

Northern Delaware Drought Advisory Guidelines

Reported by the Drought Advisory Guidelines Subcommittee (DAGS), which is composed of the Delaware Department of Natural Resources and Environmental Control, Delaware Geological Survey, and University of Delaware Water Resources Agency with input from the water purveyors and representatives from the landscaping industry. These drought operating guidelines are designed to provide guidance to the Delaware Water Supply Coordinating Council (WSCC) and the Governor’s Drought Advisory Committee (GDAC). Responsibility for providing technical guidance for a move up to or down from Drought Watch is with the WSCC. Responsibility for providing technical guidance for a move up to or down from Drought Warning or Emergency is with the GDAC. Final declaration of drought advisories rests with the Governor.

Climatic Indicators

| Indicator | Drought Watch Voluntary Conservation | Drought Warning Voluntary Conservation | Drought Emergency Mandatory Restrictions | Status Oct. 31, 2023 |
|--|--|---|--|--|
| Precipitation Wilmington Arprt/Porter Rsvr 12 month | -6.00" to -8.99" | -9.00" to -11.99" | >-12.00" | -1.39" |
| Precipitation Wilmington Arprt/Porter Rsvr 6 month | -3.00" to -4.50" | -4.50" to- 6.00" | >-6.00" | -0.68" |
| Brandywine Creek (30-day moving avg) | 85 mgd | 70 mgd | 48 mgd | 120 mgd |
| White Clay Creek - Newark (30-day moving avg) | 19 mgd | 16 mgd | 13 mgd | 17 mgd |
| White Clay Creek - Stanton (30-day moving avg) | 42 mgd | 37 mgd | 31 mgd | 39 mgd |
| Well Db24-18 | 14 - 14.99 (fbls) | 15 - 15.99 (fbls) | 16 (fbls) | 13.1 (fbls) (normal is between 12.2 and 14.4) |
| Water Conditions Index | 5.0 – 4.0 | 3.99 – 3.00 | < 3.00 | 5.99 |
| Chlorides Christina River at Newport | WCC ≤ 37 mgd for 5 consecutive days at UWD Stanton Intake | Cl > 250 ppm for 3 days at Christina River at Newport | Cl > 250 ppm for 3 days at UWD Stanton Intake | 161.8ppm |
| Chlorides Delaware River 10/30/23) | Monitor Status | Monitor Status | Monitor Status | Median RM: 72 Current RM: 70 |
| P-ET (1, 3, 12 month) | | | | |
| US Drought Monitor (10/31/23) | | | | Intensity None = 32% Abnormally Dry 68% |

Storage Indicators

| Indicator | Drought Watch Voluntary Conservation | Drought Warning Voluntary Conservation | Drought Emergency Mandatory Restrictions | Status Oct. 31, 2023 |
|--|---|---|---|--|
| Hoopes Reservoir (City of Wilmington) | -10 ft (68% capacity) | -12 ft (64% capacity) | -15 ft (57% capacity) | -2.6 ft (8/31/23) |
| Newark Reservoir | - 10 ft (70% capacity) | -17 ft (52% capacity) | -27 ft (28% capacity) | -8.5 ft (11/09/23) |
| Artesian Aquifer Storage & Recovery | mg (% capacity) | mg (% capacity) | mg (% capacity) | 48.0 mg (11/09/23) |
| Veolia Aquifer Storage & Recovery | mg (% capacity) | mg (% capacity) | mg (% capacity) | 7.4 mg (8/31/23) |
| NYC DRB Reservoirs (DRBC 10/30/2023) | Monitor Status | Monitor Status | Monitor Status | Storage 238.8 bg or 128.8 bg above drought watch |

fbls = feet below land surface
 mg = million gallons
 mgd = million gallons per day
 RM = River Mile
 bg = billion gallons

Delaware Geological Survey:
<http://dgs.udel.edu>

Delaware Environmental Observing System (DEOS)
<http://deos.udel.edu>

U.S. Geological Survey Streamflows:
<http://waterdata.usgs.gov/de/nwis/current/?type=flow>

Delaware River Basin Commission
<https://www.state.nj.us/drbc/>