

Notes from FIRESCOPE Predictive Services Specialists Meeting November 4-5, 2009, Room W-113 at McClellan TC, Sacramento CA

Attendees list: John Snook- USFS, group chair; Marva Willey- USFS, Intel; Dan Keeton – Sacramento NWS; Roger Lamoni – NWS Western Region Fire Weather Program Manager Salt Lake City; Steve Goldstein – Sacramento NWS Fire Weather Program Lead (Thursday only); Jack Froggatt-FIRESCOPE Liaison; Les Matarazzi-BLM SOPS; Corky Conover-NPS; Pete Curran- Orange County (last meeting as he is retiring in December & Dustin Grinstead will be taking over); Drew Smith- LA County Fire; Jason Branz, Dar Mims, and Ping Di- CARB (Wednesday only), Francis Fujioka- PSW Research USFS; Tom Rolinski- USFS, Rob Krohn- USFS; Bryan Schieber- Cal Fire Northern California; Michael Doi- Cal Fire Southern California; Tim Brown- DRI via conference call on Thursday. Typical attendees absent: Russ Grip- USFS,

For **Group Roster**, with contact information: See final page of these notes
Also, a big 'Thank You' to Corky Conover providing the bulk of the basis for these notes

DAY 1, Wed., November 4 (1300 – 1700 PST)

Prior Action Item Review: This was done by reviewing our Plan of Work on the FIRESCOPE PS Group website. See the 5th page of this document for the combination of past, present, and new Action items.

Predictive Services program updates and general Fire Season review (John Snook for North Ops and Tom Rolinski for South Ops and all agency reps):

John reviewed who the primary and secondary/alternate members of the group were and asked for updates. Pete Curran said that he is going to retire in December to pursue an education and career in meteorology at a university in Florida; he would be replaced by Dustin Grinstead also of Orange County Fire. Corky said that his alternate took a new job, and would get back to John to see if Christie Neill would continue or be replaced by Sid Beckman as the NPS alternate.

John said that NOPS would go live with using the National Fuel Moisture Database by next fire season, Marva and group had hoped to wait for the publication of the updated fuel moisture sampling protocols (still promised any month now), but decided that they should go forward anyway and hope that the protocol was completed to help insure consistency with collection and training.

John mentioned that it appeared that the potential \$10k funding from LA county to finish up on the hourly fire danger had fallen through again. Drew Smith said that he would take another look at the potential LA county funding and work with Tim Brown of DRI. The group reviewed some products at the CANSAC web site and we discussed how the precipitation forecasts did with the falls first rains. John reminded the group that he was always looking for feedback on CANSAC operational use, and that he planned to have an Operational Applications Group conference call soon. The group was reminded that the MM5 model was no longer going to be supported and that CANSAC was going to use the WRF model.

The group revisited the topic of the potential use of Air National Guard forecasters at fire incidents (see Action items for a summary).

Most of the group generally reported a slow to moderate fire season. John reminded folks that NOPS went into the season with some areas forecasted to have Above Normal potential, but early season thunderstorms were quite wet, there were no big dry lightning outbreaks later in the season, and it was a below average fall for foehn (N to NE, downslope-driven) winds. John next showed a demo of a fire weather briefing product that they were still doing on a weekly basis, and this was posted on an FTP site where you needed a login and password to access (see John or Marva for this). John said that the met side was fully staffed with (John, Brenda, Basil and Steve).

Marva said that she had one vacancy (NOPS Intel Officer) and was hoping to get a list of potential candidates soon. She said that NOPS had a near-average fire season, with 14 large fires needing IMT deployment (5 Cal Fire Teams, 5 Federal Teams, and 4 NIMO assignments). Marva stated that the MAC group was activated two times to help prioritize resource commitments, and that there was one fatality related to a rappel training incident. Marva also brought a Predictive Services brochure created by the National Predictive Service group. There was continued movement on rewriting the '209' program to make it more all risk friendly and to update terminology for the current national federal fire policy.

Pete said that Orange County had relatively normal season and that they had been assisting the Cleveland National Forest on some arson fires. Drew reported that LA County had a moderate fire with most fires only going 1-2 operational

periods with the exception of the Station Fire (Angeles NF protection). Bryan from Cal Fire at NOPS said that they had some early season lightning on the Lassen Unit, and then more recently some action in San Mateo and Santa Cruz Counties where the brush was plenty dry but needed the wind for the fire to carry significantly. Corky said that they had a slow season (except for the PNW area around Olympic National Park) and this lead to a good Rx fire year, with the exception of the Big Meadow escape at YOSE, and that the report on the Big Meadow Fire should be available to the public in the next couple of weeks. Tom said that SOPS was still dry in the southern 4 forests and continued to have some potential if we get some winds.

PFIRS Update (Jason Branz)

Jason said that the official rollout of PFIRS came and went quietly, on Oct. 1 this year, as planned. The USFS has had quite a few folk's sign up for passwords. So far however, only a few air districts are actively using the entire system, though many folks are using it for the CB3 decisions. Jason said that they would continue to encourage the air districts to use the system to facilitate better cross boundary coordination. Corky said that if the air districts would switch from their current systems, then the agency burners would have to follow.

Pacific SW Research (Francis Fujioka)

Francis gave a presentation on an elaborate Air Quality Model research project with many co-investigators including other scientists from his lab, universities and even one from the military. The project is looking at improving fuel modeling, particularly as it relates to fuel consumption in southern California chaparral. The project is looking at developing/improving emission factor estimates for criteria pollutants and some related or secondary pollutants, involving atmospheric scientists and air quality modelers.

Francis also provided an update on the modeling effort that he had reported on previously, in the area of the Esperanza fatality fire. BLM had an interest in keeping/maintaining some of the 5 RAWs stations that were on loan from the NIFC cache in Boise. One or 2 of the stations that were near existing permanent stations would be removed and or relocated. The lab now has a 20 node computer system that was used during the project to run 6 hour simulations with an older version of *FARSITE* which allowed using gridded winds (the down side to the older version was that it did not include the newer Nelson fuel moisture module). They could produce fire spread probabilities on random ignitions down to a 1 km resolution, and overlaid economic values onto the spread probabilities.

WFDSS Update, Wildland Fire Decision Support System (Marva Willey)

WFDSS is a server-based system (requires patience), and is open to all who have a '.gov' address. Marv gave a short impromptu overview of WFDSS to end our first day. Corky said that the NPS was heading toward full use of WFDSS next fire season. Marva said that all of DOI (BLM, FWS, BIA, NPS) was going to full use of the system next year, and that interagency folks were meeting to ensure that the modeling/ analyst needs would be met with more users on the system next year.

DAY 2, Thurs., November (0800 to 1200 PST)

NWS Update (Roger Lamoni)

Roger started out with an IMET overview from the year; there were 48 IMET dispatches within the NWS Western Region (compared to 105 in 2008), with 24 of these in CA (17 USFS, 6 Cal Fire, 1 NPS). Roger said that the 50% ratio of CA dispatches to the rest of the WR was fairly typical. There is continued movement to updating the Spot Weather Forecast request page to be more all hazard in nature and would include Google maps and a low band width version for quick remote access from portable electronic devices. Nationally there was a movement to develop a "Joint Statement of Cooperation" for all the agencies involved (NWS, Predictive Services, Fire Labs) for more seamless product development, sharing and hosting of fire weather related products. There was some more discussion on the possible future use of Air National Guard forecasters on fire incidents. Francis will provide updated info to Jack Froggatt, for Jack to share with FIREScope's Aviation Specialists Group.... they would be able to help validate whether or not a need exists (there is an Action Item on this topic).

FIREScope Task Force Update (Jack Froggatt)

Jack gave a short review of how FIREScope is organized. It has a Board of Directors and then an Operations group under them, with multiple specialist groups (like our Predictive Services group) under the Ops group. The information in 410-1 for Multi-Agency Coordination System (MACS) was being updated with the final going to the Board through the Ops team in January 2010. The Field Operations Guide (FOG- ICS 420-1) was being updated for 2010. There was a task force developed to work on Structure protection Guidelines, and one of the main tasks was to provide more consistent terminology use throughout the state. Jack provided a one page handout on some of these tasks. There was some discussion on the differences between NWCG and Firescope since many of the same players are involved. Jack said that while this is true in general, there is about 3 times more involvement with local and county fire within the FIREScope group. Jack reminded folks that the web site: <http://www.firescope.org/> had a lot of helpful background, organizational

and historical information, including information about our group: <http://www.firescope.org/specialist-groups/predictive-weather/predictive-weather.htm>. What we refer to as Action Items within our group constitute the Plan of Work on their website.

MACS 410-3 update (Tom Rolinski)

Tom reviewed the past 18-month history of 410-3 updating, and the reasons why an update was needed. He provided a handout on the current criteria used for Red Flag warnings, and we went online to the old Annual Operating Plan (AOP) to see the previous wording. There was still some resistance to the current (revised new) wording from the San Diego and Oxnard NWS offices, who were working on a slight modification to the matrix. That would continue with a low RH criteria, but one that would also need some light wind with it. Dan Keeton will work with those offices to get the NWS response to our PS Group's updated 410-3 text back to Tom R. by mid-December (see Action Items for a summary).

Training opportunities Update (Group, roundtable)

- **Smoke Management workshop** planned in Monterey Nov. 16-17.
- annual McClellan classes: **WIMS** - March 16-18, 2010 **S-491** – March 22-26, 2010
- **National NFDRS** next course - NAFRI in Tucson in February 2011
- **RAWS** – Maintenance training in CA: Danny Rhynes Training Center: Nov. 16-20, 2009, Vandenberg AFB IA Training Center: Feb. 1-5, 2010, and at North Ops in Redding, March 8-11, 2010
- **RX-410**, Smoke Mgmt Techniques April 19-23, 2010 McClellan TC Sacramento CA
- **RX-300** Burn Boss, usually late February or March, and in Redding in the past
- **S-590 (Fire Behavior Analyst)**, in Tucson at NAFRI (3/8-3/19/10).
- NWS annual **IMET** course, Boise ID March 22-26, 2010
- **NOAA/NWS's COMET** online (mainly met related) training opportunities

Other training opportunities can be found on the California wildland firefighter training site, at:

[http://www.nationalfiretraining.net/course_session/list.html?filters\[sf_guard_group_id\]=4&filter=filter](http://www.nationalfiretraining.net/course_session/list.html?filters[sf_guard_group_id]=4&filter=filter)

or at the McClellan Training Center site: <http://www.fs.fed.us/r5/fire/mcclellan/index.php>

NFDRS/WIMS/PAL Updates (Russ Gripp was in Boise but provided John some brief bullets)

Russ wanted to remind folks that the outputs from PAL are guidance, and not the final decision, which is up to the local managers. There is some concern from some timber management groups that there are too many mitigation requirements at lower PAL values and this is being reviewed. There is also concern that some of the weather stations might not be representative with regard to winds (too high) and this is also being looked at. Still working on having 24/7 coverage for when ASCADS goes down. The Fire Danger Sub Committee recommended that the WIMS course be accepted by NWCG and this was rejected (no reason for the rejection provided in John's notes from Russ), but the FDSC will delve into the reason(s) and make another run at it in 2010.

CEFA/ DRI Update (Tim Brown, via teleconference and PPT on our screen)

Current projects:

- **Hourly Fire Danger Phase II** –There were five tasks originally.... DRI is still waiting on funding for Tasks 3 and 4 (now asking for about \$15K). Drew Smith will revisit with LAC and work with Tim on potential \$.
- **RAWS FPA Quality Assurance (QA)**: DRI has a good feel on the bias of the NARR (North American Regional Re-analysis) and will rerun with bias corrections.
- **CAVE training simulator**: the DOD was happy with the upgrades to the simulator and DRI will work on making some improvements so that the simulator can be used for more real time fire simulations for training personnel.
- **Yosemite NP**: finishing up some estimates of ozone production from Yosemite fire events compared to current emission inventories for Lee Tarnay.
- **CANSAC Computing System Upgrade**: The generous NPS contribution for new CANSAC hardware finally made it through all the hoops, to DRI – this is very good news... **Yea NPS & Corky!** . The new computing system (series of 64 Quad Nehalem 2.93 GHz processors) will be acquired to replace the original 2004 system. This will allow us to go from a 4-km to 2-km inner grid, in about the same time as current run time, OR that can do the current workload in about 50% less time per run! Tim reports that CEFA expects to be fully operational with the new system and Blue Sky by April 2010.
- **CANSAC User Customization menus**: John S., the CANSAC Ops Group chairperson, brought this up. Tim will work with Hauss to move this up on his priority list, so that a person with a login and password can form their own customized menu, allowing them to go straight to their favorite outputs, without using the entire large set of 3 product matrices. CANSAC, among its many uses, is utilized heavily by the NOPS GACC Mets in writing site-specific (Spot) forecast for prescribed burning.
- **National FCAMS**: website: <http://cefa.dri.edu/fcams> they are working with the Wildland Fire Decision Support System (WFDDSS) folks on forecast guidance.

RAWS Updates (Group, agency by agency roundtable report)

National Park Service report (Corky Conover): Looks like Whiskeytown HQ old manual station will be replaced with a RAWS. Death Valley has a BLM station (Hunter Mtn.) that the NPS is working with Les M., and the ECC to get the information entered into WIMS. Then it can be used for Fire Management decisions in Death Valley, which is the biggest NP in the lower 48. DV has had several multiple thousand acres fires over the last few years, in a park with zero fire staff.

USFS report (John): No big completed changes recently, though 2 are pending. The Six Rivers NF is looking at potential new site near Orleans. Also, the Klamath NF is looking at the potential for a new site in the mid-slope areas (nighttime thermal belt effects) between Happy Camp and Somes Bar. A site has been selected, at about 2400', between the Dutch and upper Independence Creek drainages. Nationally, they are looking at the current station density and the costs of maintenance. There was a QA check done by Chuck McHugh of the Missoula Fire lab on RAWS meta-data (location, ownership etc.) and **CA (R-5) had the most accurate meta-data by far when compared to the rest of the country!**

BLM report (Les): Les will continue to work with SOPS staff and one problematic ECC about getting some more of their desert BLM RAWS stations entered into WIMS.

Cal Fire report (Bryan): They are going to FTS stations, with FTS doing the maintenance (DGS no longer). There are currently 16 portable stations in the system (mostly in a state of disarray) and Cal Fire will probably drop down to about 5 portables. San Jose City has added a new RAWS station.

San Diego Gas and Electric (from last meetings notes): has plans to put in as many as 18 RAWS in their area, to assist in shutting down power grids and manage arcing during wind events, if needed. Not looking at using for NFDRS at this time.

Orange County FA: (Pete) no new plans at this time. Fremont continues to be their most important RAWS.

LA County FD – (Drew): looking at a new station on Catalina Islands and LA City is looking at a station in the Griffith Park area. Drew also reported that LAC pocket cards are now on the national website - here is the link...

http://gacc.nifc.gov/oscc/predictive/fuels_fire-danger/myfiles/LocalPocketCards.htm

Kern County – Looking at a 4th fixed station for their network this winter.

Next Meeting- We agreed that we will meet next at LAC Fire in **La Canada Training Center on May 4th-5th 2010**, in the usual format of p.m. hours on Day 1 and a.m. on Day 2. Drew will get John a map and local hotel information, so that he can share it with the group.

Side note – the early 2010 **AOP/FWPAT meeting-** will be held at McClellan TC on Feb. 24-25, 2010