Smoke workgroup call: 8 May 2018. Notes by Debbie Miller

Frank Forsgren

Josh Hall

Matt Mavko

Debbie Miller

Mark Fitch

Mary Uhl

Sara Strachan

Sig Jaunarajs

Kevin Greenleaf

1) Review notes from previous meeting; talked largely about emissions inventory work and modernizing FETS.

2) Update status report:

 - WRAP board approved fire group workplan so group is free to begin work

 - Joint WESTAR/WARP April 24 and 25, and co-chairs meeting 26th. Co-chairs presented their plans and progress since previous meeting. Most groups’ status similar. Second day of meeting there were talks about smoke management and 2017 fire season: Oregon DEQ presentation on Oregon Protocol, their plan on how to respond to wildfires; Idaho presented 2017 fires and how they affected Idaho; CSU professor Emily Fisher discussed wildfire and ozone exceptional events. Idaho planning flights to measure smoke in upcoming season.

 - Oregon protocol discusses how state responds to wildfires and how they communicate with public and provide warning. Includes air quality trigger levels for certain tasks. Idaho modeled their protocol after Oregon’s. Once conditions reach certain levels across multiple states there are regular daily phone calls to discuss status.

 - Emily Fisher’s talk included research ideas for future research, previous papers, online tool under way to help people identify smoke impacted days and perform analysis on those days.

 - Matt gave talk on history of WRAP and work on fire and region haze. Discussed new EPA metrics for regional haze planning and how they will affect fire impacts to haze. Talked about upcoming work for fire and smoke group.

 - Sarah discussed exceptional events. Talked to air directors and EPA about the collaboration among NW states in exceptional events workgroup, conceptual models for 2017 wildfires that Idaho DEQ is putting together as it may be applicable to other states’ demonstrations, and she offered the list of exceptional events data links with useful tools for getting data. Discussed challenges with how EPA may interpret exceptional event demonstrations. OAQPS will be focusing on greater standardization among EPA regions in how they review event demonstrations.

 - 2014 vs 2016 emissions for regional haze: has this been decided? Work plan calls for using 2014 year for model performance evaluation. For 2016 there has been national decision to build an emissions modeling platform, but not an inventory per se. It’s an approximation of the sectors for modeling purposes. Certain sections like fire are a big challenge for non-NEI years. Platform should be released spring 2019. Some related products ancillary studies for 2016 will occur such as for international transport. 2014 platform is finished, but 2016 is still in progress. 2016 platform will not be ready in time.

3) Review and discussion of draft final WRAP Fire Emissions and Smoke Modeling Report memo – Matt Mavko

Latest draft report and notes from conference call were sent out just prior to meeting. Item 3a on the agenda is a reminder to read through the report and provide to Matt directly by email in the next week. Two changes have occurred: a survey link was distributed to FETS users and results are summarized in report. Users were asked what they find to be useful. Response rate was somewhat low—44 of about 340 people responded. Results were exported in spreadsheet to see if people who viewed FETS more often had different opinions than those who used it regularly, but responses were similar from all in terms of priorities. Other comments are also included. Major highlights include: peak use is summer and fall fire season, and people are more interested in activity data than for emissions. People also use it for regional coordination. Emissions information less valuable to users.

Matt also added fourth section to report looking at immediate priorities for group and regional haze planning and modeling. Broken into three steps. 1—developing methods for looking at future emissions scenarios. 2—defining scope of FETS modernization effort, which has been identified as a priority. 3—evaluation of fire emissions results from 2014 and 2016 platforms.

2014 inventory is as complete as it can get. 2016 fire inventory may focus on largest fires due to lack of resources and time available for preparing it. It may be best to project fire forward from a baseline based on several years rather than from a single year. 2016 platform won’t have the same inputs from every agency that the 2014 inventory will have. It will be useful to quantify the differences to understand the tradeoffs.

Group should consider starting with 2014, understand limitations, and then try to figure out how to make recommendations for 2016 and/or evaluate 2016 inventory. Then a decision can be made how much work to put to 2016 inventory.

The WRAP plan is to model 2014 and produce a model performance evaluation. A decision could be made then to look further at the 2014 inventory if needed based on the results. It may be possible then to develop a 5-10 year baseline rather than try to nail down a particular year.

4) Discussion of other tasks – next steps

Suggestion for Matt to finish report in next month and provide some recommendations on how to proceed. Bulk of the work this year will be characterizing 5-10 year period of emissions and evaluating ways to look at trends. Next year would look at developing methods to project into future.

We cannot predict fire in the future except to show ranges as has been done in literature. This implies for modeling platform that for 2028 we may be looking at fire in terms of sensitivity runs. It’s possible that man-made emissions reductions may be overwhelmed by fire.

For next time, ask Matt to finish up memo to recommendations section.

5) How do we plan to accomplish these tasks and engage the Work Group most effectively? - Josh

Group has relatively few members (Mark) who have done emissions inventory evaluation work and it is very time consuming. Need to prioritize and decide how much effort to put into perfecting 2014 inventory. Suggest spending limited amount of time on 2014 inventory, and spend more time on developing multi-year baseline as this is critical to projecting emissions to future year.

6) Next call date and time (recognizing fire season has started) – all

Key action item: Matt will finalize memo and put in detail, make recommendations and present tradeoffs. Need to have it to group by May 31st so that group can evaluate prior to next call. Next call is scheduled for 7 June, 1-2:30 pm MT.