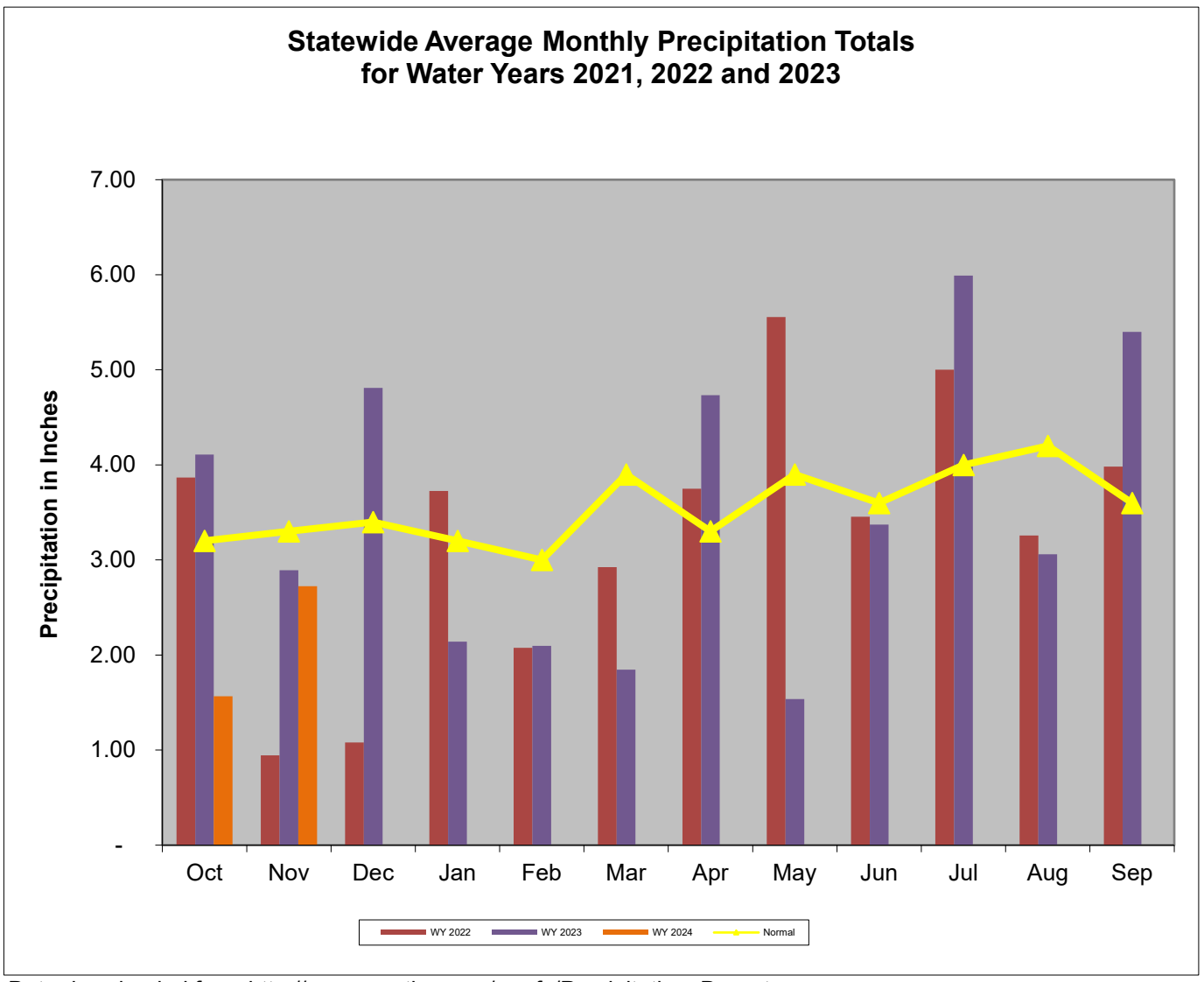
Overall Hydrologic Status for Maryland

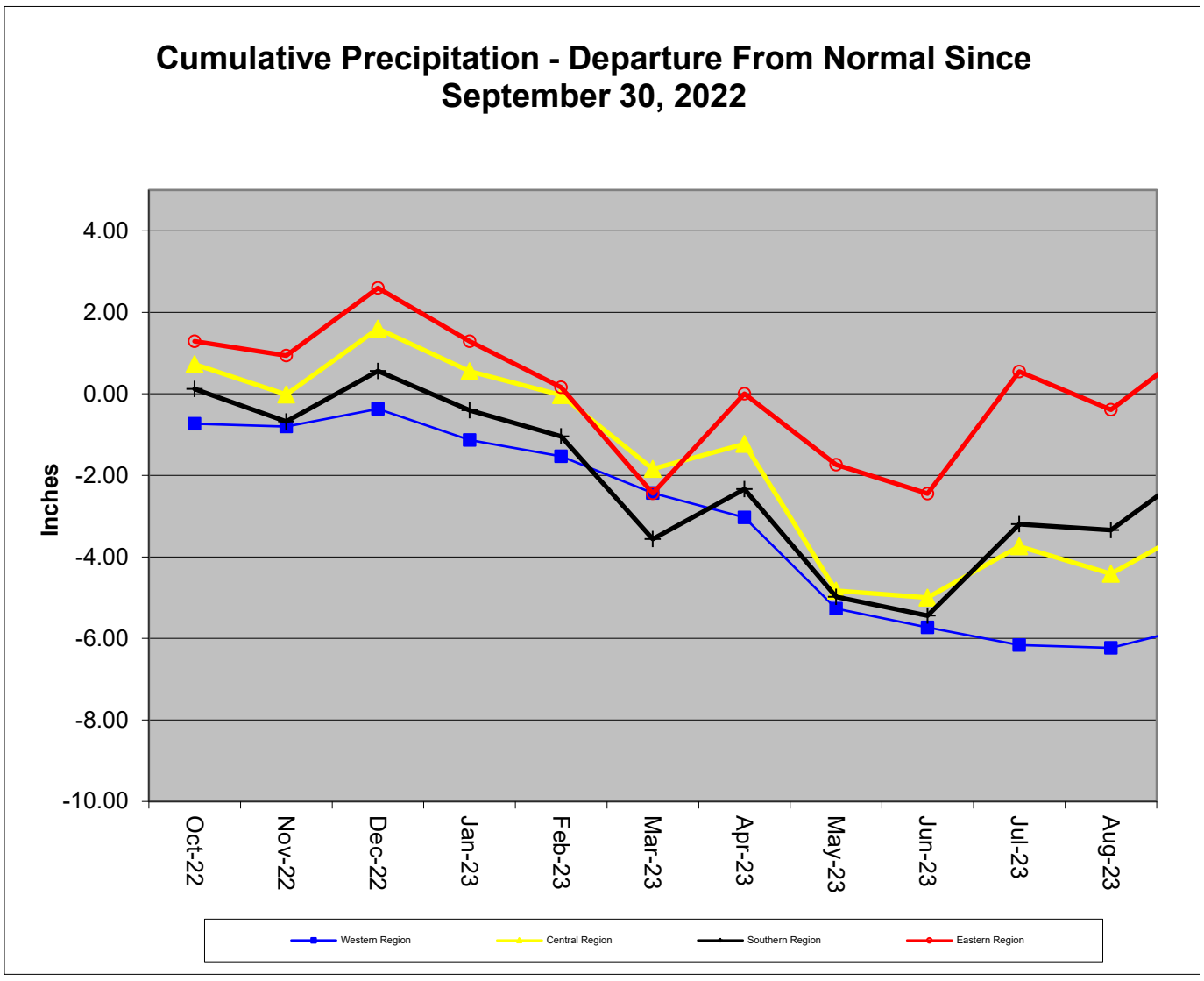
Summary of Hydrologic Indicators for 30-November 2023					
	Rainfall	**Stream Flow**	**Groundwater**	**Reservoirs**	Overall Status
Western	Normal	Normal	Warning	Normal	Watch
Central	Normal	Watch	Warning	Normal	Warning
Eastern	Normal	Normal	Normal		Normal
Southern	Normal		Normal		Normal

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 November 30, 2023						
	Since August 31, 2023		Since May 31, 2022		Since Nov 30, 2022	
Regions	**Percent of Normal**	**Condition**	**Percent of Normal**	**Condition**	**Percent of Normal**	**Condition**
Western	90%	Normal	91%	Normal	85%	Watch
Central	84%	Normal	94%	Normal	86%	Normal
Eastern	93%	Normal	103%	Normal	95%	Normal
Southern	89%	Normal	102%	Normal	91%	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 30 November 2023 (WY 2024)

		Normal Rainfall, Actual Rainfall and Rainfall Departure from Normal in Inches															
		WY[1] To Date (Since September 30, 2023)				12 Months (Since November 30, 2022)				3 Months (Since August 31, 2023)				6 Months (Since May 31, 2023)			
	COUNTY	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%
WESTERN REGION	ALLEGANY	6.0	4.3	-1.7	72%	40.1	34.0	-6.1	85%	9.5	8.8	-0.7	93%	20.0	18.5	-1.5	93%
	GARRETT	6.8	5.8	-1.0	85%	46.4	41.1	-5.3	89%	10.5	9.6	-0.9	91%	23.7	22.4	-1.3	95%
	WASHINGTON	6.4	4.3	-2.1	67%	40.6	32.6	-8.0	80%	10.2	8.7	-1.5	85%	20.7	17.5	-3.2	85%
	Regional Average	6.4	4.8	-1.6	75%	42.4	35.9	-6.5	85%	10.1	9.0	-1.0	90%	21.5	19.5	-2.0	91%
CENTRAL REGION	BALTIMORE COUNTY	7.6	4.4	-3.2	58%	45.5	40.0	-5.5	88%	12.0	10.5	-1.5	88%	23.3	23.5	0.2	101%
	CARROLL	7.1	3.8	-3.3	54%	43.8	33.7	-10.1	77%	11.4	8.4	-3.0	74%	22.5	17.0	-5.5	76%
	CECIL	7.1	4.7	-2.4	66%	44.8	43.2	-1.6	96%	11.5	10.5	-1.0	91%	23.4	26.0	2.6	111%
	FREDERICK	6.9	4.1	-2.8	59%	42.7	33.9	-8.8	79%	11.0	8.8	-2.2	80%	21.7	17.2	-4.5	79%
	HARFORD	7.5	4.6	-2.9	61%	46.0	41.9	-4.1	91%	11.9	10.2	-1.7	86%	24.0	25.0	1.0	104%
	HOWARD	7.3	3.9	-3.4	53%	44.5	37.1	-7.4	83%	11.4	9.5	-1.9	83%	22.6	20.4	-2.2	90%
	MONTGOMERY	7.0	3.6	-3.4	51%	43.0	37.0	-6.0	86%	11.1	9.7	-1.4	87%	22.2	20.8	-1.4	94%
	Regional Average	7.2	4.2	-3.1	58%	44.3	38.1	-6.2	86%	11.5	9.7	-1.8	84%	22.8	21.4	-1.4	94%
SOUTHERN REGION	ANNE ARUNDEL	6.9	4.4	-2.5	64%	42.3	40.1	-2.2	95%	10.8	10.2	-0.6	94%	21.9	24.1	2.2	110%
	CALVERT	7.0	4.6	-2.4	66%	44.3	41.6	-2.7	94%	10.9	11.0	0.1	101%	22.7	24.5	1.8	108%
	CHARLES	6.9	3.7	-3.2	54%	42.8	37.6	-5.2	88%	10.8	8.5	-2.3	79%	22.3	21.0	-1.3	94%
	PRINCE GEORGES	7.1	3.9	-3.2	55%	42.3	38.3	-4.0	91%	10.9	9.5	-1.4	87%	22.1	23.2	1.1	105%
	ST MARYS	7.0	4.1	-2.9	59%	44.0	38.8	-5.2	88%	10.9	9.1	-1.8	83%	22.7	21.1	-1.6	93%
	Regional Average	7.0	4.1	-2.8	59%	43.1	39.3	-3.9	91%	10.9	9.7	-1.2	89%	22.3	22.8	0.4	102%
EASTERN REGION	CAROLINE	6.8	4.7	-2.1	69%	43.3	45.5	2.2	105%	10.6	11.2	0.6	106%	22.4	26.8	4.4	120%
	DORCHESTER	52.9	50.5	-2.4	95%	43.6	42.2	-1.4	97%	10.3	9.4	-0.9	91%	22.6	24.0	1.4	106%
	KENT	51.6	49.4	-2.2	96%	43.5	41.9	-1.6	96%	11.1	10.6	-0.5	95%	22.3	24.2	1.9	109%
	QUEEN ANNES	52.3	50.1	-2.2	96%	43.2	42.1	-1.1	97%	10.9	10.5	-0.4	96%	22.3	23.8	1.5	107%
	SOMERSET	50.6	48.2	-2.4	95%	43.0	40.3	-2.7	94%	10.2	9.0	-1.2	88%	22.4	20.8	-1.6	93%
	TALBOT	50.0	47.6	-2.4	95%	43.7	40.3	-3.4	92%	10.7	8.6	-2.1	80%	22.5	22.1	-0.4	98%
	WICOMICO	51.4	48.8	-2.6	95%	43.8	41.8	-2.0	95%	10.3	10.6	0.3	103%	22.5	23.4	0.9	104%
	WORCESTER	48.1	45.1	-3.0	94%	44.3	38.0	-6.3	86%	10.7	9.2	-1.5	86%	22.9	19.9	-3.0	87%
	Regional Average	45.5	43.1	-2.4	95%	43.6	41.5	-2.0	95%	10.6	9.9	-0.7	93%	22.5	23.1	0.6	103%
INDEPENDENT CITY OF BALTIMORE		7.6	4.4	-3.2	58%	45.2	39.6	-5.6	88%	12.0	10.5	-1.5	88%	23.3	23.5	0.2	101%
Statewide Average		19.8	17.2	-2.6	87%	43.6	39.3	-4.3	90%	10.9	9.7	-1.2	89%	22.5	22.1	-0.3	98%

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

Stream Flow Status Based on Thirty Day Average for 2023 November 30

Region	Stream Gage Location	Notes	Status Based on 30 Day Average		
			30 Day Average (cfs)	Percentage	Status
Western	Youghiogheny (near Oakland)		236	55%-60%	Normal
Western	Savage River (near Barton)		26.5	35%-40%	Normal
Western	Wills Creek (near Cumberland)		71	30%-35%	Normal
Western	Marsh Run (at Grimes)		5.2	35%-40%	Normal
Central	Catoctin Creek (near Middletown)		10.7	5%-10%	Warning
Central	Monocacy (Jug Bridge near Frederick)		247	15%-20%	Watch
Central	Patuxent (near Unity)		14.9	15%-20%	Watch
Central	Deer Cr (at Rocks)		54.1	10%-15%	Watch
Eastern	Choptank (near Greensboro)		57.5	45%-50%	Normal
Eastern	Nassawango Creek (near Snow Hill)		10.9	25%-30%	Normal
	Susquehanna (at Marietta)		22,580	35%-40%	Normal
	Potomac (at Little Falls)(Adjusted)		2,916	15%-20%	Watch

Notes:

Ground Water Status for 30 November 2023				
Region	USGS Well ID	Well Level[1]	Status	
Western	GA Bc 1	14.60	Normal	Warning
	AL Ah 1	5.34	Watch	
	WA Be 2	36.09	Warning	
	WA Bk 25	50.94	Emergency	
Central	BA Dc 444	43.16	Warning	Warning
	BA Ea 18	27.53	Emergency	
	HA Bd 31	13.82	Normal	
	HA Ca 23	7.92	Normal	
	MO Cc 14	39.21	Normal	
Eastern	QA Cg 69	3.58	Normal	Normal
	WI Cg 20	5.58	Normal	
	MC51-01	13.12	Normal	
	SO Cf 2	5.41 [3]	Watch	
Southern	CH Bg 12 (unconfined)	3.58	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 2023-12-04
[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.

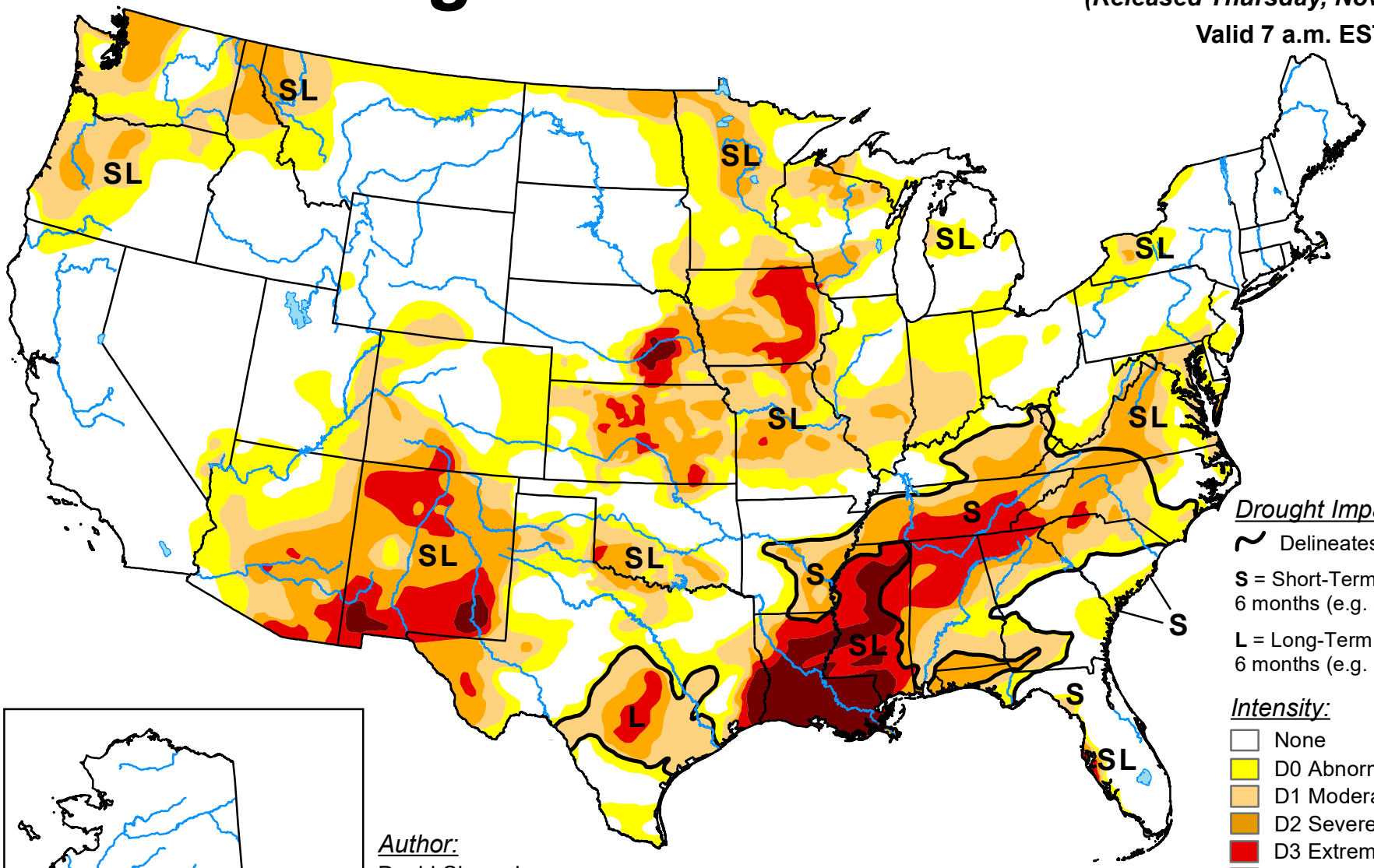
Selected ground water levels are available from USGS at:
http://md.water.usgs.gov/groundwater/
Data for other wells may be downloaded from:
USGS - NWIS Web Information for USA

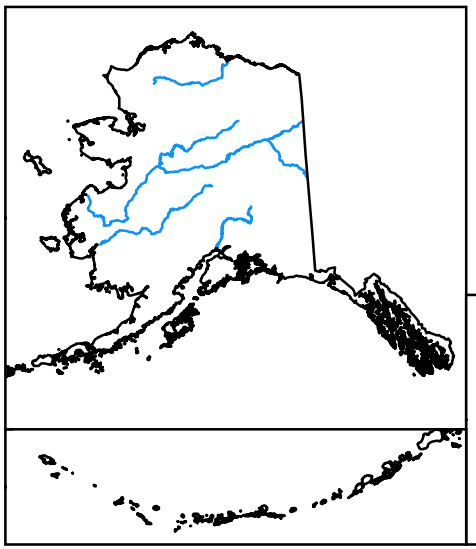
U.S. Drought Monitor

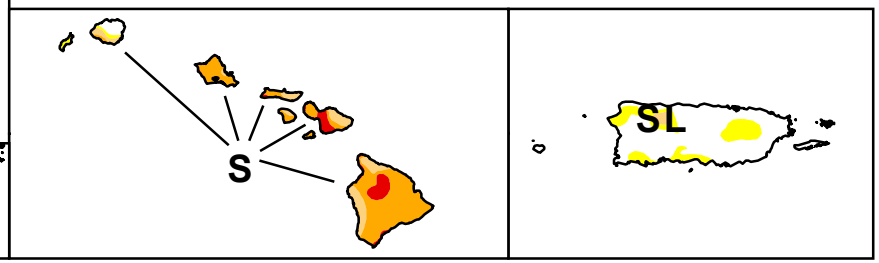
November 28, 2023

(Released Thursday, Nov. 30, 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

Author:
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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

USDA NDMC NOAA

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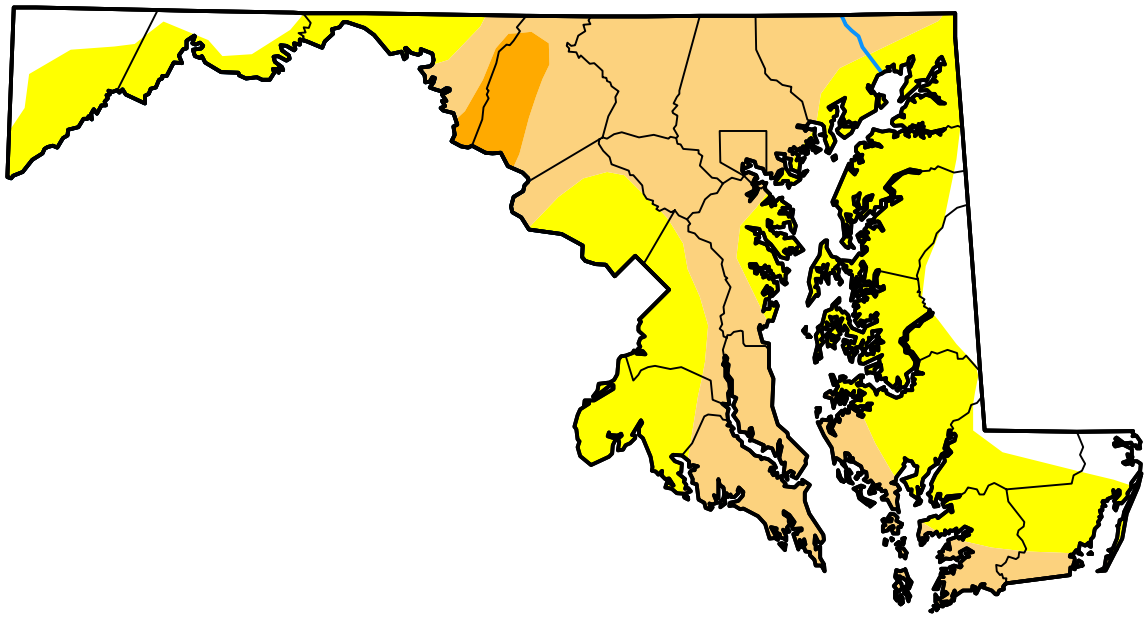
U.S. Drought Monitor

Maryland



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Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	10.43	89.57	43.44	3.26	0.00	0.00
Last Week *11-21-2023*	5.89	94.11	52.15	3.22	0.00	0.00
3 Months Ago *08-29-2023*	73.72	26.28	15.78	0.00	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 *11-29-2022*	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

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