAQPS to discuss issues relevant to air quality modeling in the western US
  - Maximize utility of EPA modeling for western air quality planners
  - Initial focus on boundary conditions, treatment of ammonia, and estimates of natural conditions
- Collaboration with NASA Health and Air Quality Applied Sciences teams
  - *"Supporting the use of satellite data in haze planning, a 2018-2019 NASA HAQAST Tiger Team"*, Arlene Fiore (Columbia U. - LDEO)
  - *"Using Satellite Data to Improve Background Ozone Estimates: Outlook for a New Project from NASA's HAQAST"*, Jessica Neu (NASA JPL)

# RTOWG Next Steps

- Next Steps
  - Consult with EPA/OAQPS on options for 2014 global model simulations
  - Continue to leverage collaborative opportunities
  - Manage modeling activities in support of regional haze planning





## Estimated Staffing Commitments

# WRAP TSC and Work Groups

## **Technical Steering Committee** (meets monthly)

- Co-Chairs 20-60 hours/month/person
- Members 2-4 hours/month/person

## **Fire and Smoke Work Group** (meets monthly)

- Co-Chairs 4-40 hours/month/person
- Members 2-8 hours/month/person

## **Oil and Gas Work Group** (meets in even months)

- Co-Chairs 8-16 hours/month/person
- Members 2-4 hours/month/person

## WRAP Work Groups (continued)

### **Regional Technical Operations WG** (meets monthly)

- Co-Chairs 8-24 hours/month/person
- Members 4-12 hours/month/person

### **Tribal Data Work Group** (meets as needed)

- Co-Chairs 2-8 hours/month/person
- Members 1-4 hours/month/person

### **Regional Haze Planning WG** (meets in even months)

- Co-Chairs 16-24 hours/month/person
- Members 3-5 hours/month/person

## RHPWG Subcommittees

### **Monitoring and Glide Path SC (every 2 weeks)**

- Task 1 Monitoring Data Analysis (to Dec 2018)
  - Lead 40+ hours/month/person
  - Members 4-40 hours/month/person

### **Emissions Inventory and Modeling Protocol SC (monthly)**

- Task 2 Emissions Inventory (to Dec 2018)
- Task 3 Air Quality Modeling (to Q1 2020)
- Task 4 Analyzing Modeling Results (to Q1 2020)
  - Lead 8-12 hours/month/person
  - Members 2-6 hours/month/person

## RHPWG Subcommittees (continued)

### **Control Measures SC** (meets monthly)

- Task 5 Control Measures Analysis (to Dec 2019)
  - Lead 8-16 hours/month/person
  - Members 4-8 hours/month/person

### **Shared Database SC** (meets twice a month)

- Task 7 Technical Support System (to Q1 2020)
  - Lead 12-16 hours/month/person
  - Members 3-5 hours/month/person

### **Consultation and Coordination SC** (meets monthly)

- Task 8 State Planning and Adoption (to Q3 2021)
  - Lead 8-12 hours/month/person
  - Members 2-4 hours/month/person



## 2018-2019 Workplan Assessment and Update

# 2018-2019 WRAP Workplan Update

- WRAP Technical Planning Meeting
  - December 4-6 in Salt Lake City, meeting registration and hotel reservations at [http://www.wrapair2.org/calendar/viewitem.jsp?&cal\\_item\\_id=18159](http://www.wrapair2.org/calendar/viewitem.jsp?&cal_item_id=18159)
  - Assess workplan progress and budget
  - Adjust task priorities, timing, and budget
  - Focus on foundational regional technical work
- Draft updates to Board by early March
- Present updated Workplan at Spring Business Meeting



# Contact Information

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