## **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<br>Warning<br>Voluntary<br>Conservation             | Drought Emergency Mandatory Restrictions         | Status<br>Dec. 31, 2023                             |
|---|--|---|--|---|
| Precipitation Wilmington Arprt/Porter Rsvr 12 month | -6.00" to -8.99"   | -9.00" to -11.99"   | >-12.00"   | +0.95"  |
| Precipitation Wilmington Arprt/Porter Rsvr 6 month  | -3.00" to -4.50"   | -4.50" to- 6.00"  | >-6.00"  | +0.62"  |
| Brandywine Creek<br>(30-day moving avg)             | 85 mgd   | 70 mgd  | 48 mgd   | 678 mgd   |
| White Clay Creek - Newark<br>(30-day moving avg)    | 19 mgd   | 16 mgd  | 13 mgd   | 131 mgd   |
| White Clay Creek - Stanton<br>(30-day moving avg)   | 42 mgd   | 37 mgd  | 31 mgd   | 292 mgd   |
| Well Db24-18  | 14 - 14.99 (fbls)  | 15 - 15.99 (fbls)   | 16 (fbls)  | 13.9 (fbls)<br>(normal is between<br>12.3 and 15.0) |
| Water Conditions Index                              | 5.0 – 4.0  | 3.99 – 3.00   | < 3.00   | 14.0  |
| Chlorides<br>Christina River at Newport             | WCC ≤ 37 mgd for<br>5 consecutive days<br>at UWD Stanton<br>Intake | Cl > 250 ppm for 3 days<br>at Christina River at<br>Newport | Cl > 250 ppm for 3 days<br>at UWD Stanton Intake | -20.7 ppm   |
| Chlorides<br>Delaware River<br>11/27/23)            | Monitor Status   | Monitor Status  | Monitor Status                                   | Median RM: 69.0<br>Current RM: NA                   |
| P-ET (1, 3, 12 month)                               |  |   |  |   |
| US Drought Monitor<br>(12/26/23)                    |  |   |  | Intensity None = 100%                               |

## **Storage Indicators**

| Indicator                             | Drought<br>Watch<br>Voluntary<br>Conservation | Drought<br>Warning<br>Voluntary<br>Conservation | Drought Emergency Mandatory Restrictions | Status<br>Dec. 31, 2023                               |
|---------------------------------------|---|---|--|---|
| Hoopes Reservoir                      | -10 ft  | -12 ft  | -15 ft                                   | -2.6 ft (8/31/23)                                     |
| (City of Wilmington)                  | (68% capacity)                                | (64% capacity)                                  | (57% capacity)                           |   |
| Newark Reservoir                      | - 10 ft                                       | -17 ft  | -27 ft                                   | -8.5 ft   |
|                                       | (70% capacity)                                | (52% capacity)                                  | (28% capacity)                           | (11/09/23)  |
| Artesian                              | mg  | mg  | mg                                       | 48.0 mg   |
| Aquifer Storage & Recovery            | (% capacity)                                  | (% capacity)                                    | (% capacity)                             | (11/09/23)  |
| Veolia                                | mg  | mg  | mg                                       | 0.0 mg  |
| Aquifer Storage & Recovery            | (% capacity)                                  | (% capacity)                                    | (% capacity)                             | (11/9/23)   |
| NYC DRB Reservoirs<br>(DRBC 1/1/2024) | Monitor Status                                | Monitor Status                                  | Monitor Status                           | Storage 267.3bg<br>or 141.0 bg above<br>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: <a href="http://waterdata.usgs.gov/de/nwis/current/?type=flow">http://waterdata.usgs.gov/de/nwis/current/?type=flow</a>

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