2/4/2019

WRAP Fire and Smoke Workgroup

Meeting Notes

Agenda

Welcome, Roll Call, Agenda Review, and Note-Taking – Sara

Sara Strachan

Mark Fitch

Frank Forsgren

Matt Mavko

Tom Moore

Kirk Baker

Andrea Boyer

Paul Corrigan

Mary Uhl

Jeff Vukovich

Tina Suarez-Murias

**Update on 2014 Fire EI submission to RH modelers (Matt)**

* 2014 base year fire EI was resubmitted to Ramboll last week
* The Urban land class/HMS-only issue was addressed by reclassifying most of these fires as Ag. None were removed. Used a 25 km and 30 days filter to find fires that those were mis-classified as.
* Question from Jeff Vukovich: What fuel bed was used for reclassified fires?
  + Matt: the current FCCS fuel bed was used. The 30 m FCCS was used for Georgia and Washington.
* Question from Kirk Baker on PM-Detail
  + Matt: mentioned it because he wanted to question Ramboll about it
  + PM speciation will be done by the modeling platform
  + Diurnal profiles will be tested during sensitivity runs
* Question from Mark Fitch(?): Will modelers provide diurnal profiles for large Rx burns during shakeout documentation?
  + Matt: yes (?)
* Review of Model Runs to be done by Ramboll for Regional Haze
  + Shakeout (2014 base case)
  + Round 2 of 2014 base case
  + Representative baseline (2013-2017, probably)
  + Future year projection 2028 (Rules-on-the-books)
    - Sensitivity runs on different projection scenarios

**Initial plans for next task (Baseline fire EI for RH modeling) (Matt)**

* Review WRAP Planning Year EI Whitepaper v2 (<https://drive.google.com/open?id=1TqVElD4H1e6qGprgkBQLDAyKJbhRhH76>)
* Would like to form a subcommittee to work on baseline EI (FYI: Ryan Templeton from AZ DEQ subsequently volunteered to be on subcommittee)
* Rx burning from year to year not as variable as wildfire (can assume it’s not going to change the trend for baseline)
* Looking to use the MTBS wildfire/burn scar dataset (1984-2016), it contains fire perimeter and severity information
* Will use MTBS to look at patterns from year to year by ecoregion, historical patterns of frequency and magnitude, and recent trends
* Question from Tina Suarez-Murias about red line in chart
  + Matt: it is a doodle from looking to see if there was a sudden shift in fire behavior starting at 2005 or so
  + Looking at fire weather too because that drives how big fires get
  + Mark Fitch: fire weather is very important
    - What met is being used for 2028 run?
    - Tom: EPA guidance says to stick with 2014 met to keep it constant
* Question from Sara: Can Matt share background papers on baseline method?
  + Yes. **ACTION ITEM**
* Question/comment from Kirk Baker on future trends and megafires
  + Mega-fires create ecosystem change, grass replaces timber, fuel beds different in future
  + Mark Fitch: MTBS severity data could be useful for identifying these mega-fires where fuel loads change
  + Tom: future fire scenarios increases in size (# of acres/day) and frequency (# of days) within ecosystems in individual WRAP region states are to bound changes in emissions from existing fuels and effects on air quality, changes to fuel types and many other aspects of fuels and fire behavior are beyond scope and resources for these scenarios

**Utah Smoke Management Plan (Paul Corrigan)**

* Link to presentation: <https://drive.google.com/open?id=12itStJ3P4qjMnFhGk0VhbwiPnj6TXtXE>
* Paul Corrigan is Utah’s Smoke Program Coordinator. He works for the USFS and started in Jan. 2018.
* Agencies that participate in Utah’s SMP: USFS, BLM, NPS, BIA, USFWS, UT DAQ, UT DNR
* Example Rx burn (Provo): encouraging aspen to regrow
* Utah is usually a short-term fire event state (lots of cheatgrass and sagebrush fuels)
* Wasatch Front around Salt Lake City has both PM2.5 and O3 nonattainment areas
* Federal and state agencies participate in Utah’s SMP, no private
* Matt Mavko built website for submitting burns
* There are no fees
* Submission process through website:
  + Submit annual burn schedule
  + Submit pre-burn info (5 Ws?) which registers a project in the system
  + Submit burn request
    - 7-day burn window
    - 2 days before planned ignition
    - Paul assesses airshed loads and weather
  + Director of DAQ approves burn using a clearing index
  + Daily emissions report after burn
* SMP organization
  + Oversight committee
  + Airshed Working Group
    - Creates long term strategy
    - Members are Paul and other agencies
  + Burn Coordinator – Paul
    - Agency liaison
    - Technical specialist on burns
    - Database manager
  + Burner community
    - ~110 qualified burners
* Utah SMP reports burned acres differently than USFS (e.g. for same burn in 2017, Utah reported 5000 black acres and USFS reported 30,000 total burned acres)
* Currently revising the SMP
* Utah legislature taking interest
* AQ Board has to approve changes to SMP
* SMP is in Regional Haze SIP, therefore, EPA has to approve changes
* In future, would like to include distance to sensitive populations in pre-burn assessment
* Question from Kirk: Is there detailed data for past burns available?
  + Yes.
* Question from Tom: How is Rx getting implemented in areas with high fuel loading?
  + FLMs are targeting high fuel load areas
  + Other factors considered: fire risk to community, will fire be useful to vegetative community
  + BLM is burning less because fire in sagebrush turns fuels to cheatgrass
* Comment from Kirk: Utah may be the only state that uses Rx for stand replacement
  + “We have a progressive program.”
  + Try to burn big chunks rather than dribs and drabs
* Question from Mark Fitch: Is the increasing WUI impacting your Rx practices?
  + Yes, but the WUI is mostly sagebrush and that’s easier to deal with than timber

**Wrap up and Action Items (Sara and all)**

* + Feb. 25 (2 pm MT) – next call
  + Need to coordinate with Emissions Inventory subcommittee on baseline inventory
    - Tina: contact Farren Herron-Thorpe, subcommittee chair, and have a timeline in hand