**8/29/2018 TSC notes**

**Welcome, Roll Call, Agenda Review**

* Attendees: Cindy Hollenberg, Curt Taipale, Darla Potter, Emma Ruppell, Farren Herron-Thorpe, Frank Forsgren, Gail Tonnesen, Gordon Pierce, Jason Walker, Jay Baker, John Vimont, Julie Simpson, Kevin Briggs, Kirk Baker, Kris Ray, Mark Jones, Mary Uhl, Mike Barna, Pat Brewer, Phil Allen, Rebecca Harbage, Richard Grimaldi, Sara Strachan, Tim Allen, Tina Suarez-Murias, Tom Moore

Notes from last call

* + No change to 8/1/2018 TSC call notes

**I. Workgroup Status Reports (see PowerPoint for details)**

***- Tribal Data***

* Call Schedule: as needed
* Current Tasks/Projects
	+ Working on the Tasks in the 2018 to 19 workplan
	+ Data analysis
	+ Outreach
* Approach
	+ Reviewed current workplan
	+ Identified work tasks
	+ Scheduled tasks to begin
* Status
	+ Reviewing proposal from ITEP for data analysis and outreach material development
* Milestones – Most products completed within 10 week of contract
* Coordination and Next Steps – TDWG calls and keep other WG informed

***- Fire and Smoke***

* Call Schedule: bimonthly, more frequent calls if/as needed
* Current Tasks/Projects
	+ 2014 WRAP FETS data review
	+ National 2016 Emissions Modeling Platform – Fires WG support for WRAP region
	+ Steady update/maintenance work on WRAP FETS website and database
* Fire & smoke people are busy with wildfire season
* Approach: 4 tasks in 2018-19 by Air Sciences, Inc. (contracted work)
	+ evaluation of the 2014 NEI, evaluation of adjustments for sensitivity testing, and evaluation of usefulness of 2016 EPA inventory effort for understanding the role of fire;
	+ using year specific inventory to develop inventory representative of 5-year baseline;
	+ scaling the representative inventory for sensitivity testing; and
	+ updating the Fire Emissions Tracking System (FETS)
* Status
	+ FSWG calls scheduled August 27, October 4, and December 13
* Milestones
	+ Align with modeling input file milestones
* Coordination and Next Steps
	+ September 24th call
* 2014 WRAP FETS/Fire NEI data review
	+ Approach
		- Build an evaluation framework for states/tribes to review inventory
		- Follow up individually as needed to solicit feedback
		- Summarize results in a memorandum with recommendations for holistic inventory updates
	+ Status
		- [2014 Fire NEI Evaluation Tool: http://35.163.196.248/2014\_fire\_nei\_eval](http://35.163.196.248/2014_fire_nei_eval)
		- Need to obtain v2 Fire NEI data: done
		- Matt providing a 1 page explanation to accompany tool for group members and a historical/contextual document (due before Aug. 27th call so group has time to digest before call)
	+ Milestones
		- August 2018 – finalize eval framework: done
		- Q3 2018 – obtain feedback from states/tribes
		- Expect to have recommendations by 11/1/18
	+ Coordination and Next Steps
		- Introduce evaluation tool to group
		- Receive feedback
* 2016 WRAP FETS/Fire NEI data review
	+ Approach
		- Participate in fire workgroup process
		- Apply 2014 evaluation framework to beta version (2016b)
		- Draft recommendations for national fire workgroup based on evaluation
	+ Status
		- Monthly fire workgroup calls and coordination
	+ Milestones
		- Q3 2018 – apply eval framework to 2016b
		- Expect to have recommendations by December 2018
	+ Coordination and Next Steps
		- Continue participation in fire workgroup monthly calls

***- Oil and Gas***

* Call Schedule:
	+ OGWG - 2nd Tuesday, every other month @ noon MT
		- October 9, 2018
		- December 11, 2018
	+ OGWG Project Management Team (PMT) Calls – as needed
* Current Tasks/Projects
	+ Road Map Phase II:
		- Task 1: 2014 Base Year O&G Emissions Inventory
		- Task 2: 2028 Forecast O&G Emissions Inventory (based on 2023)
			* will include on-the-books (OTB) and on-the-way (OTW) controls
* Task 1 – 2014 base year oil and gas inventory is underway
* Approach: Contractor (Ramboll) performing work on following tasks:
	+ Inventory Compilation, Reconciliation, Data Gaps
	+ 2014 O&G Activity
	+ Identify Emission Factors and Speciation Profiles for Oil and Gas Sources
	+ State and industry survey
	+ Technical Improvements and Reporting
	+ SMOKE-ready Emission Inventory Files
* Milestones:
	+ Sept. 2018 – Literature review PowerPoint
	+ Oct. 2018 – Survey finalized to send out
	+ Apr. 2019 – SMOKE-ready 2014 O&G emissions inventory files
* Coordination and Next Steps:
	+ OGWG and Project Management Team (PMT) review of draft work products
* Task 2: Forecast 2028 (OTB & OTW Controls) Oil & Gas Emissions Inventory
* Approach: Contractor (Ramboll) performing work on following tasks:
	+ 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 (OTB & OTW controls) Emissions Inventory
	+ SMOKE-ready Emission Inventory Files
* Milestones:
	+ May 2019 – Final Report
	+ June 2019 – SMOKE-ready 2028 O&G emissions inventory files
* Coordination and Next Steps:
	+ OGWG and Project Management Team (PMT) review of draft work products

***- Regional Technical Operations***

* Call Schedule:
	+ Next call: 9/20/18
	+ RTOWG co-chairs participating in other workgroup calls
* RTOWG call, 8/18/18
	+ Coordination of monthly phone call between WRAP RTOWG and EPA OAQPS to discuss issues relevant to air quality modeling in the western US, Gail Tonnesen
	+ Review of "model year representative" study, Till Stoeckenius (Ramboll)
	+ "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)
* Examples of presentations;
	+ Arlene Fiore: satellite data for use in regional haze planning
	+ Jessica Neu: Satellite measurements for improving model representations of O3

***- Regional Haze Planning***

* Call Schedule:
	+ 1stTuesday every even month
* Current Tasks/Projects – all related to State Regional Haze SIP preparation (2018-2019)
	+ Review and provide feedback on the Internal & External Commitments and Schedule document
	+ Evaluated alternatives to EPA guidance metric for selecting Most Impaired Days (MID)
	+ Confirmed 2014 NEI v2 as base year inventory and refining state-by-state for modeling consistency
	+ Drafted Screening Tool protocol to identify potential sources for four-factor analysis
	+ Beta-testing shared Database “TSSv.2” for Monitoring, Emissions, and Modeling
	+ State–State, State–FLM, State–Tribes, and Public Communication and Outreach
	+ Coordinate with other Work Groups and WRAP Technical Steering Committee
	+ Conference Call notes on website with presentations and links
* Reviewed work of the 5 RHPWG subcommittees:
	+ Monitoring Data and Glidepath
		- Approach
			* Evaluate proposed EPA tracking metric compared to alternative extreme episodic event (E3) thresholds and alternatives for selecting the 20% Most Impaired Days (MID)
			* Set up Excel spreadsheet and R code analysis to test variables
			* Each State can use these tools to analyze their IMPROVE sites using FED dataset
		- Status
			* Identified 26 representative IMPROVE sites and prepared evaluation data for wider review
			* Prepared draft list of alternative approaches to MID metric with pros and cons for each
			* Reviewed IWDW 2011 modeling-monitoring performance to learn about “IMPROVE- adjusted” data
		- Milestones
			* Preparing documentation of the analytical approaches evaluated
			* Contractor to prepare report documenting data patching and data substitution
			* Representative site analysis link made available to RHPWG for reviewing and use
		- Coordination and Next Steps and Task
			* Present findings to TSC and then to SIP/TIP writers through RHPWG
			* Draft Report for feedback from RHPWG (all states, FLMs, tribes, EPA)
			* Evaluate changes to redo Baseline and adjust 2064 Natural Conditions
			* Consider tools that might help differentiate natural and anthropogenic sources
	+ Control Measures
		- Approach
			* Develop Protocols for States to use to target emissions reductions from Non-Mobile Anthropogenic Sources within their State
			* Develop means to demonstrate these reductions improve visibility in Class I Areas (e.g. 0.5 deciview impact)
		- Status
			* Interpret EPA proposed guidance for 80% of non-mobile anthropogenic sources (facility/unit/source category)
			* Propose Q/d threshold screening tool (e.g. Emissions/Distance from Class I Area >10)
			* Utilize WRAP/WEP and existing Land Use Maps from TSS v.1 to identify potential impacting sources
		- Milestones
			* Develop and circulate schedule for States’ input to other Work Groups and contractors (pending)
		- Drafted potential screening techniques protocol for western states (Subcommittee review by September 14, 2018)
		- Coordination and Next Steps
			* In October, circulate Screening Techniques Protocol as working draft to states for use as guidance selecting “target sources”
			* Review four-factor methods and options
			* Work with other Work Groups on multi-year emissions averaging if needed for cost-benefit analysis or modeling
			* Coordinate with Oil & Gas Work Group differentiating Area Source Emissions vs. Stationary Source facilities with multiple units
			* Determine needs for contractor assistance
		- 4 states still working on verifying the 2014 inventory data
		- Residential woodsmoke and road dust are particular concerns, plus international transport
	+ Emissions Inventory and Modeling Protocol
		- Approach
			* Collect and collate emissions data from all states (2014 and future forecasts)
			* Photochemical modeling for CONUS western states
		- Status
			* All states have verified 2014 data, some still making adjustments
			* Photochemical modeling contract in development
		- Milestones
			* Identifying categories needing further attention (e.g. unpaved road dust, unreported minor sources)
			* Considering categories to be grouped for source apportionment (e.g. residential woodsmoke)
		- Coordination and Next Steps
			* Consider developing protocol for state-to-state negotiation regarding upwind state reductions
			* Provide additional information for state-local air agency coordination
	+ Shared Database
		- Approach
			* Assure that publically accessible database has useful information for states to use in SIP preparation
			* Work with CIRA contacts to share state needs and evaluate design of TSS v.2
		- Status
			* In early stages of development, with SC member reviews ongoing
			* Comments compiled for CIRA collaborator’s response
		- Milestones
			* Reviewing latest features of TSS v.2 (including comparison of haziest and most impaired days)
			* nticipate TSS v.2 progress report in October 2018
		- Coordination and Next Steps
			* Developing a trend tool to allow states to assess 2000-2016 monitoring data trends with MID relative to revised Glide Path
			* Assist with development of Glossary for TSS v.2
			* Coordinating with Monitoring Subcommittee regarding the visualization tool and will coordinate with Emissions and Modeling subcommittee regarding additional functionality (beyond TSSv1), if anyWhat data do states need, and what is available?
		- Rearranging data to be more useful
		- Will be beta testing
		- Roll out in 2-3 months
	+ Consultation and Coordination
		- Contact list assembled (FLM/S/L/T)
		- Work with contractor on whitepaper o how the consultations should take place

**II. TSC Administrative and Informational Items**

* Coordination
	+ For Regional Haze need understand state capabilities for SIP development, including:
		- Baseline – future year calculations, monitoring, fire data review, control measures, etc.
* Action Items
	+ Reviewed s[tate staff involvement/commitment document](http://wrapair2.org/calendar/attachments/22433/18160/Work%20Group%20and%20Subcommittee%20Staffing%20Commitments.docx%20target%3D)
		- Staff hours for both committee chairs and workgroup members were summarized for the following;
			* Technical Steering Committee
			* Fire and Smoke WG
			* Oil and Gas WG
			* Regional Tech Operations WG
			* Tribal Data WG
			* Regional Haze Planning WG
			* The following Regional Haze Tasks
				+ Task 1 Monitoring Data Analysis
				+ Task 2 Emissions Inventory
				+ Task 3 Air Quality Modeling
				+ Task 4 Future Year Modeling Results Analysis
				+ Task 5 Control Measures Analysis
				+ Task 6 Technical Support System TSS v2
				+ Task 7 State Planning and Adoption Process
		- Comments in discussion
			* Currently heavy workload with foundational work
			* Membership engagement varies significantly in balance with other work
			* Different member experience with workgroup tasks
			* Need to identify SIP planning target dates for states
			* SIP draft probably needed 6 months before submittal for internal review
			* State planning calendar could be developed with a visual stepwise timeline
			* December meeting is good time to check in on progress
* Informational Items
	+ The Communication/Coordination Guidance document has been approved by consensus
		- Guidance documents on workgroup reporting and a template for the monthly workgroup report have been developed and adopted by the workgroups
	+ Contracting Status
		- The following are contracts in place or in progress;
			* Colorado State University/CIRA: Regional Haze TSSv2 development
			* Ramboll: OGWG Emission Inv Phase 2 Road Map #1 of 2
			* Ramboll: Regional Haze Planning Readiness
			* Air Sciences: Fire & Smoke WG workplan tasks
			* Ramboll: OGWG Emission Inv Phase 2 Road Map #2 of 2
			* Air Resource Specialists: Regional Haze Data Analysis
			* N. AZ Univ/ITEP: Tribal Data WG workplan tasks
			* Colorado State University/CNEE: EGU Emissions Analysis Project Phase I
			* Tbd: Regional Modeling and Analysis Platform
	+ Modeling Platform
		- Modeling Platform
			* Regional Modeling & Analysis Platform – RFP
				+ Will use detail from IWDW-WAQS and [WRAP 2018-2019 Workplan](http://www.wrapair2.org/pdf/2018-2019%20WRAP%20Workplan%20-%20Board%20approved%20April_4_2018.pdf)s
				+ IWDW-WAQS and WRAP Regional Analysis funding
				+ Objective: scope out costs and timing of tasks
				+ Largest single funding line in WRAP budget
				+ Coordinate with Control Measure Subcommittee on tools for 4-factor analysis
				+ Be able to transfer model results to the Data Warehouse
				+ Have Data Warehouse check off data for completeness for regional haze and O3
	+ In-Person WRAP Technical Planning meeting, December 4-6, 2018 Salt Lake City.

**III. Next Steps**

* Review Regional Haze EI
* Next Call: September 26th, Wednesday 11:30 am – 1:00 pm Pacific

Note taker, Theresa Alexander