

Fire Environment Committee

Conference Call Notes

Sep 27, 2023

On the call:

Nick Nauslar, Christopher Moore, Robert Clark (CalFire), John Hiers, Darren Clabo, Wes Hall, Chris Moore, Billy Gardunio, Tim Brown, Brad Smith, Pete Lahm, Jon Fox (Note taker)

Stance on FEMS/NFDRSv4:

- Need more verification work on this before moving forward. No objections.
 - Tim B...wants to know what the next step is going to be. Nick isn't sure. Next meeting will help with some direction.
 - Some verification work has been done by the lab but not released yet.
 - Would a memo from FENC help? Robyn doesn't think so yet.

Haines Paper:

- Still wants to get rid of this...a memo was sent 8/4/23 listing the issues specifically that it doesn't relate to fire danger.
- Problem is it is embedded in everything.
- 6 recommendations to get rid of it. (see at bottom)
- Ask forecasters to refer to RH and stability.
- Stop issuing HI in forecasts.
- Get rid of it in training. (S-290 & S-390, also in S-190 but just don't dwell on it.)
- Perhaps we could use the ventilation index.
- Even Don Haines says it doesn't work correctly per correspondence with Brian Potter.
 - Tim asked Darren about this...is there a replacement for it. Depends what the audience is. Those who have been involved with this for 30 some years don't want it to go away. Younger folks don't mind it being replaced. Fire weather forecasts and IMETs can do their best to not utilize this.
 - Kevin asked when this would happen. Wants to phase it out, but the question is how/when. **Darren says perhaps Jan 1, 2025.** A hard deadline might work.
- **ACTION: Nick proposes at the next meeting we will vote on what to do with the Haines Index. A memo would be sent out to the board from Darren.**
- Darren also wants to tackle the LAL. But let it be delayed for a while. One item at a time.

FWSC Paper on Gap/Back-Filled RAWs Data from DRI:

- Tim sent a message to the group about this and Nick wondered if this could be shared publicly.
- Darren asked what's the driving force behind deriving this climatology.
 - Tim says CA folks wanted this for FDOPS.
 - Other GACCs said they wanted it as well.
 - FEMS would be the authoritative data source.
 - WFDAS wanted a 20 year data set for nextgen climatology.
 - Darren: What evidence is there that ERA5 data is precise enough to eliminate RAWs data? It sounds like this is a technical report. Tim says there could even be a journal article.
- **Nick wondered if a joint briefing paper could be issued to see what Tim came up with and what Darren's fire weather sub-committee thinks about this? Tim and Darren said yes they could. Nick would like this done in 2 months. Tim wanted to know if this could wait until version 2.**

FBSC/FWSC Meetings:

- Fire behavior meetings set 10/16-10/19 and the fire weather sub-committee would meet with them on Wednesday. Pending shutdown.
- Backup meeting set for January 2024.
- When will the meeting be called off? If we are in shutdown on October 10th then the meeting will be rescheduled.

FENC Annual Meeting dates:

- Nick thinks sometime in February in Boise.
- Pete wants it in Tucson
- The meeting will be hybrid. But in person method is encouraged.
- S590 is in Tucson in March.
- Robyn is scheduling a NWS GIS meeting sometime in February as well.
- Norman, OK Fire weather meetings 2/13-2/15.
- Could it be done same week as NWCG meetings? 2/19-2/23
- TBD in other words. Nick will send out a message to the group to find dates.

Round Robin:

- **Wes:** No updates. Slow with fire season. No monthly webinars.
- **Chris:** Talk about training again...S290. Test course in November through U of I. NWCG got funding for S390 and S490.
- **Darren:** Brian Potter will be excited about today's meetings and the outlook for the Haines Index.
- **Rob:** Going into the annual training season for CalFire.

- **Brad:** Fire danger met last week for 2 hours. No recommendations. Matt Jolly gave some perspectives on Version 4 and gap filled data. Sheryl will be back next month after the assignment.
- **Kevin:** DOD updates...4 additional smoke projects should be funded and approved in Dec 2023 or Jan 2024.
- **Tim:** No updates. Waiting for a commission report from Robyn. <https://www.usda.gov/topics/disaster-resource-center/wildland-fire/commission>
- **Pete:** Has a smoke video as it relates to health and other issues which will be released on 10/15.
 - Smoke thresholds will be reduced based on 700k comment letters of feedback regarding the current smoke standards. It will go to OMB for review. Breakpoint between good to moderate will drop. Green will be much less common going forward which will be a challenge to Rx burns.
 - ARA's were busy this summer and will now respond to Rx burns.
- **Billy...**PSOG...meeting got pushed back. New meeting is 1/29/24.
- **Cole...**Nothing to report. Planning for a shutdown on all applications.

Haines Index

Recommendation

It is the finding of the Fire Weather Subcommittee that the continued use of the HI is detrimental to decision making and risk management and its use should be discontinued. We recommend removal of the Haines Index from all fire weather related forecasts and NWCG reference and training materials. We understand that there will be some consternation from various personnel about its removal, but the overwhelming evidence supports its discontinuation.

Our recommendations on how to proceed are as follows:

1. We recommend continuing to use HI through the 2024 fire season. However, we will inform meteorologists that they should instead refer directly to humidity and stability observations and forecasts. The Haines Index should only be provided if specifically requested.
2. In the off-season 2023/2024, work with WFSTAR to make a video on the shortcomings of HI and the recommendation on what to use instead. Namely, directly addressing humidity and stability based on the observations and forecasts. Request that this video be made mandatory for all participants in the 2024 RT-130 courses.
3. In the off-season 2023/2024, request that the National Weather Service cease issuing HI forecasts starting 1/1/2025, replacing it with directly mentioning humidity and/or stability concerns in the forecast discussion part of the forecast. For those seeking forecast map data on stability, work with the National Weather Service to identify a replacement.
4. In the next IRPG update, the FWSC recommends that mention of HI be removed. This recommendation has already been submitted through the IRPG change portal.

5. In the off-season 2023/2024, work with the NWCG training to remove mention of HI in all NWCG training courses and replace it with discussion of stability and the evolution of the boundary layer.

In instances where HI is used to inform staffing or operational decisions, work with the Fire Weather Subcommittee to identify a replacement

