

G-318 Fact Sheet

Extent Examples by Hazard

March 2015

Hazard Type	Extent Example(s)
Avalanche	Probably most likely some estimate(s) of a past event: Cubic yards of earth moved (could be millions); area shifted/how far it shifted – e.g. “landslide could be 1000 yards of hillside moving 200 feet”.
Coastal Erosion	Cubic yards of sand; meters of coast
Coastal Storm	Coastal Storm can be another name for tropical storm, hurricane, or or’easter. May be worth asking for a clarification, especially if any of those others are also included.
Dam Failure	National Inventory of Dams (NID) includes a Hazard Potential Rating: Low, Significant or High.
Drought	Palmer Drought Severity Index; Keetch-Byram Drought Index (KBDI)
Earthquake	Modified Mercalli Scale of Earthquake Intensity; Richter Scale; Peak Ground Acceleration;
Expansive Soil (aka) shrink-swell soil	Expansion Index Range: 0-20: Very Low; 21-50: Low; 51-90: Medium; 91-130: High; >130: Very High. http://www.foundation-repair-guide.com/expansive-soil.html <i>Possible - Corrective measure:</i> Expansive soil on building sites is maintained long-term through proper drainage and appropriate choice of plants. Ground covers reduce moisture fluctuations and minimize soil movement in the shrink-swell cycle. http://www.ehow.com/list_6880295_properties-expansive-soils.html
Flood	Flood Depth; crest height, XX ft. over flood stage (100-year flood); XX ft. wall of water.
Hailstorm	Estimating Hail Size Chart; TORRO Hailstorm Intensity Scale
Hurricane	Saffir-Simpson Scale
Landslide	Probably most likely some estimate of a past event: Cubic yards of earth moved (could be millions); area shifted/how far it shifted – e.g. “landslide could be 1000 yards of hillside moving 200 feet”.
Lightning	Lightning strikes per S/M/H= strikes per hour Map example: http://www.lightningsafety.noaa.gov/stats/08_Vaisala_NLDN_Poster.pdf Lightning website: http://www.lightningsafety.noaa.gov/

Hazard Type	Extent Example(s)
Nor'easter	Dolan-Davis Nor'easter Intensity Scale
Rip Current	<p>Since there isn't a standard scale or static features, this is a tricky hazard occurrence. However, the National Weather Service does offer predictions and warnings when there is a possibility of rip currents (http://www.ripcurrents.noaa.gov/forecasts.shtml). The National Weather Service classifies them as 'low risk', 'moderate risk' and 'high risk'. For example, if a nor'easter was approaching, a warning might go out. The number of warning issued a year could be the extent of the hazard. Similarly, the number of rip currents related to drowning or ocean rescues due to rip currents (beach patrols collect this information) would be another way to measure the scale of the hazard. <i>(Added 3/17/15)</i></p> <p>The National Weather Service offers predictions and warnings when there is a possibility of rip currents (http://www.ripcurrents.noaa.gov/forecasts.shtml).</p>
Sea Level Rise	Since 1992, new methods of satellite altimetry using the TOPEX/Poseidon satellite indicate a rate of rise of 3 millimeters (0.11 inches) per year (NOAA Science on a Sphere). [Pulled from the City of Waveland, Hancock Co MS Plan Update 2013 page 4.12]
Sever Winter Storm	<p>Inches of Snow</p> <p>Could also be ice or a temperature at or below a certain point for some length of time – e.g. “3 inches of ice” “temperature below 25 degrees for 3 consecutive days” (for Florida, yes, but for North Dakota, a warm spring day).</p>
Sinkhole	Dimensions of hole, maybe worst one so far: “100 ft long, 80 ft wide, 30 ft deep”; “200 ft in diameter”; if area has no record, then consider a) ones in neighboring counties, or b) drop as a hazard.
Thunderstorm	Thunderstorms are classified by NOAA as Single cell, multi cell, Severe, and Supercell. a “severe thunderstorm” is by definition winds in excess of 50 knots (about 55 MPH) and/or hail .75 inches (some say 1 inch) in diameter, inches of rain. So if they define what a severe thunderstorm is, then that would be the “at least” extent.
Tornado	Fujita-Pearson Tornado Scale
Tsunami	Tsunami and Storm Surge could be the same thing – wave height or how or how far inland are two options.
Volcano	Volcanic Explosively Index
Wildfire	Acres burned
Windstorm	Beaufort Wind Scale

Experts: Drought Could Continue In Southern U.S. (Houston Chronicle)

By Angela K. Brown

[Houston Chronicle](#), April 25, 2011

The extreme drought that has gripped parts of nine states — most of them in the South — is expected to drag on for several months or intensify, posing a risk for more wildfires, agriculture problems and water restrictions, national weather experts said Monday.

Portions of Texas and a small part of eastern Louisiana are the only parts of the nation that rank in the National Weather Service's worst drought condition category, said Victor Murphy, the climate service program manager for the southern region, based in Fort Worth. The "exceptional" drought level happens once every 50 to 100 years, he said.

Much of the rest of Texas and Louisiana are in extreme drought conditions — the worst in 20 to 50 years — as are parts of Arizona, New Mexico, Oklahoma, Arkansas and Florida and tiny portions of Colorado and Kansas. Other areas of those states are experiencing severe and moderate drought conditions, along with parts of Mississippi, Alabama, Georgia, and South Carolina.

May is "pretty much our last chance to mitigate this thing," because that month typically brings the most rainfall in many of the bone-dry states, including Texas and Oklahoma, which need about 4 inches of rain in the next month, Murphy said.

The widespread drought was spawned last year by La Nina, a condition that changes wind and air pressure patterns. It brought warmer-than-normal temperatures and less rainfall to the southern and central U.S., drying out grass and shrubs that have become fuel for wildfires that have ignited and raged out of control in several states.

Since Jan. 1, New Mexico wildfires have scorched more than 390 sq. miles and destroyed 15 homes. Among the fires was a massive 15,000-acre blaze that firefighters were still battling Monday south of Carlsbad, said Dan Ware, a spokesman for the New Mexico State Forestry Division.

So far this year Florida grass fires have blackened about 87 sq. miles, according to the Florida Department of Agriculture and Consumer Services' Division of Forestry.

Texas wildfires have burned more than 2,900 sq. miles since the beginning of the year, destroying about 400 homes and leading to the deaths of two firefighters, according to the Texas Forest Service.

Overnight storms in North Texas only brought short-term relief to a small parched area of the state but did help firefighters get a 127,000-acre fire 70 percent contained, Murphy said. The only significant rainfall on the horizon is for Arkansas, but too much rain there could bring flooding, he said.

Based on weather forecasts, the drought likely will persist and even get worse in Texas, New Mexico and Oklahoma — as well as in eastern Arizona, eastern Colorado and western Kansas, said David Brown, regional climate services director for the National Oceanic and Atmospheric Administration.

But a little improvement is predicted for a small band stretching from the middle of Oklahoma across northern Texas and Louisiana, Brown said. Drought conditions are expected to improve in eastern Oklahoma, and much of Arkansas and Florida, he said.

"The drought doesn't just lead to elevated risks for wildfires, but it affects agriculture because of spring planting and also puts a stress on water resources," Brown said.

- ✓ **Interesting information that you may consider in your plan reviews if they don't mention droughts.**