

**Draft Findings of the
Drought Advisory Guidelines Subcommittee
Delaware Water Supply Coordinating Council
Draft June 23, 2021**

The Drought Advisory Guidelines Subcommittee examined drought indicators for the state (New Castle, Kent, and Sussex counties) and offers the following findings for consideration by the WSCC:

1. Early Notice of Drought: As climatic indicators approach drought watch, the WSCC recommends the DNREC Secretary (and perhaps the DDA Secretary) issue a press release stating water conditions are declining and conserving water is important but note that water supplies are adequate.

2. Northern Delaware Drought Advisory Guidelines: For northern New Castle County, DGS adds 1-, 6-, 12-month P-ET and U.S. Drought Severity and Spatial Index. The Green Industry is concerned addition of US Drought Severity and Spatial Index may be premature at this time and would be better positioned to evaluate the advisability of adding yet another index after the pending discussions of the WCI have begun. The Green Industry suggests the following revision to the prefatory language of the Northern Delaware Drought Advisory Guidelines.

Reported by the Delaware Geological Survey in consultation with the Delaware Department of Natural Resources and Environmental Control and University of Delaware Water Resources Center with input from the Delaware Water Supply Coordinating Council. These drought advisory guidelines are designed to provide relevant information to the Delaware Water Supply Coordinating Council (WSCC) and the Governor's Drought Advisory Committee (GDAC) to help decide their recommendations. Responsibility for providing recommendations for a move up to or down from Drought Watch is with the WSCC. Responsibility for providing recommendations 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.

The WSCC recommended implementation of a three-phase drought advisory system that incorporates goals for water conservation, has the potential to provide earlier notice of drought actions to the public, and aligns Delaware with the drought advisory systems used in adjacent states. The purpose of these Drought Advisory Guidelines (DAG) is to provide relevant information to the Governor's Drought Advisory Committee (GDAC) and the Delaware Water Supply Coordinating Council to help them decide their recommendations for declaration of drought advisories and water use restrictions in northern Delaware (the area of the state north of the Chesapeake and Delaware Canal). This document contains a set of indicators from which the WSCC and GDAC may assess "on the ground" conditions. It should be noted that the indices within the DAG are guidelines, not triggers.

3. Southern New Castle, Kent, and Sussex counties: DGS should develop one-page charts for each county with streamflow, groundwater, precipitation, 1-, 6-, 12-month P-ET, chlorides, and U.S. Drought Severity Index (Green Industry is concerned about adding) and posts on DGS website.

4. Water Conditions Index (WCI): The Green Industry urges discussing a report proposing use of Northern New Castle County water demands in place of population in denominator of WCI developed by DGS in 1982.

5. Drought Indicators: Separate into three categories: (1) water supply infrastructure (reservoirs, ASR, and TCS), (2) meteorological and hydrological conditions (precipitation, streamflow, ground water level, and chlorides), and (3) indices (WCI, P-ET, and U.S. Drought Severity Index).

6. Web-accessible Decision Support Tool: Create an online decision support tool to monitor water quantity variables across state including WCI, P-ET, well levels, streamflow with information on water supply (reservoir levels, water usage). The DGS, CEMA, and UDWRC will search for support to develop a real-time water quantity tool for statewide decision-makers. Organize site to distinguish between climate indicators (P-ET, precipitation) and water supply indicators (reservoir levels) and add 3rd section that show CPC seasonal forecast information and other "homegrown" products like anticipated demand from the environment and human consumption.