May 16, 2024 | Fire Weather Subcommittee Meeting

Members/Invited Attendees:
Darren Clabo (NASF/SD State, Chair), Jim Wallmann (USFS, Vice Chair), Larry Van Bussum (NWS), Calvin Bailey (NASF/SC State), Dennis Burns (NASF/CA), Drew Daily (OK Forestry Services), Kari Fleegel (NWS), Colby Neuman (NWS), Brian Potter (USFS), Paul Sopko (USFS), Robert Swofford (BLM), David Schultz (NWCG Coordinator/BLM)

Actual Attendees: Darren Clabo, Drew Daily, Kari Fleegel, David Schultz, Robbie Swofford, Brian Potter, Jim Wallmann, Larry Van Bussum, Zach Tolby (invited guest - NWS Fire Weather Testbed)
****These and past notes are also available internally in our Google Drive folder.**

Agenda

1. **Discussion with Zach Tolby, NWS Fire Weather Testbed** (Zach Tolby)
2. **Incident Response Pocket Guide and Haines Index/Lightning Activity Level replacements** (Darren Clabo)
3. **Continued issues with Haines Index and Lightning Activity Level removal** (Darren Clabo)

1. **Discussion with Zach Tolby, NWS Fire Weather Testbed** (Zach Tolby)
   The Fire Weather Testbed is 1 of 12 in the NWS, working on Research to Development and Research to Operations by engaging end users early and often. The plan is for 8 staff with 2 social scientists. The testbed will have surveys, 1-day virtual evaluations, and larger week-long in person evaluations. New tools, technology, and communication will be beneficial with prescribed burns. The testbed will also be looking at after fires, at debris flows for example. Products, models, learning systems, anything that communicates. Looked at NOAA/CIMSS (Cooperative Institute for Meteorological Satellite Studies) LightningCast last summer, and NOAA NSSL(National Severe Storms Laboratory)/CIWRO (Cooperative Institute for Severe and High-Impact Weather Research and Operations)/University of Oklahoma Warn on Forecast last fall to see how it could be used in the fire weather mesoscale environment. This included probabilistic smoke output. June 10-14, 2024 will be the first in person evaluation of the NESDIS Next Generation Fire System (NGFS) used in detecting hotspots, and issuing Fire Warnings (FRW). This includes significant

work with the Southern Great Plains Wildfire Working Group (which has been ongoing since 2011). This group has been Fire Warnings at the request of State Foresters and collaborated with several other groups including the NWS.

Darren Clabo asked about the future of the testbed and specifically with other government agencies. He also asked about social science and if they have a history of working with wildland firefighters. Zach Tolby noted that social scientist Emily Wells at the testbed will focus on operations to research. A NOAA Global Systems Laboratory (GSL) social scientist division is also spinning up. Brian Potter noted that the Forest Service side has had a difficult time integrating with wildland fire folks. Zach's main goal with social scientists would be trying to understand public perception of products and services. Dennis Burns suggested that the testbed reach out to the Desert Research Institute/Tamara Wall, and Brian Potter suggested Heather Heward University (Senior Instructor for Forest, Rangeland, and Fire Sciences Department of the University of Idaho) who is helping with some of the S-290 training creation.

2. **Incident Response Pocket Guide and Haines Index/Lightning Activity Level replacements** (Darren Clabo)
   Here is the current January 2022 Incident Response Pocket Guide (IRPG): https://fs-prod-nwcg.s3.us-gov-west-1.amazonaws.com/s3fs-public/publication/pms461.pdf?VersionId=lXUgkLMK9mRTMyssaamowdM3y6u7CKpl. Our suggested replacement for the space currently held by the Haines Index and Lightning Activity Level (LAL) is needed by around mid June. Brian Potter suggests including a reason why they have been removed. Larry Van Bussum asked if other tools should be included/what could be used instead of Haines Index and LAL. Kari Fleegel brought up that Brent Wachter (Northern California GACC) had some suggestions for the pages too, if needed. Dave Schultz mentioned that it needs to remain a reference guide, and not a long justification of why the parameters have been removed.

   As a result it was discussed that the best use of the space would be an inclusion of what the mixing height parameter can tell you, what doesn't tell you. Also included should be the difference between stability at the surface, and how helpful each component is on the growth of a fire. This ties in to why Haines Index is being removed, and may be only briefly mentioned.

3. **Continued issues with Haines Index and Lightning Activity Level removal** (Darren Clabo)
   There are a few people that have some concerns about the removal of the Haines Index. Additional conversions related to this topic will continue to be communicated through email ahead of our next meeting.

Next meeting June 20, 2024 at 11 am MT
typically the 3rd Thursday of each month