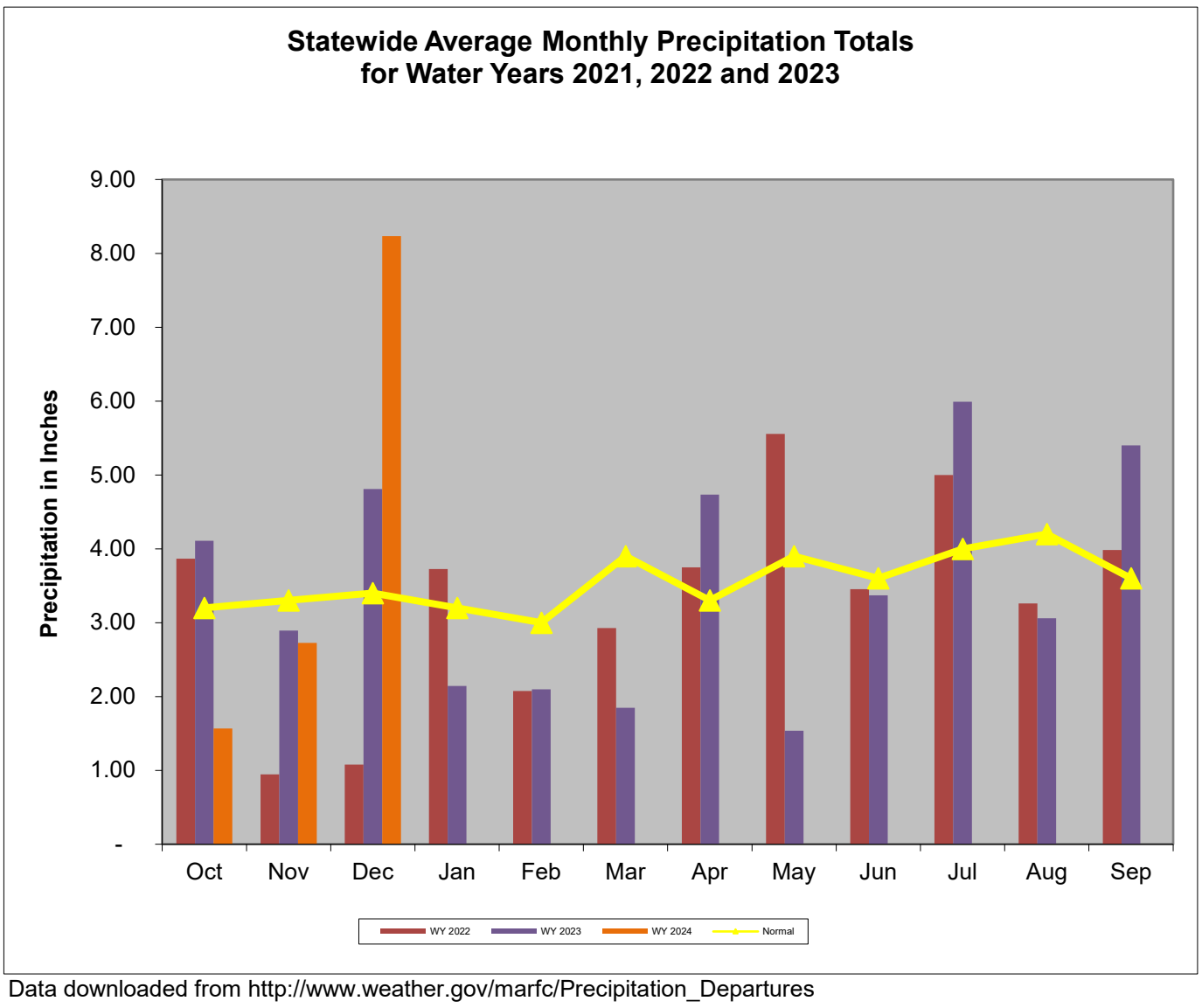
Overall Hydrologic Status for Maryland

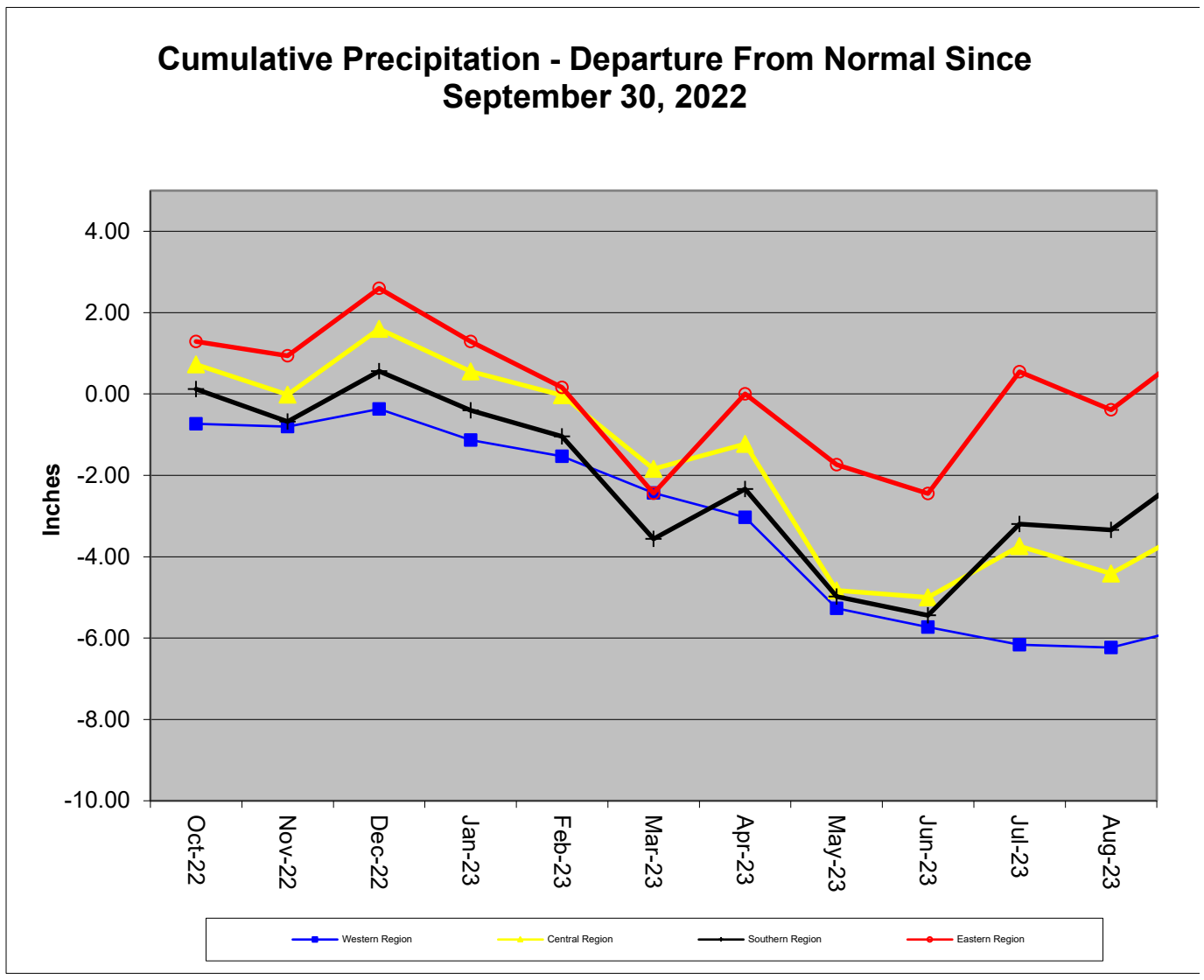
Summary of Hydrologic Indicators for 21 December 2023					
	Rainfall	**Stream Flow**	**Groundwater**	**Reservoirs**	Overall Status
Western	Normal	Normal	Watch	Normal	Watch
Central	Normal	Normal	Warning	Normal	Warning
Eastern	Normal	Normal	Normal		Normal
Southern	Normal		Normal		Normal

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 December 21, 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	96%	Normal	99%	Normal	87%	Normal
Central	112%	Normal	114%	Normal	92%	Normal
Eastern	139%	Normal	135%	Normal	106%	Normal
Southern	125%	Normal	129%	Normal	101%	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 21 December 2023 (WY 2024)

		Normal Rainfall, Actual Rainfall and Rainfall Departure from Normal in Inches															
		WY[1] To Date (Since September 30, 2023)				11.75 Months (Since December 30, 2022)				2.75 Months (Since September 30, 2023)				5.75 Months (Since June 30, 2023)			
	COUNTY	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%
WESTERN REGION	ALLEGANY	8.9	8.3	-0.6	93%	40.1	35.2	-4.9	88%	8.9	8.3	-0.6	93%	19.2	19.1	-0.1	99%
	GARRETT	10.4	9.4	-1.0	90%	46.4	41.5	-4.9	89%	10.4	9.4	-1.0	90%	22.8	21.6	-1.2	95%
	WASHINGTON	9.5	10.0	0.5	105%	40.7	33.5	-7.2	82%	9.5	10.0	0.5	105%	20.0	20.4	0.4	102%
	Regional Average	9.6	9.2	-0.4	96%	42.4	36.7	-5.7	87%	9.6	9.2	-0.4	96%	20.7	20.4	-0.3	99%
CENTRAL REGION	BALTIMORE COUNTY	11.2	12.5	1.3	112%	45.5	43.2	-2.3	95%	11.2	12.5	1.3	112%	23.1	27.8	4.7	120%
	CARROLL	10.5	11.0	0.5	105%	43.8	36.1	-7.7	82%	10.5	11.0	0.5	105%	22.2	21.8	-0.4	98%
	CECIL	10.7	14.4	3.7	135%	44.7	47.5	2.8	106%	10.7	14.4	3.7	135%	23.1	29.8	6.7	129%
	FREDERICK	10.2	10.6	0.4	104%	42.8	35.3	-7.5	82%	10.2	10.6	0.4	104%	21.2	21.1	-0.1	100%
	HARFORD	11.1	13.0	1.9	117%	46.0	45.1	-0.9	98%	11.1	13.0	1.9	117%	23.7	28.5	4.8	120%
	HOWARD	10.8	11.6	0.8	107%	44.5	39.8	-4.7	89%	10.8	11.6	0.8	107%	22.2	25.2	3.0	114%
	MONTGOMERY	10.3	10.6	0.3	103%	43.1	38.9	-4.2	90%	10.3	10.6	0.3	103%	21.6	24.6	3.0	114%
	Regional Average	10.7	12.0	1.3	112%	44.3	40.8	-3.5	92%	10.7	12.0	1.3	112%	22.4	25.5	3.1	114%
SOUTHERN REGION	ANNE ARUNDEL	10.2	13.2	3.0	129%	42.2	44.2	2.0	105%	10.2	13.2	3.0	129%	21.5	29.5	8.0	137%
	CALVERT	10.4	13.8	3.4	133%	44.2	46.1	1.9	104%	10.4	13.8	3.4	133%	22.1	29.7	7.6	134%
	CHARLES	10.1	12.1	2.0	120%	42.7	41.5	-1.2	97%	10.1	12.1	2.0	120%	21.6	26.4	4.8	122%
	PRINCE GEORGES	10.4	12.1	1.7	116%	42.3	42.1	-0.2	100%	10.4	12.1	1.7	116%	21.6	28.3	6.7	131%
	ST MARYS	10.4	13.2	2.8	127%	44.0	43.1	-0.9	98%	10.4	13.2	2.8	127%	22.4	26.9	4.5	120%
	Regional Average	10.3	12.9	2.6	125%	43.1	43.4	0.3	101%	10.3	12.9	2.6	125%	21.8	28.2	6.3	129%
EASTERN REGION	CAROLINE	10.1	14.7	4.6	146%	43.2	50.3	7.1	116%	10.1	14.7	4.6	146%	22.0	34.4	12.4	156%
	DORCHESTER	56.3	60.8	4.5	108%	43.5	47.5	4.0	109%	10.1	14.6	4.5	145%	22.0	31.6	9.6	144%
	KENT	55.0	58.6	3.6	107%	43.4	45.8	2.4	106%	10.2	13.8	3.6	135%	22.0	29.6	7.6	135%
	QUEEN ANNES	55.7	59.4	3.7	107%	43.1	46.2	3.1	107%	10.2	13.9	3.7	136%	21.9	30.3	8.4	138%
	SOMERSET	53.8	58.3	4.5	108%	42.9	44.8	1.9	104%	9.6	14.1	4.5	147%	22.1	27.7	5.6	125%
	TALBOT	53.4	56.7	3.3	106%	43.6	44.4	0.8	102%	10.3	13.6	3.3	132%	22.1	28.7	6.6	130%
	WICOMICO	54.8	59.4	4.6	108%	43.7	47.1	3.4	108%	9.9	14.5	4.6	146%	22.2	30.5	8.3	137%
	WORCESTER	51.6	54.4	2.8	105%	44.2	42.8	-1.4	97%	10.3	13.1	2.8	127%	22.9	26.1	3.2	114%
	Regional Average	48.8	52.8	4.0	108%	43.5	46.1	2.7	106%	10.1	14.0	4.0	139%	22.2	29.9	7.7	135%
INDEPENDENT CITY OF BALTIMORE		11.2	12.5	1.3	112%	45.2	42.8	-2.4	95%	11.2	12.5	1.3	112%	23.1	27.8	4.7	120%
Statewide Average		23.2	25.4	2.2	110%	43.6	42.7	-0.9	98%	10.3	12.5	2.2	122%	22.0	27.0	5.0	122%

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

Ground Water Status for 21 December 2023				
Region	USGS Well ID	Well Level[1]	Status	
Western	GA Bc 1	12.06 [3]	Normal	Watch
	AL Ah 1	5.34 [2]	Watch	
	WA Be 2	36.09 [2]	Warning	
	WA Bk 25	49.13 [3]	Watch	
Central	BA Dc 444	43.33 [3]	Warning	Warning
	BA Ea 18	27.14	Emergency	
	HA Bd 31	9.75	Normal	
	HA Ca 23	6.91	Normal	
	MO Cc 14	14.86	Normal	
Eastern	QA Cg 69	3.58 [2]	Normal	Normal
	WI Cg 20	5.58 [2]	Normal	
	MC51-01	10.83 [3]	Normal	
	SO Cf 2	1.22 [3]	Normal	
Southern	CH Bg 12 (unconfined)	1.98 [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 2023-12-22
[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

Stream Flow Status Based on Thirty Day Average for 2023 December 21

Region	Stream Gage Location	Notes	Status Based on 30 Day Average		
			30 Day Average (cfs)	Percentage	Status
Western	Youghiogheny (near Oakland)		318	40%-45%	Normal
Western	Savage River (near Barton)		47.4	25%-30%	Normal
Western	Wills Creek (near Cumberland)		112	20%-25%	Watch
Western	Marsh Run (at Grimes)		6.6	35%-40%	Normal
Central	Catoctin Creek (near Middletown)		36.7	30%-35%	Normal
Central	Monocacy (Jug Bridge near Frederick)		971	55%-60%	Normal
Central	Patuxent (near Unity)		45.3	75%-80%	Normal
Central	Deer Cr (at Rocks)		149.7	80%-85%	Normal
Eastern	Choptank (near Greensboro)		346.8	85%-90%	Normal
Eastern	Nassawango Creek (near Snow Hill)		151.5	90%-95%	Normal
	Susquehanna (at Marietta)		54,620	75%-80%	Normal
	Potomac (at Little Falls)(Adjusted)		6,816	35%-40%	Normal

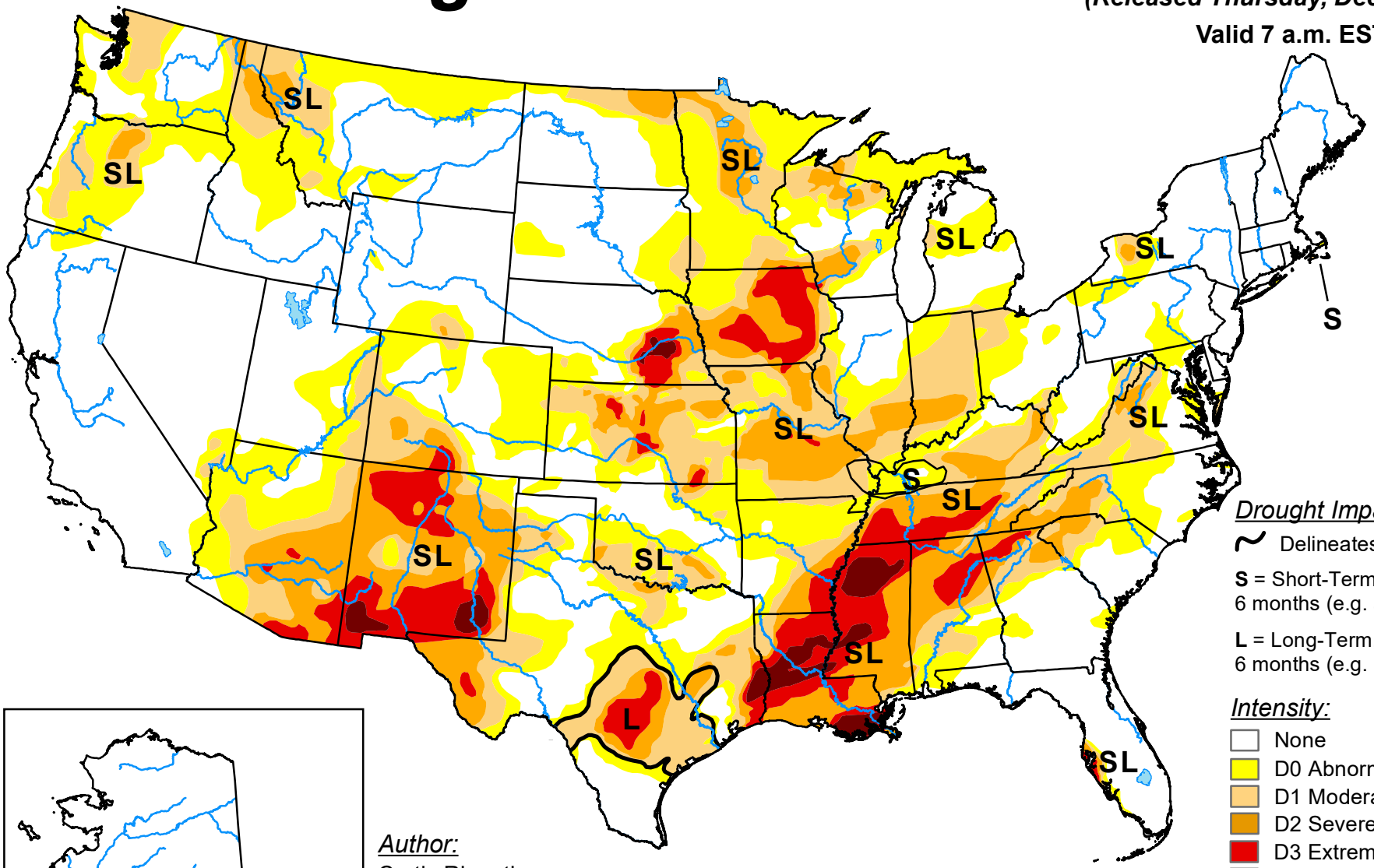
Notes:

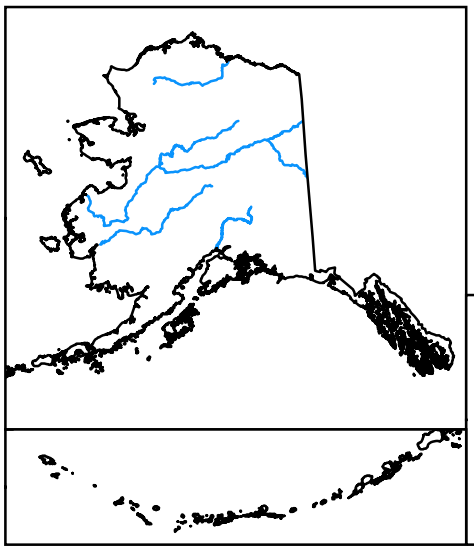
U.S. Drought Monitor

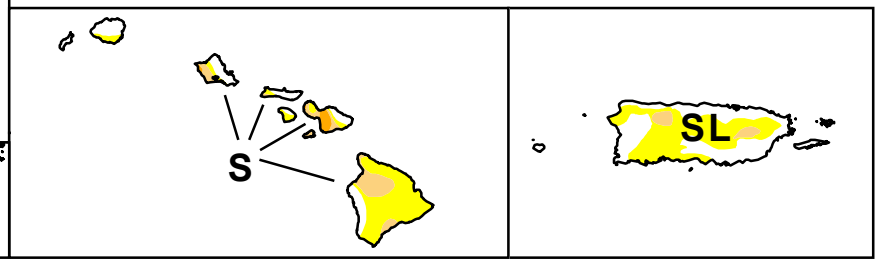
December 19, 2023

(Released Thursday, Dec. 21, 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:

Curtis Riganti

National Drought Mitigation Center

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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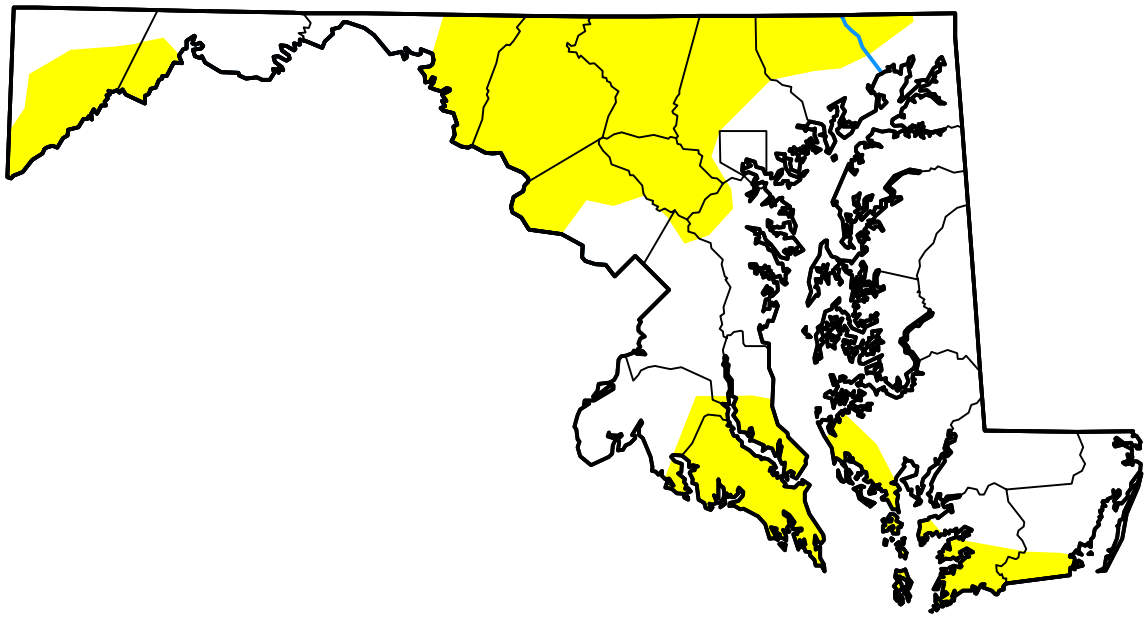
U.S. Drought Monitor

Maryland



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Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	58.15	41.85	0.00	0.00	0.00	0.00
Last Week *12-12-2023*	22.46	77.54	29.91	0.00	0.00	0.00
3 Months Ago *09-19-2023*	47.05	52.95	14.85	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 *12-20-2022*	92.86	7.14	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
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