SEVERE WEATHER

Drought

A drought is a natural disaster!
Consequences of drought can include hunger and famine, thirst, pandemics, wildfires, social conflict and war, and migration or relocation.

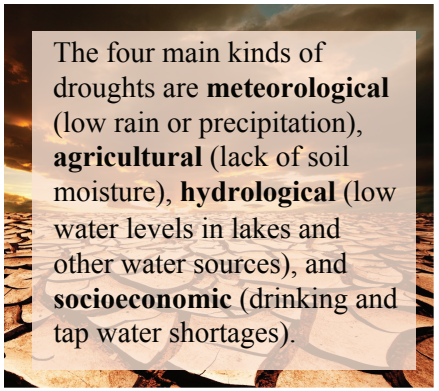
Current Boulder Weather Update: https://www.esrl.noaa.gov/psd/boulder/

Drought Facts:

- A drought can be declared in as few as 15 days
- If a drought continues to recur, it can lead to desertification.
- Human activity can cause drought. Deforestation, farming, excessive irrigation, erosion, and climate change global warming are all human causes of drought. Meteorologists predict drought based on precipitation patterns, stream flow, and soil moisture over long periods of time.
- Snakes often migrate when drought occurs, which can result in increased snake bites to human.

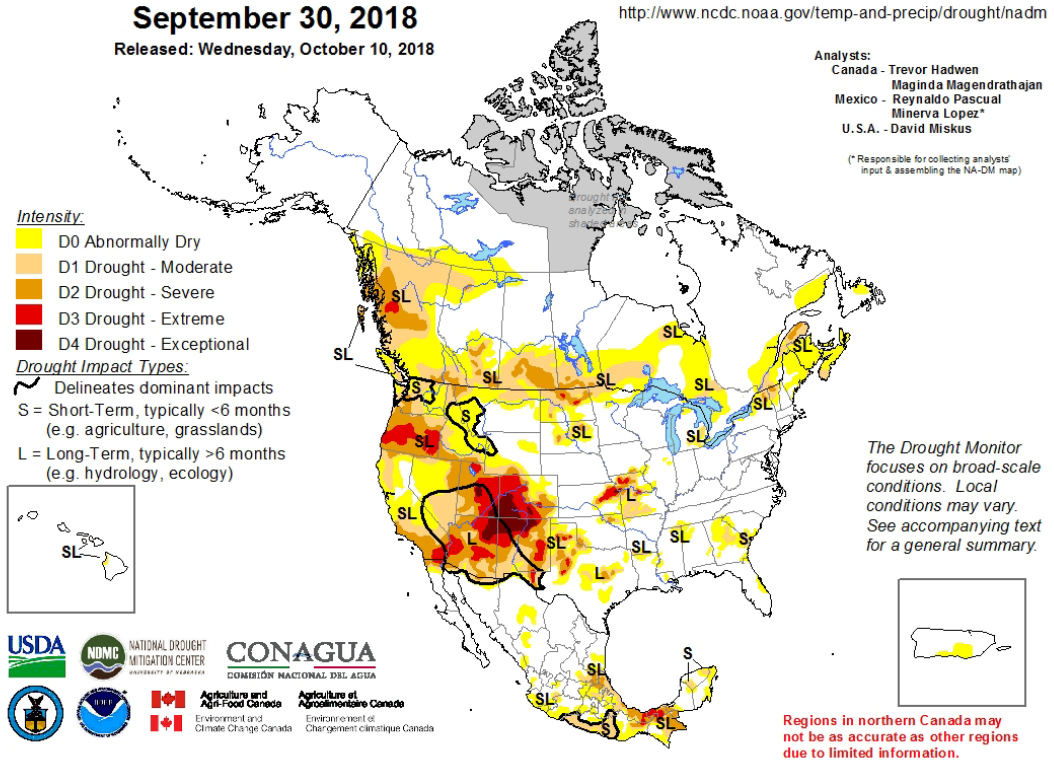
Drought Classification

Category	Description	Possible Impacts	Ranges				
			Palmer Drought Severity Index (PDSI)	CPC Soil Moisture Model (Percentiles)	USGS Weekly Streamflow (Percentiles)	Standardized Precipitation Index (SPI)	Objective Drought Indicator Blends (Percentiles)
D0	Abnormally Dry	Going into drought: ▪ short-term dryness slowing planting, growth of crops or pastures Coming out of drought: ▪ some lingering water deficits ▪ pastures or crops not fully recovered	-1.0 to -1.9	21 to 30	21 to 30	-0.5 to -0.7	21 to 30
D1	Moderate Drought	▪ Some damage to crops, pastures ▪ Streams, reservoirs, or wells low, some water shortages developing or imminent ▪ Voluntary water-use restrictions requested	-2.0 to -2.9	11 to 20	11 to 20	-0.8 to -1.2	11 to 20
D2	Severe Drought	▪ Crop or pasture losses likely ▪ Water shortages common ▪ Water restrictions imposed	-3.0 to -3.9	6 to 10	6 to 10	-1.3 to -1.5	6 to 10
D3	Extreme Drought	▪ Major crop/pasture losses ▪ Widespread water shortages or restrictions	-4.0 to -4.9	3 to 5	3 to 5	-1.6 to -1.9	3 to 5
D4	Exceptional Drought	▪ Exceptional and widespread crop/pasture losses ▪ Shortages of water in reservoirs, streams, and wells creating water emergencies	-5.0 or less	0 to 2	0 to 2	-2.0 or less	0 to 2



The four main kinds of droughts are **meteorological** (low rain or precipitation), **agricultural** (lack of soil moisture), **hydrological** (low water levels in lakes and other water sources), and **socioeconomic** (drinking and tap water shortages).

North American Drought Monitor



North America Drought Monitor: https://droughtmonitor.unl.edu/nadm/Home.aspx

United States Drought Monitor: https://droughtmonitor.unl.edu/CurrentMap.aspx

November 3rd

Normal High: 57
Normal Low: 31
Record High: 77/50 (1915, 2015)
Record Low: 1/30 (1991)
Snow/Year: 4.8/1990

Severe Weather Event:

On November 3rd, 2000, a stationary front draped across Southeast Texas and caused very heavy rainfall and flash flooding in the northern part of the region. Rainfall totals of 7 to 10 inches were common. These heavy rains ended severe drought conditions that had plagued the area for months. Total damage costs were $3.4 million.