Experimental Products

Current Conditions

Forecast Conditions

Image Archive

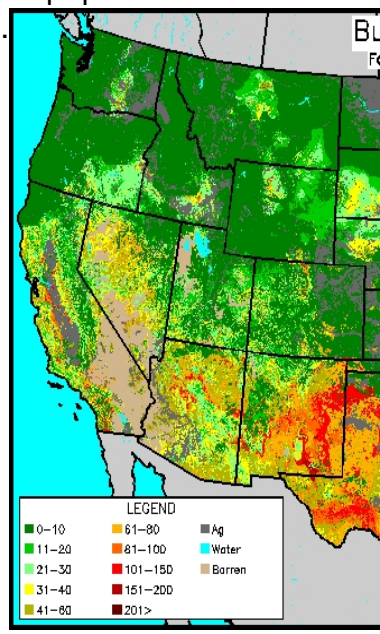
Data Archive

Gridded NFDRS Forecast

Link

The Gridded NFDRS project is a cooperative effort between the Fire Behavior Research Work Unit at the Missoula Fire Sciences Lab and the Missoula Forecast Office of the National

Weather Service. The objective of the project is development of a proof-of-concept product that integrates operational NCEP forecast models into a Fire Danger Environment.



The gridded NFDRS forecast product uses the 29-km ETA model as a basis for the 'next day' fire danger forecast using 21Z (3 p.m. MDT) as the validation time. The 21Z temperature, relative humidity, percent cloud cover, state of the weather, and wind speed are noted. The 3-hour increments of the ETA forecast are examined to estimate the forecasted maximum and minimum temperature and humidity and total precipitation duration from 21Z to 21Z. The 29-km grid values are interpolated to a 1-km grid using high-resolution elevation data and an objective interpolation scheme (Tim Barker, NWS, Boise).

The forecast grids are passed to the Missoula Fire Sciences Lab where they are integrated with the 1-km NFDRS fuel model map, current NDVI greenness information (to estimate live fuel moisture), and observed field values of the heavy (100-h and 1000-h) fuel moistures and KBDI (via WFAS maps). The NFDRS algorithms are applied to the 1-km mix of fuel model, slope, forecast weather and observed heavy fuel moistures to generate a next-day forecast of the NFDRS indexes and components.

In Fall of 2001, ERC and BI maps based on a single fuel model across the country (NFDRS Model G) were added.