

Drought Management in Georgia

Georgia EPD

Watershed Protection Branch, Water Supply Program

August 2022

Outline

- Authority in Drought Management
- Monitoring of Hydrologic and Drought Conditions
 - Office of the Georgia State Climatologist
 - Hydrology Unit
- Drought Monitoring Report
- Drought Responses
 - Declaration by the Director of EPD
 - Variances
- Drought-mitigation measures

Authority in Drought Management

- [OCGA 12-5-20](#) Georgia Water Quality Act
- [OCGA 12-5-90](#) Ground-Water Use Act
- [OCGA 12-5-170](#) Georgia Safe Drinking Water Act of 1977
- [391-3-30](#) Rules for Drought Management
 - <https://rules.sos.ga.gov/gac/391-3-30>

391-3-30 Rules for Drought Management

- Purpose – setting up mechanisms to help the state and local governments respond to drought conditions and mitigate its impacts
- Pre-drought mitigation strategies – outdoor water use limitation
- Drought indicators – to be monitored by Georgia EPD and posted for public awareness
- Drought declarations – made by the Director to initiate drought responses
- Drought responses – three levels of responses to mitigate impact of drought conditions
- Variances – local governments may seek a different level of response through this process

Drought Monitoring

- Precipitation data – 3-month, 6-month, and 12-month precipitation
- Soil moisture data
- US Drought Monitor (<https://droughtmonitor.unl.edu/>)
 - Substantial input from Office of the Georgia State Climatologist
- Real-time USGS surface water stream gages
- Real-time USGS groundwater monitoring wells
- Storage conditions in federal reservoirs of Lanier, West Point, Walter F. George, Allatoona, Carters, Hartwell, and Thurmond
- Federal Climatic Prediction Center (CPC) projected temperature and precipitation conditions and Drought Outlook

Drought Monitoring Report

- Georgia EPD's Drought Management website
 - <https://epd.georgia.gov/watershed-protection-branch/drought-management>

The screenshot shows the top navigation bar of the Georgia Environmental Protection Division (EPD) website. The header includes the state logo, the text "ENVIRONMENTAL PROTECTION DIVISION", and a search icon. Below the header is a horizontal menu with items: "About EPD", "Forms & Permits", "Rules, Laws & Enforcement", "Public Announcements", "Outreach", and "Emergency Response".

The breadcrumb trail reads: Home > About EPD > Watershed Protection > Drought Management.

The main content area features a sidebar on the left with a menu: "About EPD" (highlighted), "Contact Us", "Air Protection", "Land Protection", and "Watershed Protection".

The main heading is "Drought Management". Below it is a "Please note" section: "Please note: On June 24, 2015, the DNR Board adopted Drought Management Rules that replaced former rule provisions relating to outdoor water use as well as the 2003 Drought Management Plan. The Drought Management Rules, Chapter 391-3-30, require specific drought response strategies during specified levels of declared drought that may limit or restrict some of the outdoor water uses discussed below." A link is provided: "Click here to read the Rules for Drought Management".

Drought Monitoring Report (continued)

- Water Well Standards
- Indirect Potable Reuse
- Drought Management**
- Water Efficiency and Water Loss Audits
- Fats, Oils, and Grease (FOG)
- Floodplain Management
- > Water Conservation
- > Watershed Planning

Drought Indicators Reports

Pursuant to the Rules for Drought Management, Section 391-3-30-.04, Drought Indicators and Triggers, the Director of EPD monitors climatic indicators and water supply conditions to assess drought occurrence and severity, and its impact upon the ability of public water systems to provide adequate supplies of water. The Rules require EPD to report on current climatic indicators at least semi-annually, and as frequently as monthly when any part of the state has experienced at least two consecutive months of severe drought. The Reports are in Microsoft Power Point and are best viewed in slideshow mode.

- [!\[\]\(9dc885fa0d6d341860a6e69645e59475_img.jpg\) Drought Indicators Report July 2022](#)
- [!\[\]\(5d2b0686f24c91a69ec6f054f466d184_img.jpg\) Drought Indicators Report June 2022](#)
- [!\[\]\(ef97c4cf774c94401d40a852a635219b_img.jpg\) Drought Indicators Report January 2022](#)
- [!\[\]\(f8ef7bbfeae36453ca014751196aefd5_img.jpg\) Drought Indicators Report August 2021](#)
- [!\[\]\(c16c1d45ae17c42d924e54c1f9be81dd_img.jpg\) Drought Indicators Report January 2021](#)
- [!\[\]\(95b5024aa73784eeb3bbb283901425f3_img.jpg\) Drought Indicators Report August 2020](#)

Drought Declaration

- An action by the Director
- Based on severity of drought conditions in various areas and public water systems' ability to provide “adequate supplies of water” and to “avoid or relieve local water shortages”
- Three possible levels of Drought Responses
- Geographic area associated with drought responses
- Notification to all affected permittees
- Public outreach

Drought Responses

- Level 1:
 - Public water systems to conduct public information campaign to raise public awareness of drought conditions
- Level 2:
 - Responses from Level 1
 - Outdoor watering restrictions – two days a week of outdoor watering by odd/even numbered addresses
 - Prohibition of certain types of outdoor water use
 - Implement 4 or more additional practices from Drought Response Strategy Manu in 391-03-30-.07(5)

Drought Responses (continued)

- Level 3
 - All measures in Levels 1 and 2
 - Prohibition of general outdoor watering
 - Specific outdoor water use may be allowed subject to additional requirements
 - Public water systems shall implement all practices from Drought Response Strategy Manual in 391-03-30-.07(5)
 - Rate structure to encourage drought time water conservation
 - Numeric water usage reduction requirements

Drought Responses

- Variances
 - Request by permitted public water systems
 - Public water systems can request more or less stringent levels of responses depending on local water supply conditions
 - EPD review and approval

Additional Drought Mitigating Measures

- Drought Contingency Plan as part of water withdrawal permits
- Water Conservation Plan as part of water withdrawal permits
- Public water systems serving more than 3,300 people are required to participate in annual water loss audit and to improve water supply efficiency
- Water loss control programs are required for water withdrawal permittees
- Drought conditions applied to newer farm water use permits

Questions

Wei Zeng, Ph.D., Professional Hydrologist
Manager, Water Supply Program
Watershed Protection Branch
Georgia EPD
470-251-4897 (Desk)
470-898-3891 (Cell)

Possible Demonstration of Drought Report's Interactive Features

- <https://epd.georgia.gov/document/document/drought-indicators-report-2022-07-14/download>