# WRAP FSWG Meeting Notes – June 7, 2018

Members in attendance:

Josh Hall

Tina Suarez Murias

Elias Toon

Frank Forsgren

Mary Uhl

Colleen Campbell

Matt Mavko

Debbie Miller

Kevin Greenleaf

Andrea Boyer

Kirk Baker

Joel Karmazyn

Tom Moore

1. **Welcome, Roll Call, Agenda Review – Josh** 
   1. Notes – Elias Toon, Arizona Dept. Env. Quality (ADEQ)
   2. Josh: Does anyone have questions about what was covered or items in the agenda?
      1. None
2. **Review of proposed Air Sciences work plan effort for FSWG – Josh and Matt Mavko (materials attached)**
   1. Tasks
      1. Overview: Tom sent out 3 documents this week. The main one is the draft final report. One of the things that came out of the last call was a request to add a new section to the report that related to specific tasks and recommendations for the work plan. Matt tried to segue into the tasks since the report morphed over time. Matt tried to tie this report into the first round of RH planning at the recommendation of Tom. The recommendations in section 4 are steeped in the WRAPs history, the ways we examine this source category are very relevant to the work we are doing today. First round will be using the 2014 NEI v2. The model sensitivity and planning aspects we will be using a 5 year (20013-2017) IMPROVE dataset to smooth out inter-year variability. From this 5 year baseline we will do future year modeling to a 2028 target year. Moving from a year specific to a 5 year average to a future year.
         1. **Task 1:** The work plan tasks revolve around doing an evaluation of the 2014 NEI and doing some evaluations to help inform model sensitivity runs (i.e. does changing aspects such as adjusting how wildfire/prescribed are classified affect the model?), and helping RH planners understand fire as a source category. Also examine the 2016 EPA inventory (not an NEI year so there won't be as much data available) to give recommendations to WRAP members on how this data could be used for their planning efforts.
         2. **Task 2 (Section 4.2.2):** This task is taking year specific information and turning that into an EI that is representative of the 5 year baseline period. There was a methodology in 2007, and something similar will be done this time. There are some assumptions built into that methodology (spatial and temporal variability with wildfire is greater than with prescribed), want to look at the distribution of fires to see if 2014 is somewhere in the noise. Trying to get long-term climatology for agriculture burns and prescribed is more difficult. Recommend surveying regional experts to see if 2014 is out of whack or is representative (i.e. wildfire window in Idaho goes late, then agriculture burn window could be shorter).
            1. Commenter: Wonder if a shorter period would be better since fire in the past 15 years has skyrocketed? If you were going to use climatology and things have shifted, picking the appropriate window is important.

Matt: That is definitely something that we can examine, we would need to dive into the available information and present them to the workgroup for feedback.

* + - 1. **Task 3:** The process of actually scaling is the same, hoping we can convene a subcommittee that can figure out what type of scenarios we want to do. What fires does it affect, and how much? Predicting for certain types of fire if we think it will go up and down, may require interfacing with other WRAP groups. How based on the larger scenarios, how that affects fire will be up to this committee. Phase 3/4 document outlines what type of attributes were on the table for scaling. We don't have access to the attributes of the activity data that was used to change them. Fuel loading won't be possible. We will need to think about how to do that at the tail end; we don’t have the ability to change the levers that were used to build the NEI. We may be limited to removing or adding fires to make changes?
         1. Josh: Looking at California data, and how different it was compared to what SMART fire had, was interesting. Tweaks that we may need to make to 2014 or 2016. I don’t expect that there are multiple future year models being run.

Matt: We are not going to be able to ask EPA to rerun. I don’t know how the models will be run? Maybe shorter time period?

Tom: All that has been talked about so far would be how the amount of fire changes in a future scenario. Is there a scenarios where wildfire intensity doubles? What would the corresponding lessening amount of prescribed and agri fire. What is there is a policy to increase prescribed fires? How would that affect the wildfires? Thinking 2-3 scenarios could be possible. The only thing we would change would be the fire signal. Many what if scenarios could be looked at.

* + - 1. **Task 4:** Update FETS. Matt goes into great detail about what we need to think about when updating FETS. Broken into 3 pieces. Modernizing and finding a new home for the webpage. Bring the database along/backend. The process of building the WRAP tools through grans has gotten us 1/2 way there. Just need to formalize what was put in place and make it clean. Based on what the website currently looks like, Matt looked at what the site will look like in the future. Some parts of the site may not be brought forward due to the updates taking a long time and there not being a clear application for some of the tools. Some pages meant for manual entry. This tool hasn't been used since 2007 (not recommending bringing this tool/page along). The data that is coming into the system is created and handled elsewhere, so we don’t need the manual options. The third thing is persistent and targeted outreach to the community. There are folks out there that are unfamiliar with the tools, and current users that will need to relearn. Want to reach out to downstream efforts to make sure others can use the data.

Josh: Could really help our forecasting and regional coordination (Blue skies?). Currently it is really inconsistently used. WRAP is just one region and this happens all over the county, is it possible to interface at the national level?

Matt: If we do establish these API endpoints, then there are avenues open to us to potentially interface with other regional/national efforts. Would involve expanding the scope and may be too big to bite off right now.

* 1. Timeline
     1. The timing of the tasks has been setup from multiple angles. There are some deadlines for spinning up the modeling. For the first 2014 runs, our work won't be ready for that. However later sensitivity runs we can have some feedback, recommendations, inputs ready for those runs.
     2. For Task 2, building the strawman documents are frontloaded so we can figure out how we want to build this baseline inventory. It is an accelerated timeline. We can solicit feedback from different individuals. Pushing the future year and FETS work until as far forward as we can. Want to make sure by time the region 10 fire meeting in the spring, we can have some updates available. Kickstart off the outreach process.
     3. Penciled in bi-monthly calls going into the summer of 2019 based on what was written into the work plan; we can present draft results and draft final memos in the calls and then finalize in the following months.
        1. Josh: looks super helpful having it outlined!
        2. Tina: Question about the 2014 inventory, do we need to edit this data to put into the model?
        3. Matt: The 2014 NEI is a spatially and temporally allocated inventory. Does bring up the question about preprocessing before we send the results into SMOKE. That is something to consider.
  2. Deliverables
     1. This topic was not covered

1. **Budget and Contracting – Tom**
   1. Tom: Matt prepared summary budget table on tasks Matt started last year. The total cost Matt is proposing to add to the budget is $123k. We have a budget for $100k. We would need to apply the $100k then would need to apply some discretionary fund leftover that we could cover the additional $23k. We can fully fund this proposal if the group approves. They have 1 week to send in feedback, then WESTAR will award the contract.
   2. Josh: That’s helpful, I am supportive of the proposal. Does anyone else have any feedback?
      1. No responses.
   3. Tom: Tell people if we don’t hear from them COB next Thursday, WESTAR will proceed with the proposal as laid out
   4. Debbie: What is the $4,800 non-labor for?
   5. Matt: It is a round number and is for hardware or monthly cloud hosting (AWS). It does include travel to SLC once for a check-in meeting, and travel to the March 2019 Region 10 smoke management meeting.
2. **Questions or comments?**
   1. None

* Next FSWG call on Thursday August 9th, at 2:00pm Mountain Time.
* Proceeding FSWG call would be on October 4th, at 11:00am Mountain Time
* Proceeding FSWG call would be on December 13th, at 2:00pm Mountain Time