



WRAP Workplan and Technical Analyses - Update

Julie Simpson, TSC Co-Chair

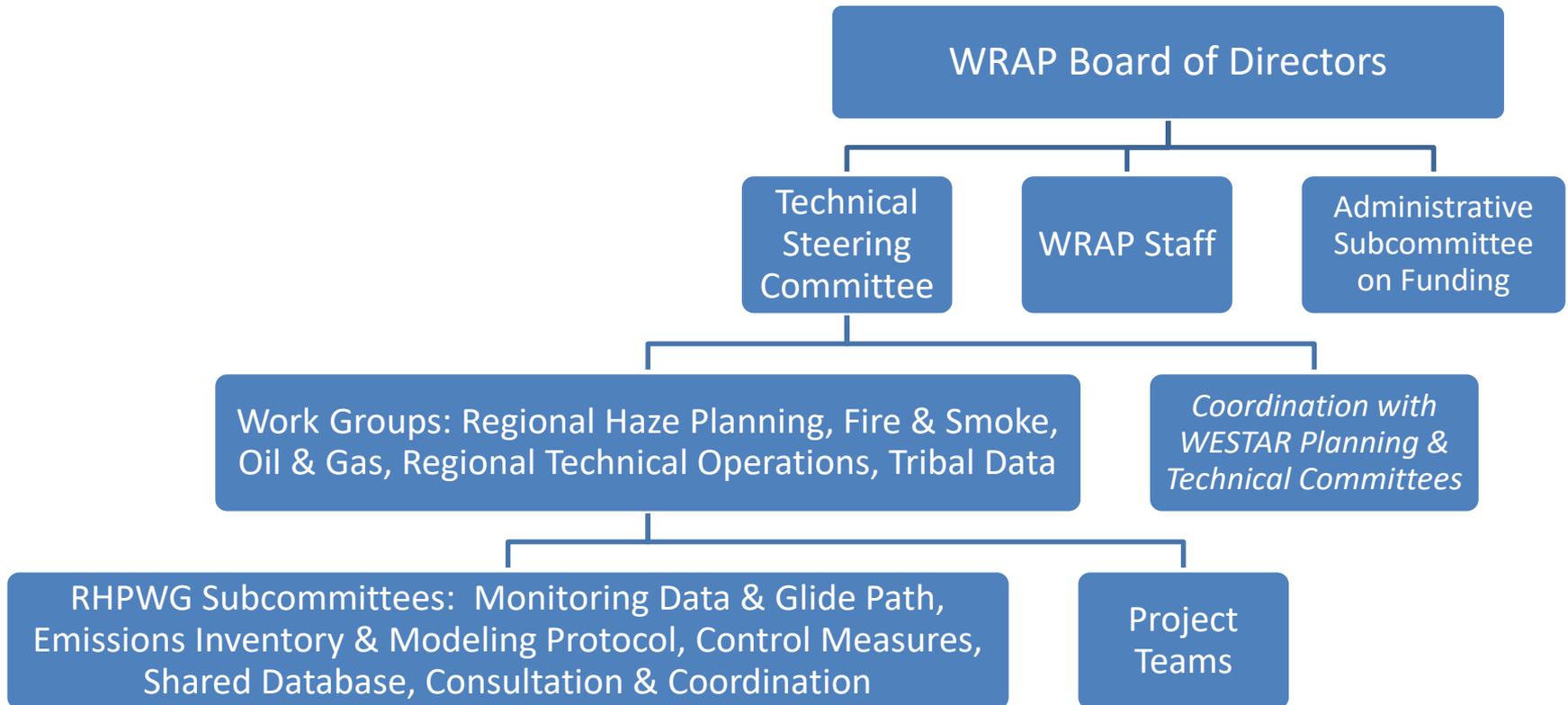
Tom Moore, WRAP/WESTAR

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 29th
 - 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
 - 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 - 2nd 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
- 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?&calendar_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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