Drought


Courtesy of Alabama Forestry Commission

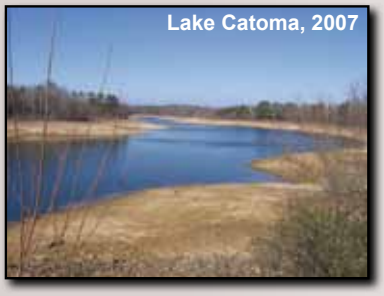

Courtesy of Michael Harper
Lake Martin, Aug 8, 2007


Courtesy of Ryan Cartee
Jefferson County, June 2011

Drought is an extended period when an area has a persistent and abnormal deficiency in its water supply. In Alabama, this usually occurs because both moisture and rain-producing weather systems are blocked from entering the area. Once a drought develops, it may "feed" on itself because of very dry soil conditions, etc., and intensify with time.

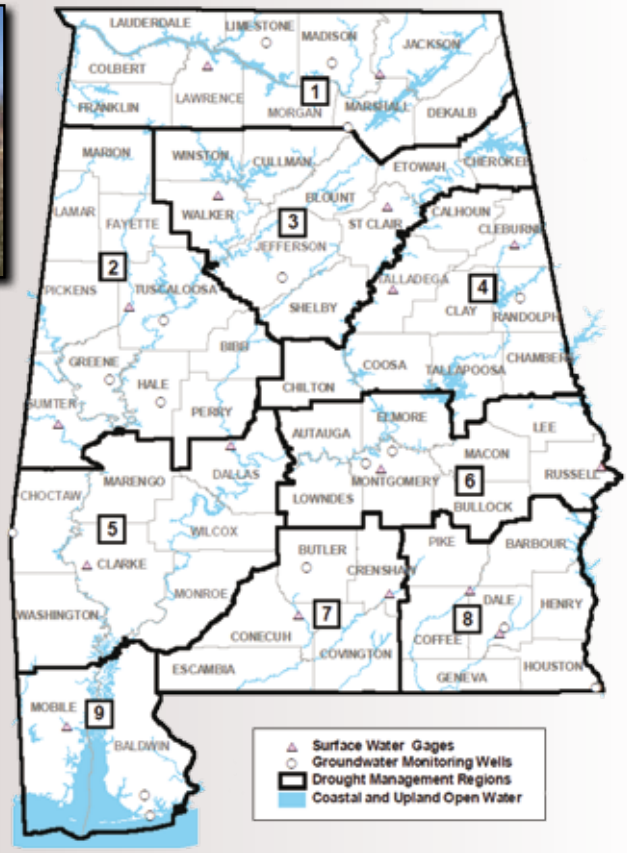
Drought can occur anywhere, and can persist for months or even years. However, even a short, intense drought can have severe effects. Drought can impact many things, such as agriculture, water supply and quality, energy production and wild fires. Its onset and end are often difficult to discern, making it difficult to monitor its progress or quantify its impact.

Drought can be classified as agricultural (short-term) or hydrological (long-term). An agricultural drought normally occurs due to a deficit of rainfall over a relatively short period of time, and has short-term effects such as crop losses, damaged lawns and shrubbery, etc. A hydrological drought is one that has persisted for a longer period of time, generally many months or even years. This type of drought has long-term effects, such as major drops in reservoir levels, ground water levels and deeper wells, affecting such things as public water supplies.


Lake Catoma, 2007

Examples of drought impacts include things such as diminished crop growths or yields, reduced electricity generation by hydro-electric dams, or shortages of water for both industrial use and public consumption. Livestock might be severely impacted due to a shortage of feed, or the public might be prohibited from watering lawns and shrubbery. Even recreational activities can be affected, such as reservoirs becoming too low to support boat traffic. Increases in the number of wildfires can also be a result of drought conditions as soils become too dry and therefore more prone to catching fire.

Drought planning and management is accomplished through short-term reductions in vulnerability (called Mitigation) and through long-term structural changes (called Adaptation). Examples of mitigation or short-term reduction are more prudent watering of plants and not washing automobiles. Examples of a long-term change or adaptation might be as simple as planting more drought resistant plants, or developing irrigation systems in areas prone to drought.



The map above shows the various Drought Management Regions and Monitoring locations throughout the state. This map is courtesy of the Alabama Department of Economic and Community Affairs, Office of Water Resources