

Notes from FireScope Predictive Services Specialists group meeting

Day 1, Wed. May 16, 2012 1300-1700 PDT

Attendees: John Snook, NOPS PS; Tom Rolinski, SOP PS; Steven Vanderburg, San Diego Gas and Electric; David Brinsfield, BLM; Les Matarazzi, DOI; Michael Doi, Calfire SOPS; John Wilson, Calfire NOPS; Chris Waters, Calfire HQ; Shyh Chen, USFS PSW Research; Kathy Hoxsie, NWS Sacramento; Larry Hood, USFS R5 RO; and Corky Conover, NPS

Pre-season reviews and info: **John S.** showed a PPT highlighting the preliminary 2012 Seasonal Assessment for CA and HA, with supporting graphics. **Tom R.** commented on portions pertinent to SOPS, then he shared about their web page look and functionality, and then about the Offshore Flow severity index.

We had a round table where agency reps could share anything they felt pertinent to their situation and/or coming fire season. **Les Matarazzi** said BLM has a new head of the CA Desert district, Rob Burger, over from NV. There will be a rezoning of BLM districts before long. **Michael Doi** shared that SOPS Calfire has 143 engines and 96 fire crews ready, with 2 Air tankers at Ramona and Hemet. More fires (almost double) so far in 2012 than in comparable period last year, though (so far) acreage is down compared to same date last year. **John Wilson** shared that with a considerable personnel turnover at NOPS since the last busy fire season in 2008, there could be a sizeable learning curve with the first large fire or two this year. Air assets formerly at Fresno have been either stored, or to Porterville (a result of tough budget times). **Chris Waters** shared that Calfire will be looking at fire weather policy manuals. He is involved as a state rep to the Fire Environment working team and they will do what they can to see that more Fire Danger Ops Plans get developed and implemented. **Corky Conover** noted that the NPS fire budget is down 8% and fuels reduced by 18%! Sue Husari plans to retire on Sept. 15, 2012.

CEFA Update – Dr. Tim Brown via conf call: Talked about the CANSAC meso-scale model first. Acknowledged that the WRF (Weather Research Forecast) mesoscale model has been rather slow lately, in terms of how quickly the post-run graphic products are all there and available. Modeler Domagoj Podnar has been rewriting code for the post-processing, and Tim was optimistic progress would be coming soon. Meanwhile, the older non-supported but still useable MM5, running on the newer servers, comes out faster than ever. There is potential for CANSAC to get new membership (additional support) from the Bay Area and Monterey Bay Area APCDs, if CEFA is able to hire sufficient staff to meet their needs.

In other CANSAC news, Tim was going to re-visit employee Grant soon, about finishing touches to the asked-for options on the User Customization page. Tim showed some new Google earth download files, available as KMZs. To view, you need Wind Ninja, available at FireModels.org. Chris Waters stated that CalFire might possibly be able to supply the \$10 K or so that is needed to finally do Hourly Fire Danger Phase II tasks. Tim also shared about the “CFS Weekly to Seasonal Forecasts”, i.e. output from the **Climate Forecast System**. The URL is <http://www.cefa.dri.edu/CFS/cfs.php>

WFDSS, FPA, related – **Larry Hood** provided the group with the current status/ latest upgrades of the **Wildland Fire Decision Support System**. There is now a ‘WFDSS lite’ version for smartphones that can be used for basic Plan approval, but having no graphics and analysis. Online training has improved a lot, and YouTube is even a part of that. There are several modes in WFDSS: ‘*Basic fire behavior*’ is a snapshot in time, like a FLAMMAP run. ‘*Short term FB*’ is a 1-3 day run, with fire progression maps. ‘*Near term FB*’ is a 1-7 day Farsite run. The short and near-term runs rely heavily on NWS NDFD gridded forecasts. “RAVAR” has pretty much been phased out. This is the 2nd year of having 2 fuels views to use... the Landfire Refresh 2008, and the California fuels layer. WFDSS gets its State of Weather values directly from WIMS. The ‘Smoke playground’ tools for the system are still ‘offsite’ on another web page, though WFDSS links to them. For 2012, there are no changes in Federal procedures for WFDSS use; and the Mob Guide lines out use. There are three tiers: 1) local analyst, 2) if no local analyst available, go to the GACC (or call Larry), and 3) the National Fire Decision Support Center. As for **Fire Planning Analysis (FPA)**, it is still moving along. With the three model options being under 3 budget scenarios (current, +20%, -20%). For those not familiar, FPA replaced the former NIFMUS for the USFS, and replaced Fire Pro for DOI agencies.

FIRESCOPE Task Force update- David Brinsfield updated our group. David is the new Liaison for the Predictive Services group, with Bob Bell of South Ops his alternate. There are lots of folks retiring.... Christie Neill is the new chair of the OPS group. Ralph Domanski, formerly of the USFS at South Ops, is the new Cal-EMA Fire Program Manager. At the Task Force level, David is the DOI liaison. The Fire Operations Guide (FOG) update is almost done and should be available this year. David said there is lots of focus on the 40th anniversary of FireScope.

Day 2, Thursday May 17, 2012 0800-Noon PDT

National Weather Service update- Kathy Hoxsie: She gave a short update, with a portion devoted to talking about the recently finished 2012 CA Fire Weather Annual Operating Plan (AOP) which, as per normal, was developed in a cooperative effort between the NWS and the CWCG fire agencies (represented primarily through Predictive Services). A big thank you goes out to NWS WFO Eureka for merging the edits from many sources and managing the production of the new AOP. [side note that is not from this Firescope meeting, but worth including- shortly after this year's AOP was released, Tom Rolinski suggested that we might want to produce the 2013 version in a tabbed, web-based version. This has been done in some other regions, and it has been very well received. A committee has been formed to discuss the details of making this substantial change, and work on the re-format (in preparation for next year) could begin soon.]

Kathy informed us next of the soon coming move of the NWS into CMAS capability (explained below). Here's an excerpt from a FEMA web article about this system (which explains it better than my notes could have) "Using the **Commercial Mobile Alert System, or CMAS**, which is a part of FEMA's Integrated Public Alert and Warning System, this structure will be used to deliver **Wireless Emergency Alerts (WEA)** to wireless carriers for distribution to the public. The CMAS system will allow the NWS to soon begin issuing WEAs for the most dangerous weather thru participating wireless carriers directly to cell phones. The alerts will be broadcast by cell towers much like an AM/FM radio station, and cell phones within range will immediately pick up the signal, provided they are capable of receiving these alerts. The availability of WEA alerts will be dependent on the network status of the wireless carriers and handset availability....people should check with their cellular carriers to see if WEA alerts are available in their area". The website for this is www.inws.wrh.noaa.gov/alerts, where INWS is Interactive NWS Alert settings. Kathy showed our group how to sign up and use the system. A user can draw their own polygon, to define the area(s) within which they get warned for. You can also individually select which parameters you want to be alerted about. This seems like a very promising new way for individuals to gain situational awareness of dangerous weather.

Pacific SW Research presentation - **Shyh Chen**: Shyh's topic was Development of Wildland Fire Seasonal Forecasts. They use the CFS coupled ocean-atmosphere model. The goal is to produce coarse 7-Day NFDRES element fore-casts, out to 7 months ahead! Here is the forecast system link: <http://99.15.69.103/nfdr-cfs/>

CARB update – **Jason Branz**: Not a lot new to share about PFIRS, which continues to see a gradually increased user count. Currently, about half the Air Districts are using it. Jason stated that reaching the 75% level (of Air district use) will trigger incorporation of Bluesky capability into PFIRS. Jason also shared about the recent **Inter-agency Air and Smoke Council (IASC)** meeting, the first of it's kind in over three years. It was a very good meeting, from his account.

San Diego Gas and Electric (SDGE) – Guest presenter **Steve Vanderburg**: We had Steve give us this presentation, because the Utility has created a very extensive weather monitoring network since the huge fires of 2007, and it is good to learn more about it. The website is www.SDGEweather.com. They have two Mets, the first hired in 2009. In total, there are 128 weather stations currently in their network, 5 of which are RAWs as we know them, and 123 others are pole-mounted, containing several sensors. 43 of these also have pyranometers. Winds on all 123 stations are 10-minute averaged, just as in NFDRES, and have 3-second gust recording. The RAWs are FTS type and the 123 all are standardized. With all these stations, SDG&E has become the 3rd largest non-government meso-net in the nation! There are another 14+ new stations planned for installation this year. There are also eight portables in their arsenal. Steve said they are looking at installing two profilers (would be trailer-mounted, i.e. portable). They also have two mobile field command trailers, and 6 webcams.

RAWS information sharing – Group roundtable:

NPS: (Corky C) There are no station moves imminent. **Wawona** was moved, and now serves the fire folks better. The NPS has completed 10 of the upgrades to High Data Rate (HDR)...which BTW is a **critical national requirement, that has a must-be-completed-by date of May 31, 2013.** (see <http://raws.fam.nwcg.gov/> for more info). Eight of these 10 NPS HDR-completed RAWS are in CA, including: **Schoolhouse** at Redwood NP, **Headquarters & Mule Mountain** at Whiskeytown NP, **Crane Flat** LO in Yosemite, **Park Ridge** and **Cedar Grove** in Sequoia-Kings NP, **Lost Horse** in Joshua Tree NM, and **Indian Well** at Lava Beds. Remaining CA NPS stations needing the upgrade are: **Rattlesnake** and **Sugarloaf**, both CA-KNP (Sequoia & Kings Canyon) RAWS...high elevation used mostly for backcountry fire; **Wolverton**, CA-KNP, mid-elevation and mid-slope brush and pine vegetation; **Barnaby**, CA-GNP (Golden Gate & Point Reyes), and **MGrove**, CA-YNP (Yosemite). There is a mix of funding (mainly suppression, also fuels) to cover their upgrades.

Calfire: (Chris W) Annual maintenance is progressing well, should be all done by 6/30/12. They have 87 stations, and the maintenance is performed by FTS. There are also 7 distributed portables (6 in North and 1 in South). There are plans in place to put a new station at Lone, site of the state Fire Academy – targeted to occur by end of July this year. **Devore, Beaumont, and Clark** were all mentioned as stations (in South Ops) that have been encroached on by some form of urbanization/ built up sites/ pavement etc., and they will be moved, each probably a short move. There are additional stations being looked at for these same types of issues. Chris told us their Fire weather policy has never been officially 'published', but that through a requirement to develop and implement Fire Danger Operating Plans, this will be a part of those plans. Calfire is going to reach out to the NWS and to Predictive Services programs, to help meet their weather needs involved.

BLM (Les M): In southern CA, **Mojave River Sink** was recently moved. It is now called **Bird Springs Pass**, and is as a considerably different site. There was a BLM WO cost-savings, RAWS program review performed in late winter. Stations were identified that could be sacrificed (if need be), but to my knowledge no changes have been finalized in CA, and in fact my not end up being needed if enough money can be saved via less expensive maintenance options.

USFS (John S, using **mainly Russ Gripp notes**): New stations include **Bolam**, 4488' elevation, on the North side of Military Pass, NE of Mt Shasta on the Shasta-Trinity NF. **Slate Creek**, 4181', 7 miles WNW of Orleans, near Slate Creek Butte, Six Rivers NF. **Blue Mountain**, 5740', in north-central part of the Modoc NF, where site evaluation is ongoing. **Smith Peak** on the Stanislaus NF, was a relocation of Buck Meadows RAWS to a mountain top site 1.5 miles south of the existing site. **Alpine**, 2053', Cleveland NF, and site evaluation is ongoing there, also.

Military, Camp Pendleton: A lack of funding has caused the several stations to be turned off down at sprawling Camp Pendleton. Among these are Ammo Dump, Roblar, Los Flores, and Talega. Case Springs is the only one still available.

Other NFDRS/ WIMS info that John S. passed on from **Russ G**: From a Reg. 5 USFS perspective, the Forests are about 70% complete with the HDR upgrade process on NFDRS RAWS. Nine Region 5 forests (of 17) have now completed all of their station's upgrades. Russ wanted to remind the group that folks must be familiar with and follow practices / procedures related to the relocation of RAWS, as outlined in the *Fire Weather Station Standards and Guidelines* handbook. Latest version is from Aug 2009, publication PMS 426-3.

Regarding the **NWCG WIMS/WFMI fire weather station location synchronization project**, the project “due date” **has been pushed from June 2012 to November 1, 2013.** Official letter from NWCG Fire Weather Subcommittee announcing the extension should be out soon. Review of California stations in WFMI shows slow progress. A number of technical issues are being worked on by the WFMI and WIMS staffs. This centers on how and when the actual synchronization should take place. Users are encouraged to update both WIMS and WFMI to the high resolution value outlined in a letter of early 2011, attached with this email. It is also a good time to **update site photos** on these same site visits.

Training dates to keep in mind:

- next California RAWS Maintenance class is Nov. 5-9th, 2012, at NCTC in Redding
- the National Advanced Fire Danger Rating System course Feb. 19th to March 1st, 2013, at NAFRI in Arizona
Course details are on the National Wildland Fire Training site (<http://www.nationalfiretraining.net/>)
- WIMS course is March 12-14, 2013 at McClellan Training Center.
- NFDRS (S-491) course will be April 1-5, 2013, also at McClellan.

Next PS Specialists Group meeting: Planned for in-person again, on **Wed Nov. 28- Thurs Nov. 29th**.... Week after Thanksgiving. Perhaps in the Bakersfield area. (the Fall 2012 meeting has potential to need changed to Video Teleconference format... which will be mainly a travel budgets dependent decision).

The Table below, which shows the Group's **Program of Work** (i.e. Action items) can also be found at: <http://www.firescope.org/specialist-groups/predictive-weather/predictive-weather.htm>)

Work Task	Action	Assigned To:	Projected Completion Date	Actual Completion Date
Provide current Roster Provide meeting dates in advance	Provide roster and next mtg dates to David Brinsfield	John Snook in spring and Tom Rolinski in Fall	June 11, 2012 Dec. 15, 2012	
Provide Predictive Svcs. Group's Plan of Work to main TASK Force	Finalize 2012 PS Group's POW, then disseminate to Group and to main FireScope task force for approval and Web posting	John Snook in spring and Tom Rolinski in Fall	June 11, 2012 Dec. 15, 2012	
Chairmanship of Predictive Services Specialists Group	Group has new Chairperson	T. Rolinski	June 2012	
Transfer of all relevant documents (from old to new Group chair)	Send latest version of all relevant PS Firescope documents to new chair.	J. Snook	By June 13, 2012	
Annual Review of MACS 410-03 document	Annually review document. When-ever changes are needed, incorporate into next California Fire Wx AOP.	T. Rolinski	June 2012	
South Ops Offshore Severity Index	Continue with any planned remaining work on this valuable product	T. Rolinski	Summer, 2012	
Find funding to complete the tasks of Hourly Fire Danger Phase II. (approx.. \$10K)	Group has given up on LA County contribution for this. May be some potential from Calfire via a Grant.	J Snook C Waters T Brown	Late summer 2012?	
When HFD Phase II gets funded, prioritize remaining Tasks in project	Review of which tasks in HFD Phase 2 not yet completed. Prioritize and develop timetable for completion.	T. Brown, Russ Gripp, T. Rolinski, J. Snook	Partly depends on timing of item just above	
Station review related to Hourly FD Map	Now tied in to adjustments that might be made on Hourly map itself.	Gripp, Corky Conover, & Calfire rep (vice B Schieber)	September 2012?	
CANSAC Products – User customized menu – distribute info to Users	Snook to review/ assess CEFA's latest (recently notified by Tim Brown) & provide feedback. When approved, disseminate info to wider audience.	J. Snook and CANSAC Opera. Apps Group	By mid-August 2012	
Checklist for reviewing WIMS station catalogues	A check list to help folks review their NFDRS Station catalogues in WIMS	R. Gripp	July 15, 2012	
Provide Ops Application Group (OAG) feedback regarding CANSAC products	Continue to compare WRF & MM5 outputs, feedback to CANSAS OAG	CANSAC OAG thru Snook	ongoing	
Prescribe Fire Info Reporting System (PFIRS)	Encourage PFIRS use by air districts. Provide link to Blue Sky modeling.	J. Branz of CARB and Tim Brown	Ongoing in 2012	
Letter outlining how to match RAWs lat/lons in WIMS and WFMI	Part of a national effort to improve a long-standing issue. Good clear guidance in this document.	R. Gripp	All should follow steps, 2012	