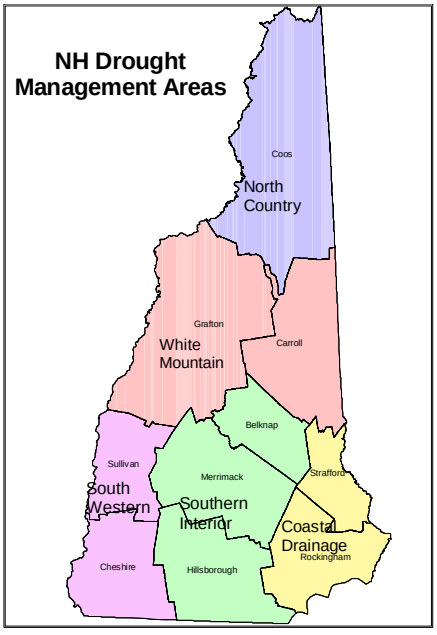
Drought - General Description

Droughts are generally not as damaging or disruptive as floods, but are more difficult to define. A drought is a natural hazard that evolves over months or even years and can last as long as several years to as short as a few months, fortunately droughts are rare in New Hampshire. The central theme in the definition of a drought is the concept of water deficit. The severity of the drought is gauged by the degree of moisture deficiency, its duration and the size of the area affected. The effect of droughts, or decreased precipitation, is indicated through measurements of soil moisture, groundwater levels, and streamflow. Not all of these indicators will be minimal during a particular drought. For example, frequent minor rainstorms can replenish the soil moisture without raising ground water levels or increasing streamflow.

Low stream flow correlates with low ground water level because it is ground water discharge to streams and rivers that maintain streamflow during extended dry periods. Low streamflow and low ground water levels commonly cause diminished water supply.

New Hampshire breaks the State into five Drought Management Areas, with one in the north, one across the central region, and three along the southern portion of the State. The National Oceanic and Atmospheric Administration (NOAA) and the US Government, utilize the Palmer Drought Survey Index for conditions of the Nation. The Palmer Drought Management areas divide the State into two areas and utilize the Palmer Drought Severity Index which is based on rainfall, temperature and historic data. The New Hampshire Drought Management Team, the efforts of which are coordinated by the NH DES Dam Bureau, utilizes these maps to help determine which areas are hardest hit.



There are four magnitudes of drought outlined in the New Hampshire State Drought Management Plan. These are Alert, Warning, Emergency and the highest being Disaster. Each level has varying responses.