

Massachusetts State Hazard Mitigation and Climate Adaptation Plan

State Agency Vulnerability Assessment Reference Materials:

Drought

Data Source: 2018 State Hazard Mitigation Plan - DRAFT

These maps were created from U.S. Drought Monitor data from 2001-2017. They indicate the number of weeks of severe and extreme drought experienced by areas across Massachusetts over this time period. Full page versions of these maps are also included at the end of this file for ease of viewing. Maps depicting the anticipated frequency and severity of droughts under climate change conditions are not currently available. However, research indicates that climate change is likely to exacerbate droughts in several ways. Paleoclimatological records suggest that the frequency of droughts in the past 70 years is greater than those encountered in the distant past. Additionally, warmer temperatures increase evaporation, thereby increasing the severity of droughts that occur. This will be exacerbated by reduced snowpack (as a result of warmer temperatures and altered precipitation patterns), which will reduce water levels for communities that rely on snowmelt for water supply. Although it is likely that overall trends in drought distribution will persist, the dependence of an area on a given water supply should also be considered when evaluating this hazard under future conditions.

Present-Day Conditions



