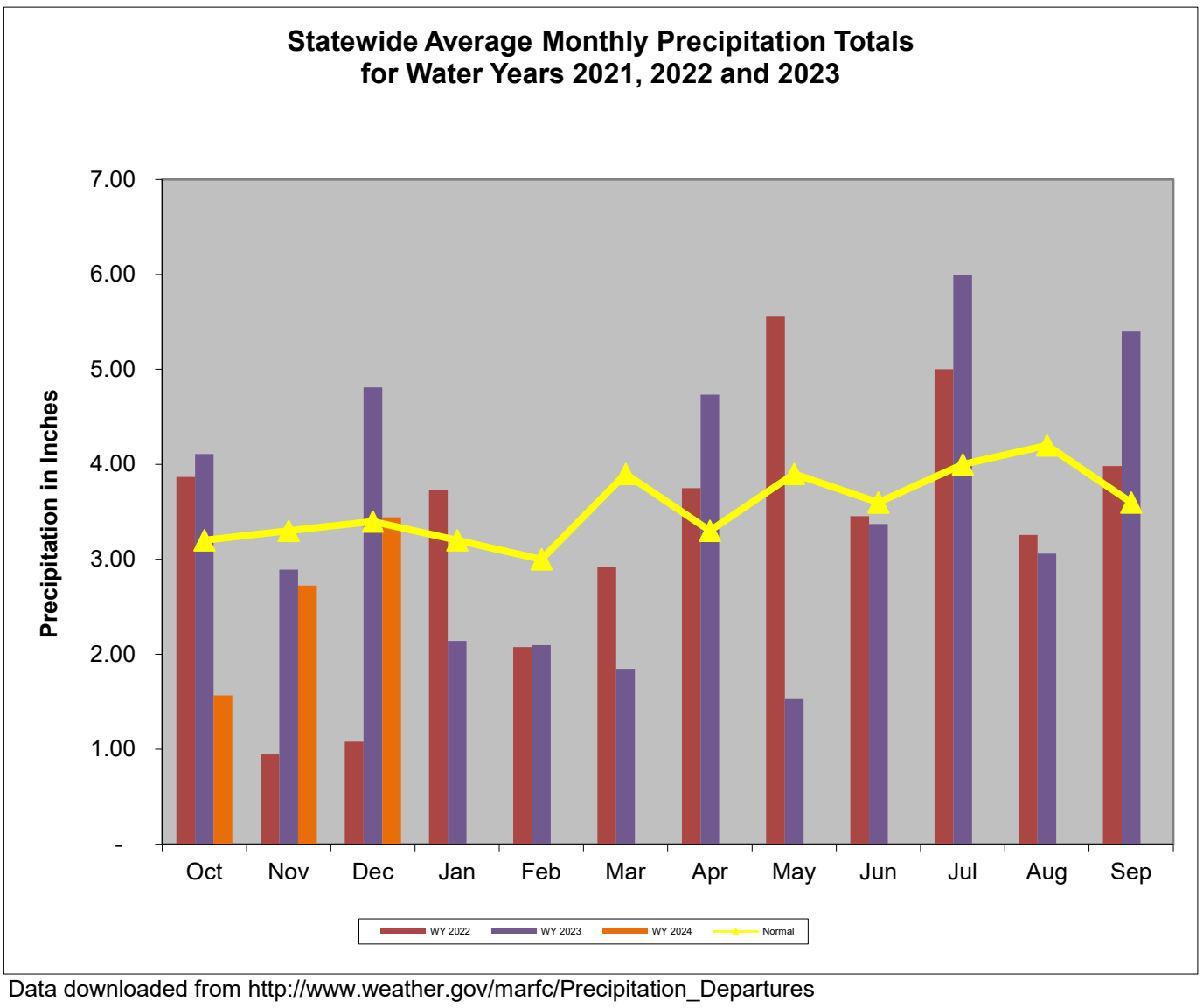
# Overall Hydrologic Status for Maryland

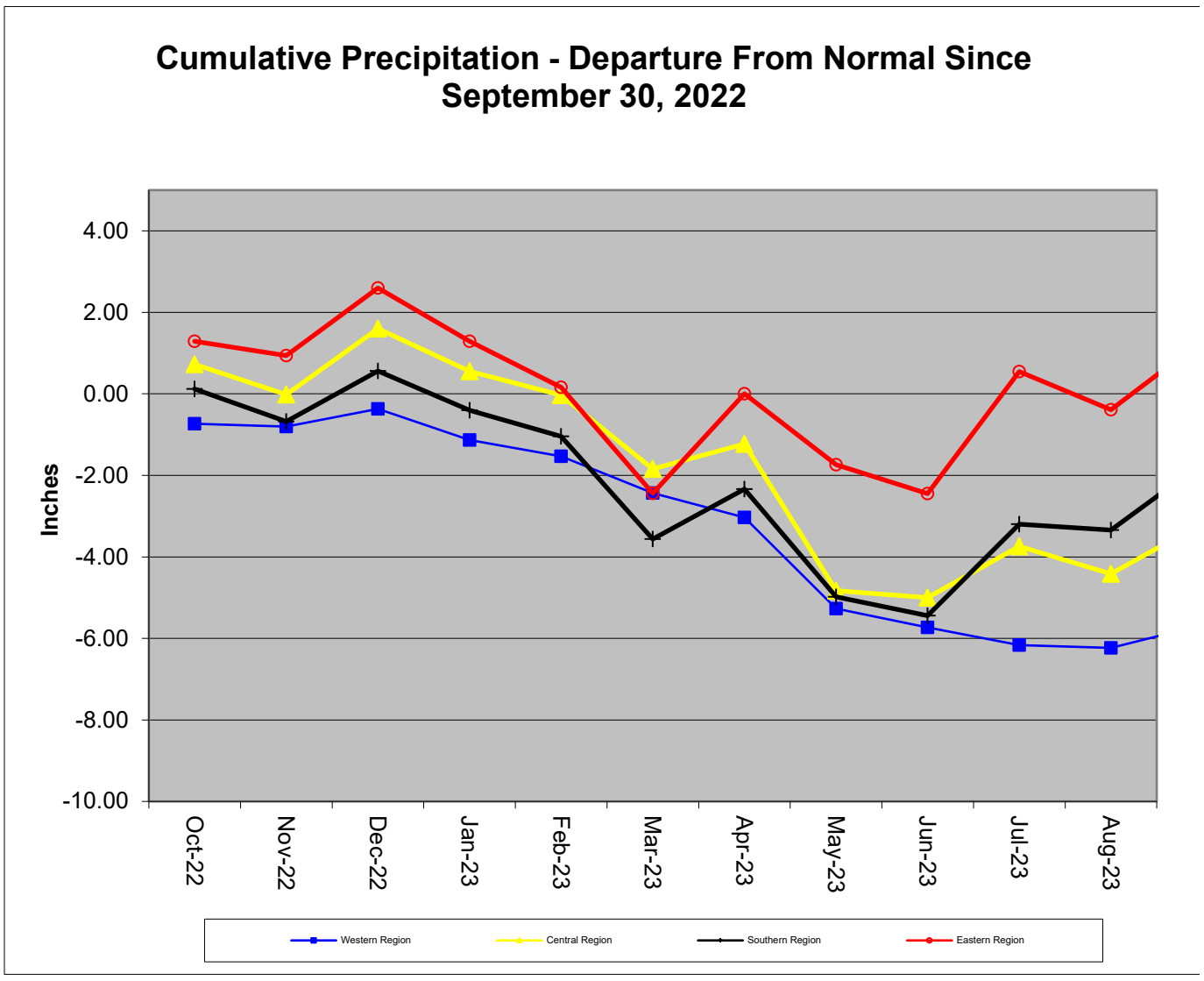
| Summary of Hydrologic Indicators for 09 December 2023 | | | | | |
|---|---|---|---|---|---|
| | **Rainfall** | **Stream Flow** | **Groundwater** | **Reservoirs** | Overall Status |
| Western | Normal | Normal | Warning | Normal | Watch |
| Central | Watch | Normal | Warning | Normal | Warning |
| Eastern | Normal | Normal | Normal | | Normal |
| Southern | Normal | | Normal | | Normal |

Notes: The WSSC Patuxent reservoirs have less then 120 days of water in storage. This is a result of dredging in the Triadelphia, which was scheduled to end by November 2023.

| Precipitation Indicators for Maryland Drought Regions<br>December 9, 2023 | | | | | | |
|---|---|---|---|---|---|---|
| | Since Sept 30, 2023 | | Since June 30, 2022 | | Since Dec 31, 2022 | |
| **Regions** | **Percent of Normal** | **Condition** | **Percent of Normal** | **Condition** | **Percent of Normal** | **Condition** |
| Western | 80% | Normal | 91% | Normal | 83% | Watch |
| Central | 72% | Watch | 95% | Normal | 82% | Watch |
| Eastern | 77% | Normal | 107% | Normal | 92% | Normal |
| Southern | 75% | Normal | 105% | Normal | 89% | Normal |
| WY or Water Year begins on October 1. | | | | | | |




Data downloaded from http://www.weather.gov/marfc/Precipitation_Departures



# Precipitation in Maryland Counties
# as of 9 December 2023 (WY 2024)

| | | Normal Rainfall, Actual Rainfall and Rainfall Departure from Normal in Inches | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WY[1] To Date (Since September 30, 2023) | | | | 11.25 Months (Since December 30, 2022) | | | | 2.25 Months (Since September 30, 2023) | | | | 5.25 Months (Since June 30, 2023) | | | |
| | COUNTY | Normal | Actual | Depart | % | Normal | Actual | Depart | % | Normal | Actual | Depart | % | Normal | Actual | Depart | % |
| WESTERN REGION | ALLEGANY | 9.0 | 7.1 | -1.9 | 79% | 40.2 | 34.0 | -6.2 | 85% | 9.0 | 7.1 | -1.9 | 79% | 19.3 | 17.9 | -1.4 | 93% |
| | GARRETT | 10.5 | 8.7 | -1.8 | 83% | 46.5 | 40.8 | -5.7 | 88% | 10.5 | 8.7 | -1.8 | 83% | 22.9 | 20.9 | -2.0 | 91% |
| | WASHINGTON | 9.6 | 7.4 | -2.2 | 77% | 40.8 | 30.9 | -9.9 | 76% | 9.6 | 7.4 | -2.2 | 77% | 20.1 | 17.8 | -2.3 | 89% |
| | Regional Average | 9.7 | 7.7 | -2.0 | 80% | 42.5 | 35.2 | -7.3 | 83% | 9.7 | 7.7 | -2.0 | 80% | 20.8 | 18.9 | -1.9 | 91% |
| CENTRAL REGION | BALTIMORE COUNTY | 11.3 | 8.0 | -3.3 | 71% | 45.6 | 38.7 | -6.9 | 85% | 11.3 | 8.0 | -3.3 | 71% | 23.2 | 23.3 | 0.1 | 100% |
| | CARROLL | 10.5 | 6.9 | -3.6 | 66% | 43.8 | 32.0 | -11.8 | 73% | 10.5 | 6.9 | -3.6 | 66% | 22.2 | 17.7 | -4.5 | 80% |
| | CECIL | 10.6 | 9.0 | -1.6 | 85% | 44.6 | 42.1 | -2.5 | 94% | 10.6 | 9.0 | -1.6 | 85% | 23.0 | 24.4 | 1.4 | 106% |
| | FREDERICK | 10.3 | 7.3 | -3.0 | 71% | 42.9 | 32.0 | -10.9 | 75% | 10.3 | 7.3 | -3.0 | 71% | 21.3 | 17.8 | -3.5 | 84% |
| | HARFORD | 11.1 | 8.4 | -2.7 | 76% | 46.0 | 40.5 | -5.5 | 88% | 11.1 | 8.4 | -2.7 | 76% | 23.7 | 23.9 | 0.2 | 101% |
| | HOWARD | 10.8 | 7.3 | -3.5 | 68% | 44.5 | 35.5 | -9.0 | 80% | 10.8 | 7.3 | -3.5 | 68% | 22.2 | 20.9 | -1.3 | 94% |
| | MONTGOMERY | 10.4 | 6.8 | -3.6 | 65% | 43.2 | 35.1 | -8.1 | 81% | 10.4 | 6.8 | -3.6 | 65% | 21.7 | 20.8 | -0.9 | 96% |
| | Regional Average | 10.7 | 7.7 | -3.0 | 72% | 44.4 | 36.6 | -7.8 | 82% | 10.7 | 7.7 | -3.0 | 72% | 22.5 | 21.3 | -1.2 | 95% |
| SOUTHERN REGION | ANNE ARUNDEL | 10.3 | 8.3 | -2.0 | 81% | 42.3 | 39.3 | -3.0 | 93% | 10.3 | 8.3 | -2.0 | 81% | 21.6 | 24.6 | 3.0 | 114% |
| | CALVERT | 10.4 | 8.4 | -2.0 | 81% | 44.2 | 40.7 | -3.5 | 92% | 10.4 | 8.4 | -2.0 | 81% | 22.1 | 24.3 | 2.2 | 110% |
| | CHARLES | 10.2 | 7.1 | -3.1 | 70% | 42.8 | 36.5 | -6.3 | 85% | 10.2 | 7.1 | -3.1 | 70% | 21.7 | 21.4 | -0.3 | 99% |
| | PRINCE GEORGES | 10.5 | 7.6 | -2.9 | 72% | 42.4 | 37.6 | -4.8 | 89% | 10.5 | 7.6 | -2.9 | 72% | 21.7 | 23.8 | 2.1 | 110% |
| | ST MARYS | 10.3 | 7.4 | -2.9 | 72% | 43.9 | 37.3 | -6.6 | 85% | 10.3 | 7.4 | -2.9 | 72% | 22.3 | 21.1 | -1.2 | 95% |
| | Regional Average | 10.3 | 7.8 | -2.6 | 75% | 43.1 | 38.3 | -4.8 | 89% | 10.3 | 7.8 | -2.6 | 75% | 21.9 | 23.0 | 1.2 | 105% |
| EASTERN REGION | CAROLINE | 10.1 | 8.4 | -1.7 | 83% | 43.2 | 44.0 | 0.8 | 102% | 10.1 | 8.4 | -1.7 | 83% | 22.0 | 28.1 | 6.1 | 128% |
| | DORCHESTER | 56.2 | 54.0 | -2.2 | 96% | 43.4 | 40.7 | -2.7 | 94% | 10.0 | 7.8 | -2.2 | 78% | 21.9 | 24.8 | 2.9 | 113% |
| | KENT | 54.9 | 53.4 | -1.5 | 97% | 43.3 | 40.6 | -2.7 | 94% | 10.1 | 8.6 | -1.5 | 85% | 21.9 | 24.4 | 2.5 | 111% |
| | QUEEN ANNES | 55.6 | 53.9 | -1.7 | 97% | 43.0 | 40.7 | -2.3 | 95% | 10.1 | 8.4 | -1.7 | 83% | 21.8 | 24.8 | 3.0 | 114% |
| | SOMERSET | 53.7 | 51.3 | -2.4 | 96% | 42.8 | 37.8 | -5.0 | 88% | 9.5 | 7.1 | -2.4 | 75% | 22.0 | 20.7 | -1.3 | 94% |
| | TALBOT | 53.4 | 51.1 | -2.3 | 96% | 43.6 | 38.8 | -4.8 | 89% | 10.3 | 8.0 | -2.3 | 78% | 22.1 | 23.1 | 1.0 | 105% |
| | WICOMICO | 54.7 | 51.9 | -2.8 | 95% | 43.6 | 39.6 | -4.0 | 91% | 9.8 | 7.0 | -2.8 | 71% | 22.1 | 23.0 | 0.9 | 104% |
| | WORCESTER | 51.5 | 47.9 | -3.6 | 93% | 44.1 | 36.3 | -7.8 | 82% | 10.2 | 6.6 | -3.6 | 65% | 22.8 | 19.6 | -3.2 | 86% |
| | Regional Average | 48.8 | 46.5 | -2.3 | 95% | 43.4 | 39.8 | -3.6 | 92% | 10.0 | 7.7 | -2.3 | 77% | 22.1 | 23.6 | 1.5 | 107% |
| INDEPENDENT CITY OF BALTIMORE | | 11.3 | 8.0 | -3.3 | 71% | 45.3 | 38.3 | -7.0 | 85% | 11.3 | 8.0 | -3.3 | 71% | 23.2 | 23.3 | 0.1 | 100% |
| **Statewide Average** | | 23.2 | 20.7 | -2.6 | 89% | 43.6 | 37.9 | -5.7 | 87% | 10.3 | 7.7 | -2.6 | 75% | 22.0 | 22.2 | 0.2 | 101% |

WY[1] - USGS Water Year, which begins October 1

## Stream Flow Status Based on Thirty Day Average for 2023 December 09

| Region | Stream Gage Location | Notes | Status Based on 30 Day Average | | |
|---|---|---|---|---|---|
| | | | 30 Day Average (cfs) | Percentage | Status |
| Western | Youghiogheny (near Oakland) | | 248 | 45%-50% | Normal |
| Western | Savage River (near Barton) | | 29.8 | 60%-65% | Normal |
| Western | Wills Creek (near Cumberland) | | 76 | 50%-55% | Normal |
| Western | Marsh Run (at Grimes) | | 5.1 | 25%-30% | Normal |
| Central | Catoctin Creek (near Middletown) | | 12.2 | 30%-35% | Normal |
| Central | Monocacy (Jug Bridge near Frederick) | | 271 | 35%-40% | Normal |
| Central | Patuxent (near Unity) | | 16.1 | 40%-45% | Normal |
| Central | Deer Cr (at Rocks) | | 61.0 | 25%-30% | Normal |
| Eastern | Choptank (near Greensboro) | | 70.6 | 65%-70% | Normal |
| Eastern | Nassawango Creek (near Snow Hill) | | 16.1 | 55%-60% | Normal |
| | Susquehanna (at Marietta) | | 25,581 | 65%-70% | Normal |
| | Potomac (at Little Falls)(Adjusted) | | 3,257 | 40%-45% | Normal |

Notes:

| Ground Water Status for 09 December 2023 | | | | |
|---|---|---|---|---|
| Region | USGS Well ID | Well Level[1] | Status | |
| Western | GA Bc 1 | 12.15 [2] | Normal | Warning |
| | AL Ah 1 | 5.34 [2] | Watch | |
| | WA Be 2 | 36.09 [2] | Warning | |
| | WA Bk 25 | 50.77 [3] | Emergency | |
| Central | BA Dc 444 | 43.39 [3] | Warning | Warning |
| | BA Ea 18 | 27.53 [2] | Emergency | |
| | HA Bd 31 | 13.82 [2] | Normal | |
| | HA Ca 23 | 7.92 [2] | Normal | |
| | MO Cc 14 | 39.21 [2] | Normal | |
| Eastern | QA Cg 69 | 3.58 [2] | Normal | Normal |
| | WI Cg 20 | 5.58 [2] | Normal | |
| | MC51-01 | 13.09 [3] | Normal | |
| | SO Cf 2 | 5.14 [3] | Watch | |
| Southern | CH Bg 12 (unconfined) | 1.84 [3] | Normal | ***Normal*** |
| | AA Cc 40 (confined) | NA[2] | Unknown | |
| | CA Fd 54 (confined) | 241.54 | On Trend[4] | |
| | CH Dd 33 (confined) | NA[2] | Unknown | |
| | PG De 21 (confined) | NA[2] | Unknown | |
| | SM Fg 45 (confined) | NA[2] | Unknown | |

[1] - Measurement of water level as feet below land surface
[2] - Not Available as of 2023-12-12
[3] - Value computed from real time measurement
[4] - In accordance with Maryland's drought monitoring and response plan, the impact of drought upon confined aquifers is analyzed as a departure from long term trend.

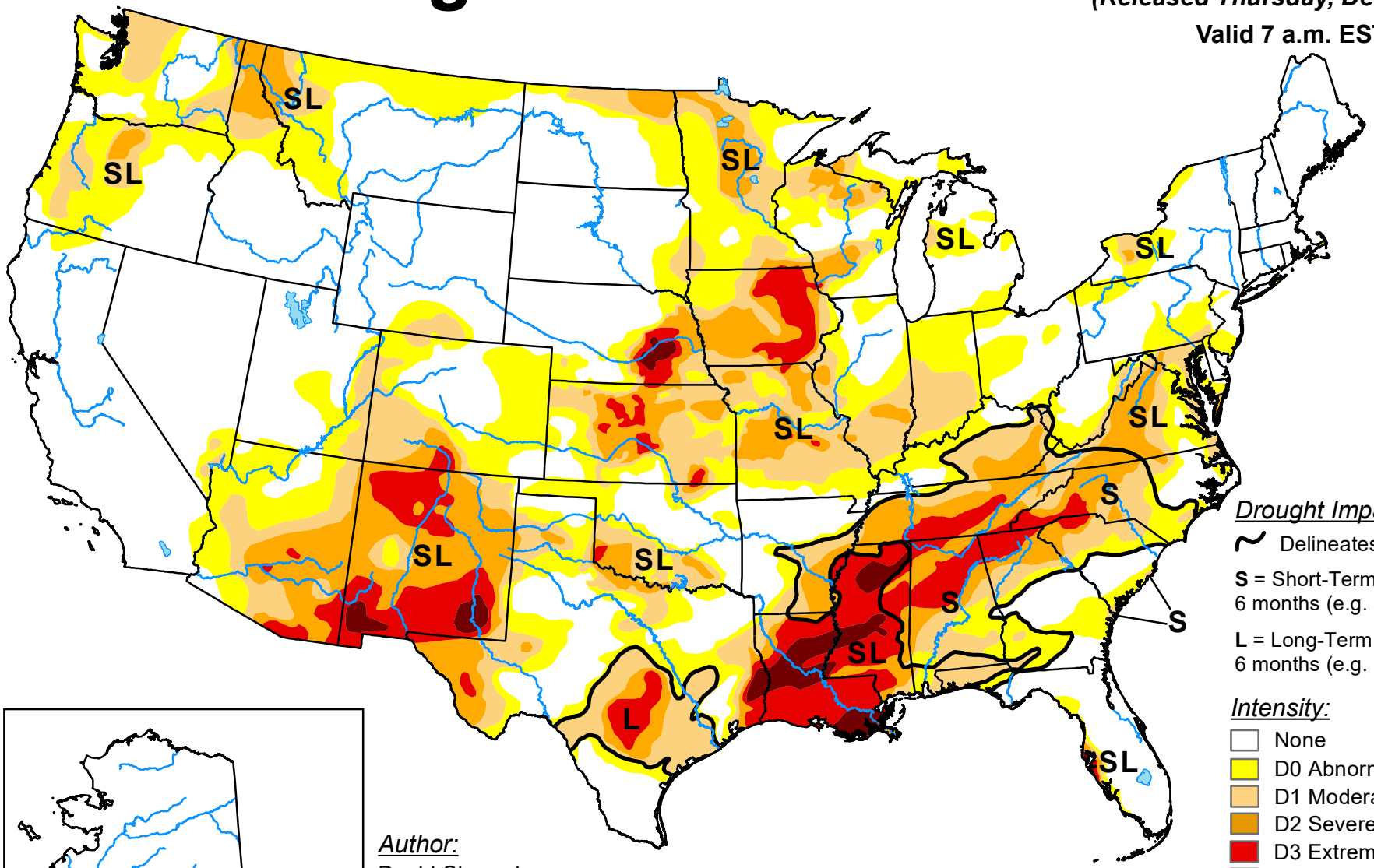
Selected ground water levels are available from USGS at:
http://md.water.usgs.gov/groundwater/
Data for other wells may be downloaded from:
USGS - NWIS Web Information for USA

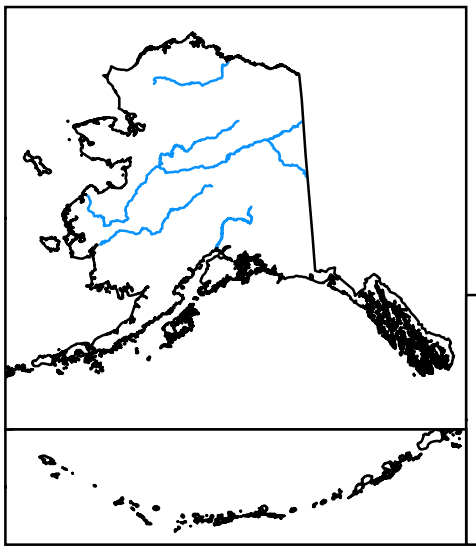
# U.S. Drought Monitor

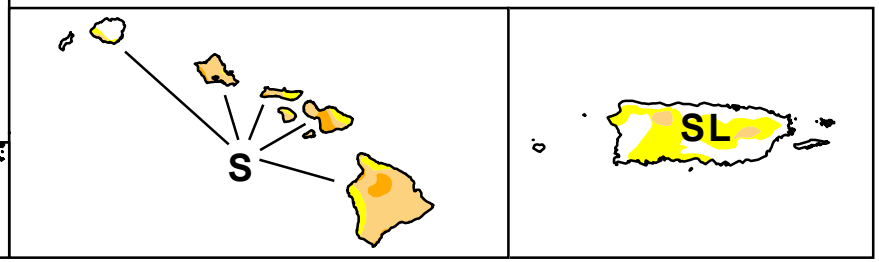
**December 5, 2023**

***(Released Thursday, Dec. 7, 2023)***

**Valid 7 a.m. EST**









*Drought Impact Types:*

~ Delineates dominant impacts

**S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

**L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

*Intensity:*

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought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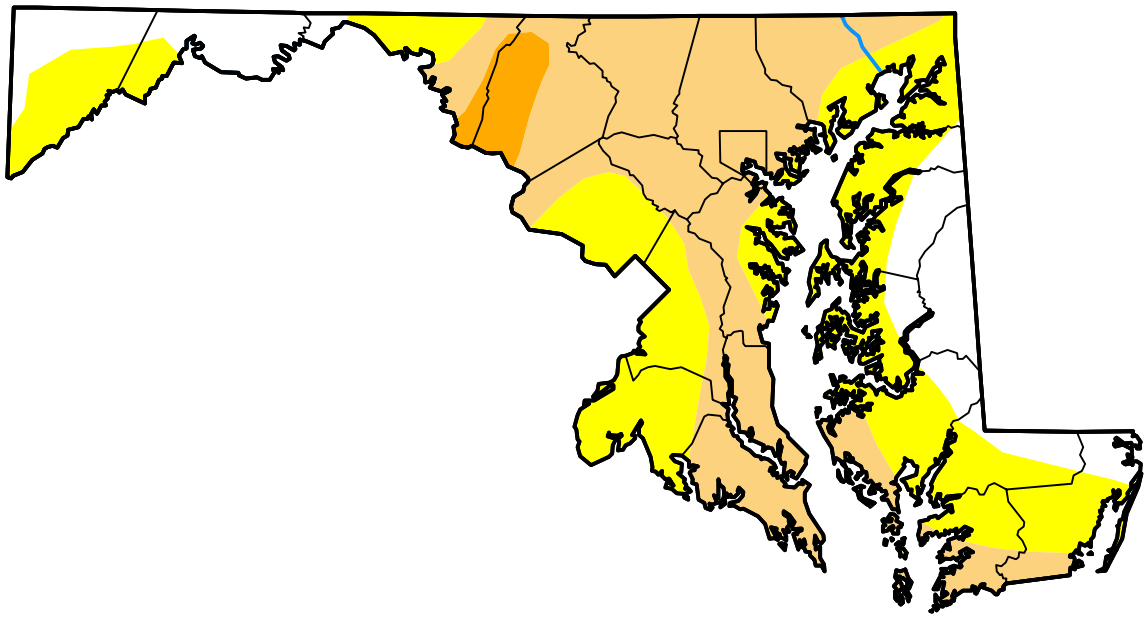
*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx*

**droughtmonitor.unl.edu**

# *U.S. Drought Monitor*

# Maryland



## December 5, 2023

***(Released Thursday, Dec. 7, 2023)***

**Valid 7 a.m. EST**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 17.45 | 82.55 | 43.48 | 3.26 | 0.00 | 0.00 |
| **Last Week** *11-28-2023* | 10.43 | 89.57 | 43.44 | 3.26 | 0.00 | 0.00 |
| **3 Months Ago** *09-05-2023* | 70.69 | 29.31 | 16.52 | 0.50 | 0.00 | 0.00 |
| **Start of Calendar Year** *01-03-2023* | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Start of Water Year** *09-26-2023* | 63.11 | 36.89 | 3.30 | 0.47 | 0.00 | 0.00 |
| **One Year Ago** *12-06-2022* | 92.80 | 7.20 | 0.00 | 0.00 | 0.00 | 0.00 |

*Intensity:*

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

*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.aspx*

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**droughtmonitor.unl.edu**