

December 14, 2023 | 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), Kari Fleegel (NWS), Colby Neuman (NWS), Brian Potter (USFS), Paul Sopko (USFS), Robert Swofford (BLM), Dave Schultz (NWCG Coordinator/BLM)

Actual Attendees: Darren Clabo, Dennis Burns, Colby Neuman, Brian Potter, Kari Fleegel, Larry Van Bussum, Jim Wallmann

**These and past notes are also available internally in our Google Drive folder.

Agenda

- 1. Haines Index and LAL (Lightning Activity Level) ending timeline and documentation through NWCG (Darren Clabo)
- 2. Round Robin (all)
- 1. Haines Index and LAL (Lightning Activity Level) ending timeline and documentation through NWCG (Darren Clabo)

Our presentation to the NWCG Executive Board on a specific timeline for removing these products has been moved to their February meeting.

A spreadsheet of the known mentions of both the Haines Index and LAL was created by the NWCG Publications Manager, Erica Lamb and sent to us on November 27, 2023. This list was put into a spreadsheet available to all subcommittee members. Colby Neuman added a few National Weather Service mentions as well. During the meeting we created a proposed timeline or plan for each mention of either the Haines Index or LAL, particularly in NWCG documents. When a straight removal didn't seem appropriate, a reference to the stability section of the IRPG was added.

Larry Van Bussum asked if a mention of contacting the Fire Weather Subcommittee should be mentioned in any white papers, as it related to annual operating plans and assistance for fire planners and practitioners who wanted additional guidance on the removal of the Haines Index or LAL.

A discussion about stability as a replacement for the Haines Index was discussed. Larry Van Bussum was wondering if there is a reason that stability

needs to be in an annual operating plan? Brian Potter added that research shows that mid-level stability has not shown great predictability of fire growth, and has two research papers that discusses this. He knows of one more. Ground level stability does have a correlation. Brian Potter suggests that we add in the page and white paper we create...that we recommend that the Haines Index be removed and a discussion of stability be added. Darren Clabo mentioned the need to stop using instability outside of context. Dennis Burns added that he teaches that fire is the unstable portion of your environment. The Dixie fire is a good example, with upslope conditions being a driver and not instability. This mention could be included in the white paper.

A replacement for LAL was discussed. Dennis Burns suggests the replacement be what is already available, clear text and thunderstorm mentions in the fire weather forecasts. The group discussed the probability of lightning from the National Weather Service National Blend of Models and lightning density from the NWS Storm Prediction Center. Kari Fleegel will look into if probability of lightning gridded data is available or could be sent to the public

Given some of the details above, the next steps in this process include...

Step 1: White Paper to NWCG. Darren Clabo hopes to have the transition plan created and reviewed by subcommittee members in the next 3 weeks, before sending it to Nick Nauslar at the Fire Environment Committee, and Dave Schultz at the Executive Board level.

2nd Step: NWCG Fire Weather Subcommittee webpage creation. Larry Van Bussum suggests creating information on the left side of our NWCG subcommittee page describing why the Haines Index and LAL were discontinued. This page should include the original paper by Don Haines, and Brian Potter's research about discontinuing the use of the Haines Index. Any hyperlink mentioning it being discontinued on NWCG sites could directly bring folks to the information that our subcommittee mentioned. Darren Clabo will coordinate with Dave Schultz on the necessary steps for the webpage.

3rd Step: WFSTAR video creation. Create a 10 minute video on WFSTAR prior to March 2024 on why the Haines Index and LAL are being removed. This video would reference the NWCG. WFSTAR person on the video should be someone who is well respected and not in the research field. A suggestion would be to have Dennis Burns, and he accepted to be the face of the WFSTAR video. Darren will reach out to the WFSTAR folks about the process.

4th Step: White paper to the public/other agencies. A white paper will need to be created to send to agencies that used or create these variables in their products.

2. Round Robin (All)

Brian Potter - Update from the International Fire Ecology and Management Congress earlier this month. Brian met with a Spain fire representative who noted that they were releasing radiosondes into smoke plumes, and outside of smoke plumes to record the ambient air. They are hoping to better understand the variability in the different environments. A scientific advisory group will be organized to ensure that data being collected is useful. Brian was asked to be in this group. Brian also noted that Central Washington University is looking for someone seeking a Masters of Natural resources degree to look at fires of larger sizes. A flier for this position has been emailed to the subcommittee members for distribution.

Larry Van Bussum - Larry stood in for Heath Hockenberry on the NWCG Executive Board over the last couple of days, where there was discussion of the Haines Index and LAL.

Colby Neuman - Volunteered to assist if there was something on the NWS side of the Haines Index and LAL project, or other projects in the future. Please let him know.

Darren Clabo - Calvin Bailey was unable to attend this meeting, but was brought up to speed on the progress of the working group in recent days.

Next meeting January 18, 2024 at 10am MT **typically the 3rd Thursday of each month**