**WRAP RHPWG Monitoring & Glide Slope Workgroup**

**Conference Call May 3, 2018**

**Notes**

1. Roll Call – Ryan Templeton (AZ) Lead

Present: NPS, AZ, CA, ID, MT, NV, NM, WA, WY, WESTAR Note taking schedule rotates through members. Meetings every two weeks at this time, Noon -1PM Pacific 1st and 3rd Thursdays. Elias Toon (AZ) prepared notes from kickoff meeting April 14. California takes notes for this call.

1. Liaison Reports:

-Database, Frank Forsgren (NV) reported that Pat Brewer NPS and Gail Tonnessen presented a webinar on Friday April 13 on Monitoring and Modeling using 2011 data and PSAT. Link will be posted on WRAP Regional Haze website.

-Ryan Templeton (AZ) reported that Bob Kotchenreuther Reg. 10 EPA also wrote report on PMF modeling and Ryan Templeton (AZ) will find reference for it. Models have some issues – need to outline what modeling is available and how to use results.

-Fire & Smoke – still no liaison on RHPWG

- Modeling Protocol Subcommittee still has no liaison but RTOWG using contractor to do sensitivity runs.

- Survey sent out to Key State Regional Haze Contacts, Albuquerque, and Julie Simpson (for tribes)

1. Task List Progress

Overview

-Using Most Impaired Days as Metric, what are alternatives for e3 or other options for identifying Most Impaired Days. Then need to write report that selects/documents the method western states use to track progress improving visibility (or reducing impairment over time. RTOWG needs this to do forecast modeling. Need to make link between MGS subcommittee and MP Subcommittee and RTOWG and regional modeling contractor

-Narrow down what analysis done with available tools and to decide what to use; will know more after survey results come back and encourage state to get work done! Jean-Paul did not get survey, need follow-up call if states don’t answer.

-Concern that states will not have monitoring data analysis finished in May to decide option to use

-Link to Database Management Subcommittee that decides what to show in TSS for e3 selection, for recalculated baseline, for method west uses to identify Most Impaired Days.

Workgroup Task 1.1: Evaluate Most Impaired Day metric

-Ryan built excel spreadsheet using FED data so that states can vary e3 percentile thresholds and see results in graphs and tables

-Kristen Martin (MT) wrote program in R which selects thresholds from 50-95%, also applied it to only wildfire season (June through October), taking days out, and also tried yearly mean and ranking by nitrate and sulfate only. Annual trend lines for Most Impaired Days vary less with lower thresholds. Removed entire day before ranking, if day was e3 day, rather than break remainder into natural and anthropogenic carbons. Different sites did better with different methods.

-Kristen shows R code that states can vary as needed; Ryan will share Kristen’s presentation with subcommittee. Will need to make it accessible to all states, once we figure it out for them to use.

-Ryan and Kirsten will figure out way to post their methods as “tools” for state planners so that other states can play around with their data to make informed decisions for method selection.

-Note that FED keeps adjusting carbon which means constant reruns of data analysis

-Pat Brewer (NPS) stressed that all states need to play with these tools to inform decision about method for west to use. R may be easier, but do all states use R?

Upcoming Tasks from Task List: Adjusting the Glide Path

 --For 2064 end point, need international input from source apportionment modeling. Start point removes wildfire and dust from baseline, but how is “natural” accounted for at endpoint?

 --Using this analytic “R” approach, what is meaning of what states find, how do we figure out interstate inputs to monitoring data? Will comparing 2014 and 2016 help? Need monitoring to modeling linkage.

 --Need report document to describe difference between Worst Days and Most Impaired Days and a consensus document that explains process

1. Action Items

-Share links to Pat & Gail's modeling/monitoring comparison (and post on website)

-Share links to **two monitoring data analysis tools** (and post on website)

-Post any updates to R code

-Review Task Codes and how far we’ve progressed or stalled on the WRAP Work Plan Quarterly Task List

-Lay out task timeline for rest of May

-Collate monitoring survey for oral report to May 30 TSC conference call and June 5 RHPWG Conference call, should include (1) any recommendation for western metric and (2) identify contractor needs.

-Will carbon stop changing in FED data base – When should there be the “snapshot in time”