

Notes from Ag Burning Networking/Breakout Session in the Hallway, June 7, 2012
NW-AIRQUEST Annual Meeting 2012, June 6-8, 2012, Pullman, WA
Notes by Julie Simpson

Attendees:

Mary Anderson, Idaho DEQ
Kary Peterson & Neil Hodgson, WA Dept. of Ecology (ECY)
Joe Vaughan, Brian Lamb, Soumita Kundu, WSU
Julie Simpson, Andrea Boyer, Mary Fauci, Nez Perce Tribe
Terry Ganueles, Yakama Nation

- A. We discussed 3 levels of ClearSky-like functionality layers for smoke plume forecasts in AirPact4 (AP4):
1. "Normal AP4" – this includes wildfires from SMARTFIRE
 2. Prescribed forestry burning (Rx) from day-before approved fires from MT/ID Airshed Group 5pm PDT submissions to WRAP FETS (use as smoke tracer)
-- any other agency Rx burns available the day before?
 3. Agencies' Ag Fire Defaults
 - a. Defaults available by agency to view alone without other agency burns, without AP4 SMARTFIRE wildfires, without Rx fires.
 - b. All agency defaults merged together
 - i. Low, medium, high (L,M,H) defaults, OR one default, OR two defaults (e.g. L,H or M,H)
 - ii. Clarify parameters to be submitted by agencies to build defaults
 1. Outreach to other agencies (e.g. Yakama Nation, Umatilla, CDA Tribe) to submit defaults
 2. Parameters for emissions (combination of agency submitted parameters and WRAP FETS emissions calculation)
- Layers 1-3 are additive and can be viewed individually?
-- Cap plumes at PBL – vertical distribution proportionally to PBL, instead of having plumes go through PBL (IDEQ)
-- Any agency needs for a gaming feature? Does anyone use it now?
- B. Evaluations: Periodically go back and evaluate days using actual burn data (wildfires, Rx, Ag.) within CMAQ:
1. Use WRAP FETS data
 2. Confirm ECY actual burns get submitted to FETS
 3. Confirm other agency submittals of actuals (which agencies, timeline for submittals)
- C. We also discussed improving physics in WRF Modeling – plume characteristics discussion:
1. Ventilation in Col.R. basin: inversion is lifting about 1 hr earlier than forecasted (ECY).
 2. Are seeing time lags with fronts coming through in Walla Walla area: WRF is forecasting the front coming through about 4hrs earlier than actual (ECY).
 3. Add ventilation index tool to assist Ag and Rx burn forecasting that would use transport winds (surface to PBL, not 20m winds to PBL). (IDEQ)
- D. NEXT STEPS
1. Joe to present CMAQ results from tracers and plume representation demo for 7/17/12 N.ID/E.WA regional Ag. SMP meeting in Lewiston.
 2. Distribute what we talked about to solicit feedback from agency users to confirm workplan and functionality.
 - a. Set up formal workgroup?
 - b. Establish conference call schedule?
 - c. Note that from now through July, Ag SMP folks intermittently available, Aug-October we're basically unavailable, November and later we have more time.
 - d. We want to ensure we prioritize work based on consensus need of agencies vs. WSU level of effort.
 3. Set up a call with Cliff Maas for discussions on WRF timing of inversion break-up over the Columbia River basin in E. WA.