

Drought Information Statement for the Philadelphia/Mt. Holly Hydrologic Service Area Valid September 25, 2023

Issued By: NWS Philadelphia/Mount Holly Contact Information: wfophi.webmaster@noaa.gov

- This product will be updated October 27, 2023 or sooner if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/phi/DroughtInformationStatement for previous statements.







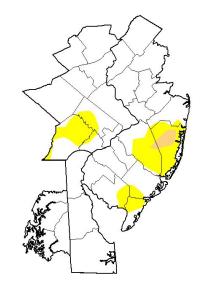


Link to the latest U.S. Drought Monitor for Philadelphia/Mt Holly Forecast Area

Per the U.S. Drought Monitor...

- Drought intensity and Extent
 - D4 Exceptional Drought: No Exceptional Drought exists across the Mt. Holly Hydrologic Service Area (HSA).
 - D3 Extreme Drought: No Extreme Drought exists across the Mt. Holly HSA.
 - D2 Severe Drought: No Severe Drought exists across the Mt. Holly HSA.
 - D1 Moderate Drought: Less than 2.0% extends across the central NJ coastal plain.
 - D0 Abnormally Dry: Approximately 15% of the Mt. Holly HSA falls within this category.

U.S. Drought Monitor Mount Holly, NJ WFO



September 19, 2023 (Released Thursday, Sep. 21, 2023)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | broading contained to contain and | | | | | | | | |
|---|-----------------------------------|-------|-------|-------|------|------|--|--|--|
| | None | D0-D4 | D1-D4 | D2-D4 | | D4 | | | |
| Сиптепт | 85.82 | 14.18 | 1. 19 | 0.00 | 0.00 | 0.00 | | | |
| Last Week 09-12-2023 | 89.52 | 10.48 | 1.19 | 0.00 | 0.00 | 0.00 | | | |
| 3 Month's Ago 06-20-2023 | 11.90 | 88.10 | 49.08 | 0.00 | 0.00 | 0.00 | | | |
| Start of Calendar Year 01-03-2023 | 96.07 | 3.93 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Start of Water Year 09-27-2022 | 24.89 | 75.11 | 32.66 | 6.11 | 0.00 | 0.00 | | | |
| One Year Ago 09-20-2022 | 19.24 | 80.76 | 32.81 | 6. 11 | 0.00 | 0.00 | | | |



The Drought Monitor focuses on broad-scale conditions Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.asp.

Richard Heim NCEI/NOAA





droughtmonitor.unl.edu





Image Caption: U.S. Drought Monitor valid 8am EDT September 19th.



Recent Change in Drought Intensity

Link to the latest 4-week change map for Philadelphia/Mt Holly Forecast Area

- Four Week Drought Monitor Class Change.
 - Drought Worsened: Over southeast Pennsylvania and the coastal plain of New Jersey.
 - No Change: Portions of the New Jersey coastal plain.
 - Drought Improved: No drought improvement was observed.

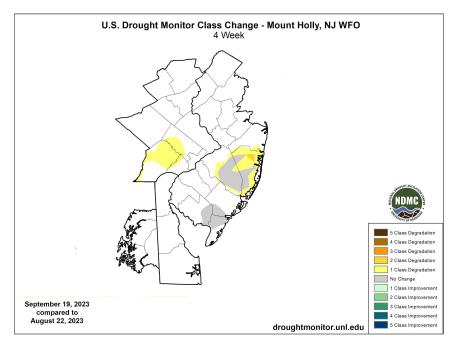
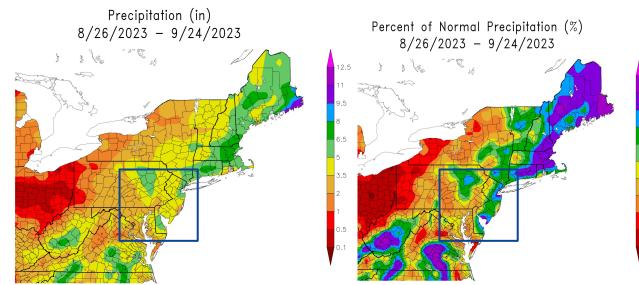


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT September 19th.



- Much of Delaware and New Jersey has either seen normal rainfall over the last 30 days or a surplus.
- Much of our Maryland and Pennsylvania zones have seen deficits.

Note: Based off the maps cut-off time, not all the weekend precipitation associated with the remnants of Ophelia and the cold front is included. As a result, surpluses or deficits may change in the days to come.



NOAA Regional Climate Centers 23 at HPRCC using provisional data.

NOAA Regional Climate Ce

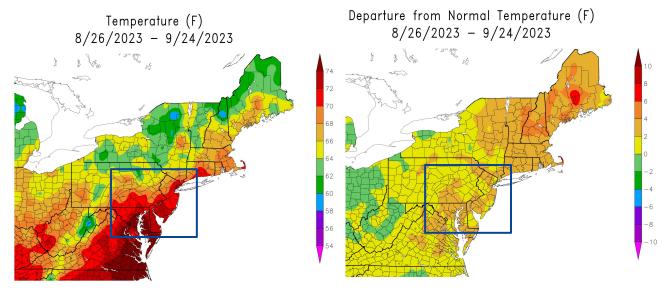
Image Captions:

Left - <u>Precipitation Amount for the NWS Philadelphia/Mt. Holly Forecast Area</u>
Right - <u>Percent of Normal Precipitation for the NWS Philadelphia/Mt. Holly Forecast Area</u>

Data Courtesy High Plains Regional Climate Center Data over the past 30 days ending September, 24,2023



 As we approach the end of September, temperature departures so far for the month were between 0.0 and +4.0 degrees across the HSA.



Generated 9/25/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers 323 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:

Left - <u>Average Temperature</u>

Right - <u>Departure from Normal Temperature</u>

Data Courtesy High Plains Regional Climate Center.

Data over the past 30 days ending September, 24, 2023





Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Hydrologic Impacts

- Seven-day average streamflow conditions, ending 9/25, were normal to much above normal.
- See the next slide for more details.

Agricultural Impacts

- Soil moisture was mainly running normal.
- See slide 8 for more details.

Other Impacts

- Per the PA DEP (Department of Environmental Protection), groundwater recharge has been slow across the southeastern portion of the state.
- Per state DEPs, most reservoir pools across the HSA were either slightly below normal or normal.
- Per the Delaware River Basin Commission, and as of September 18th, the salt front in the Delaware River Estuary was estimated at river mile marker 69.3. The normal location for this time of year is river mile marker 76. This means the salt line was further downstream compared to normal.

Drought Mitigation Actions

- Per the state of Pennsylvania, a Drought Watch remains in effect for much of the southeastern portion of the state.
- Keep in mind, the National Weather Service does not declare Drought Watches or Warnings.

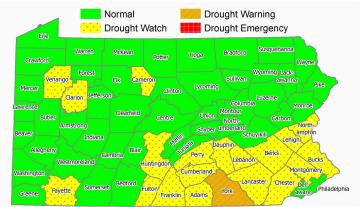


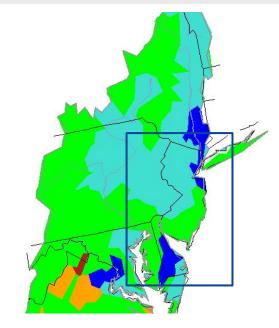
Image Captions: PA Drought Declaration Status valid 9/26/23





Hydrologic Conditions and Impacts

- Seven-day average streamflow conditions, ending 9/25, were normal to much above normal across the HSA.
- The image to the right is from the USGS. It's the 7-day average streamflow HUC map.

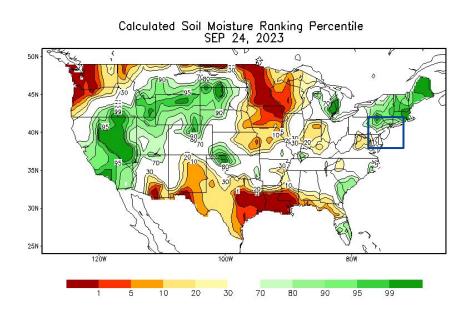


| | Expl | anation | - Perce | ntile cla | asses | | |
|-----|----------------------|-----------------|---------|-----------------|----------------------|--------|---------|
| Law | <10 | 10-24 | 25-75 | 76-90 | >90 | 111-1- | |
| Low | Much below normal | Below normal | Normal | Above normal | Much above normal | High | No Data |



Agricultural Impacts

 Soil moisture was mainly running normal across the HSA.



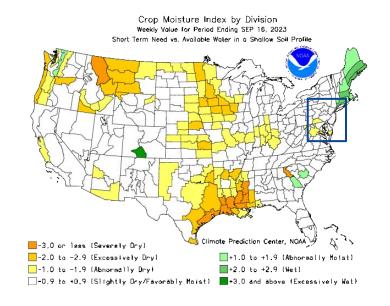


Image Captions:

Left: CPC Calculated <u>Soil Moisture Ranking</u> <u>Percentile</u> valid September 24, 2023

Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending September 16, 2023





Seven Day Precipitation Forecast

The remnants of Ophelia will drift slowly southward and offshore through Wednesday, resulting in onshore flow and some lingering rain, especially toward the coast. High pressure builds over southern Quebec and the Northeast states, pressing southward through early Thursday. An upper level low passes by late in the week, but otherwise high pressure will expand southward from New England down the Appalachians through the weekend. The 8 to 14 day outlook calls for above normal temperatures and below normal precipitation.

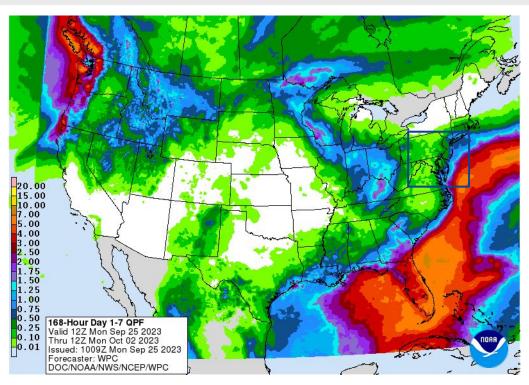


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Monday September 25 to Monday October 2.

