

The NOAA Fire Weather Testbed and Related Activities at GSL

Daniel Nietfeld

With wildfires increasingly impacting society and ecosystems from local to global scales, NOAA has increased its strategic investments and planning to address wildfire-related hazards. One key aspect of these investments is the establishment of a new NOAA Fire Weather Testbed (FWT). The FWT intends to bring together a broad range of fire-related communities across agencies and jurisdictions including decision makers, researchers, and operational fire weather forecasters to improve and tailor tools, applications, products, and information. A primary focus centers on understanding the information needs of those involved with wildland fire before, during, and after the flames to create a fire-ready nation: one that is fire-adapted and fire-resilient.

The FWT will work closely with other NOAA Testbeds and Proving Grounds to facilitate evaluation and transitional of state-of-the-art fire weather-related products and tools. The FWT is a joint effort between three of NOAA's Line Offices: NOAA Research (Oceanic and Atmospheric Research), National Weather Service, and National Environmental Satellite, Data, and Information Service. Housed within NOAA's Global Systems Lab in Boulder, Colorado, the FWT will consist of physical and virtual facilities for conducting evaluations and experiments. Social and behavioral science will also be a critical component of every aspect of the FWT user needs assessments, research, and evaluation activities. Here, we will introduce the FWT's mission and provide updates on the status of the infrastructure, staffing, and planned execution of the FWT. By engaging with the atmospheric science research community at an early stage, we hope to develop a wide range of interdisciplinary collaborations that will serve to improve our understanding of the total fire environment.