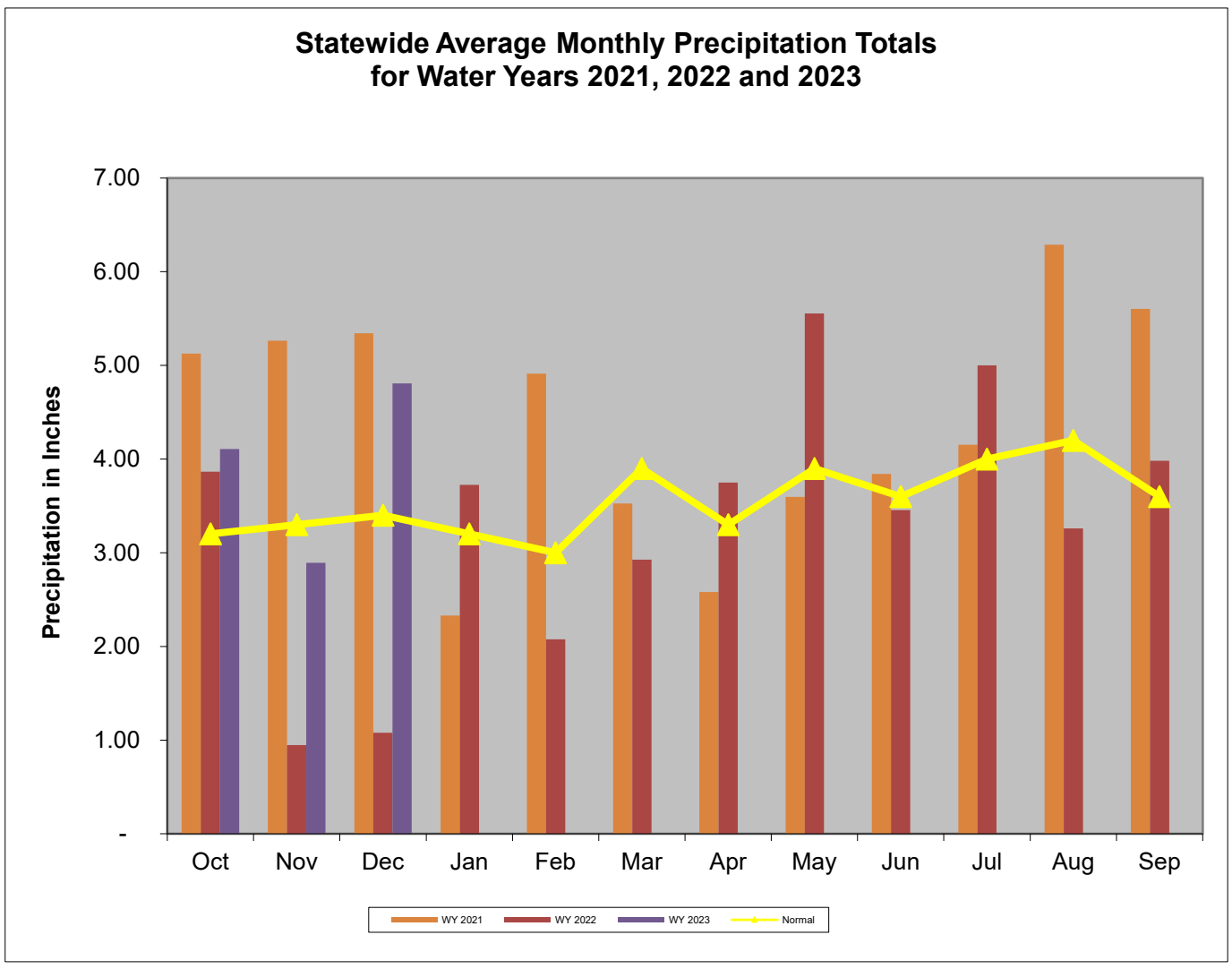
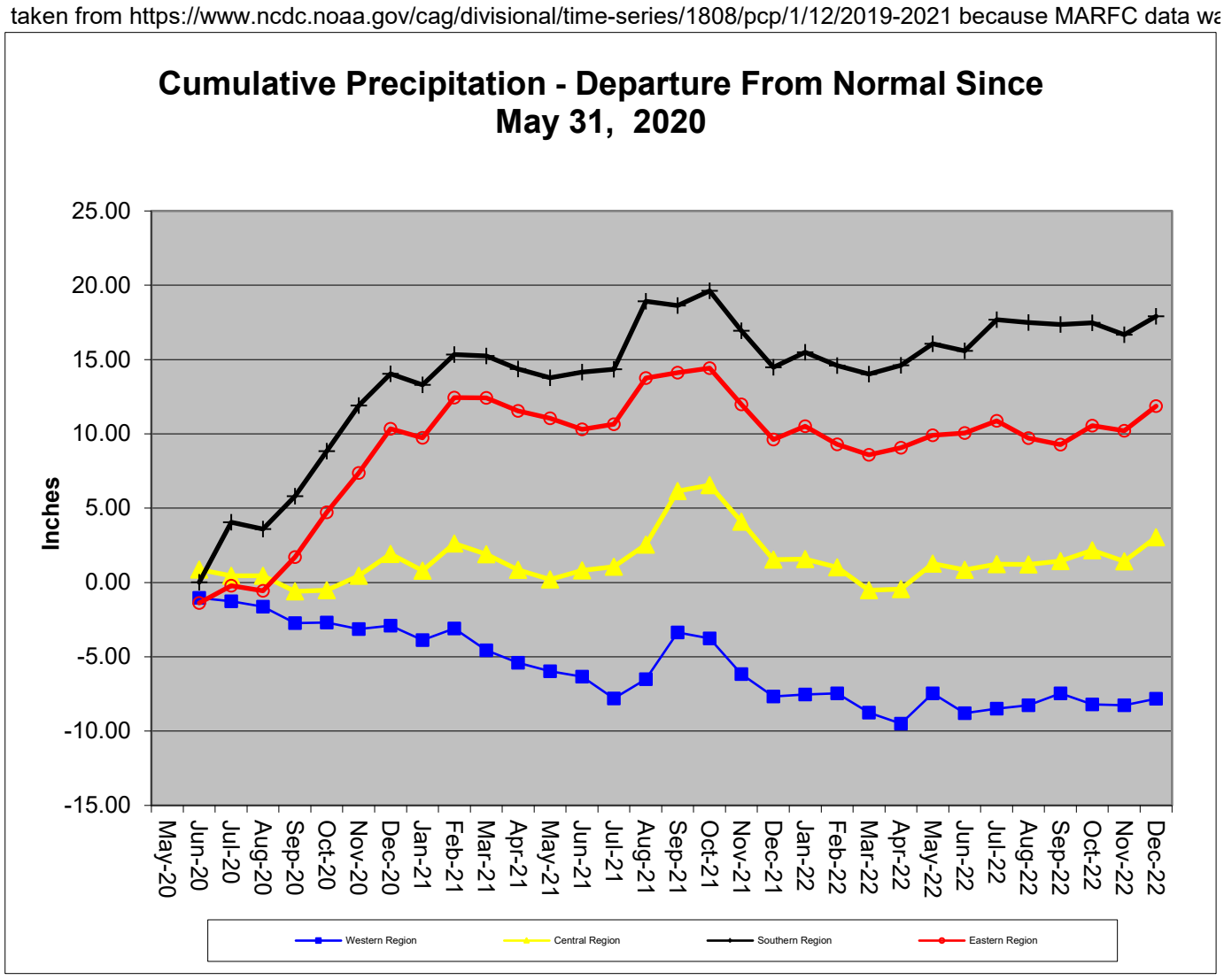
Overall Hydrologic Status for Maryland

Summary of Hydrologic Indicators for 31-December-2022					
	Rainfall	**Stream Flow**	**Groundwater**	**Reservoirs**	Overall Status
Western	Normal	Normal	Normal	Normal	Normal
Central	Normal	Normal	Normal	Normal	Normal
Eastern	Normal	Normal	Normal		Normal
Southern	Normal		Normal		Normal

Precipitation Indicators for Maryland Drought Regions December 31, 2022						
	WY to Date		Since June 30, 2022		Since December 31, 2021	
Regions	**Percent of Normal**	**Condition**	**Percent of Normal**	**Condition**	**Percent of Normal**	**Condition**
Western	96%	Normal	105%	Normal	100%	Normal
Central	115%	Normal	110%	Normal	103%	Normal
Eastern	126%	Normal	108%	Normal	105%	Normal
Southern	105%	Normal	111%	Normal	108%	Normal
WY or Water Year begins on October 1						



Data downloaded from http://www.weather.gov/marfc/Precipitation_Departures except for Garrett County, which was taken from https://www.ncdc.noaa.gov/cag/divisional/time-series/1808/pcp/1/12/2019-2021 because MARFC data wa



Precipitation in Maryland Counties
as of 31 December 2022 (WY 2023)

		Normal Rainfall, Actual Rainfall and Rainfall Departure from Normal in Inches															
		WY[1] To Date (Since Sep 30, 2022)				12 Months (Since December 31, 2021)				3 Months (Septermber 30, 2022)				6 Months (Since June 30, 2022)			
	COUNTY	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%
WESTERN REGION	ALLEGANY	8.9	8.7	-0.2	98%	39.1	38.3	-0.8	98%	8.9	8.7	-0.2	98%	19.2	20.6	1.4	107%
	GARRETT	10.4	9.0	-1.4	87%	47.1	47.9	0.8	102%	10.4	9.0	-1.4	87%	22.8	23.8	1.0	104%
	WASHINGTON	9.4	9.9	0.5	105%	39.8	39.3	-0.5	99%	9.4	9.9	0.5	105%	19.9	20.4	0.5	103%
	Regional Average	9.6	9.2	-0.4	96%	42.0	41.8	-0.2	100%	9.6	9.2	-0.4	96%	20.6	21.6	1.0	105%
CENTRAL REGION	BALTIMORE COUNTY	11.2	13.0	1.8	116%	45.6	47.4	1.8	104%	11.2	13.0	1.8	116%	23.1	26.5	3.4	115%
	CARROLL	10.5	11.1	0.6	106%	43.5	41.0	-2.5	94%	10.5	11.1	0.6	106%	22.2	22.0	-0.2	99%
	CECIL	10.8	13.9	3.1	129%	44.6	50.8	6.2	114%	10.8	13.9	3.1	129%	22.8	26.5	3.7	116%
	FREDERICK	10.1	10.9	0.8	108%	42.3	38.8	-3.5	92%	10.1	10.9	0.8	108%	21.1	20.7	-0.4	98%
	HARFORD	11.1	14.7	3.6	132%	45.7	52.6	6.9	115%	11.1	14.7	3.6	132%	23.7	30.0	6.3	127%
	HOWARD	10.8	11.2	0.4	104%	44.4	43.6	-0.8	98%	10.8	11.2	0.4	104%	22.2	22.6	0.4	102%
	MONTGOMERY	10.2	11.1	0.9	109%	42.8	45.2	2.4	106%	10.2	11.1	0.9	109%	21.6	23.7	2.1	110%
	Regional Average	10.7	12.3	1.6	115%	44.1	45.6	1.5	103%	10.7	12.3	1.6	115%	22.4	24.6	2.2	110%
SOUTHERN REGION	ANNE ARUNDEL	10.3	11.4	1.1	111%	42.8	47.9	5.1	112%	10.3	11.4	1.1	111%	21.6	24.9	3.3	115%
	CALVERT	10.5	11.4	0.9	109%	44.1	45.8	1.7	104%	10.5	11.4	0.9	109%	22.2	24.1	1.9	109%
	CHARLES	10.2	10.1	-0.1	99%	42.5	44.1	1.6	104%	10.2	10.1	-0.1	99%	21.7	22.2	0.5	102%
	PRINCE GEORGES	10.4	10.3	-0.1	99%	42.5	45.8	3.3	108%	10.4	10.3	-0.1	99%	21.6	23.5	1.9	109%
	ST MARYS	10.4	11.4	1.0	110%	43.7	49.2	5.5	113%	10.4	11.4	1.0	110%	22.4	26.5	4.1	118%
	Regional Average	10.4	10.9	0.6	105%	43.1	46.6	3.4	108%	10.4	10.9	0.6	105%	21.9	24.2	2.3	111%
EASTERN REGION	CAROLINE	10.2	13.3	3.1	130%	43.5	48.2	4.7	111%	10.2	13.3	3.1	130%	22.1	25.0	2.9	113%
	DORCHESTER	10.2	13.3	3.1	130%	43.9	46.2	2.3	105%	10.2	13.3	3.1	130%	22.1	25.2	3.1	114%
	KENT	10.3	12.8	2.5	124%	43.5	45.4	1.9	104%	10.3	12.8	2.5	124%	22.1	23.9	1.8	108%
	QUEEN ANNES	10.3	13.2	2.9	128%	43.3	47.6	4.3	110%	10.3	13.2	2.9	128%	22.0	24.0	2.0	109%
	SOMERSET	9.7	13.5	3.8	139%	43.2	43.5	0.3	101%	9.7	13.5	3.8	139%	22.2	24.5	2.3	110%
	TALBOT	10.4	12.3	1.9	118%	44.0	48.0	4.0	109%	10.4	12.3	1.9	118%	22.3	23.1	0.8	104%
	WICOMICO	10.0	12.3	2.3	123%	44.0	46.9	2.9	107%	10.0	12.3	2.3	123%	22.3	25.2	2.9	113%
	WORCESTER	10.4	11.6	1.2	112%	44.3	41.9	-2.4	95%	10.4	11.6	1.2	112%	23.0	21.8	-1.2	95%
	Regional Average	10.2	12.8	2.6	126%	43.7	46.0	2.3	105%	10.2	12.8	2.6	126%	22.3	24.1	1.8	108%
INDEPENDENT CITY OF BALTIMORE		11.2	13.0	1.8	116%	45.6	47.4	1.8	104%	11.2	13.0	1.8	116%	23.1	26.5	3.4	115%
Statewide Average		10.3	11.8	1.5	114%	43.6	45.5	2.0	104%	10.3	11.8	1.5	114%	22.1	24.0	2.0	109%

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

Stream Flow Status Based on Thirty Day Average for 2022-October-31

Region	Stream Gage Location	Notes	Status Based on 30 Day Average		
			30 Day Average (cfs)	Percentage	Status
Western	Youghiogheny (near Oakland)		301	30%-35%	Normal
Western	Savage River (near Barton)	[1]	40.5	20%-25%	Watch
Western	Wills Creek (near Cumberland)	[1]	293	45%-50%	Normal
Western	Marsh Run (at Grimes)	[1]	11.8	55%-60%	Normal
Central	Catoctin Creek (near Middletown)		110.4	65%-70%	Normal
Central	Monocacy (Jug Bridge near Frederick)		1,396	65%-70%	Normal
Central	Patuxent (near Unity)		60.4	70%-75%	Normal
Central	Deer Cr (at Rocks)	[1]	142.9	70%-75%	Normal
Eastern	Choptank (near Greensboro)		238.5	70%-75%	Normal
Eastern	Nassawango Creek (near Snow Hill)		70.3	60%-65%	Normal
	Susquehanna (at Marietta)		48,645	65%-70%	Normal
	Potomac (at Little Falls)(Adjusted)		12,006	60%-65%	Normal

Notes:

[1] - Some dates are missing stream flow values due to ice

Ground Water Status for 30 November 2022				
Region	USGS Well ID	Well Level[1]	Status	
Western	GA Bc 1	13.03	Normal	Normal
	AL Ah 1	3.82	Normal	
	WA Be 2	28.43	Normal	
	WA Bk 25	45.28	Normal	
Central	BA Dc 444	40.22	Normal	Normal
	BA Ea 18	25.76	Watch	
	HA Bd 31	7.42	Normal	
	HA Ca 23	7.22	Normal	
	MO Cc 14	30.85	Normal	
Eastern	QA Cg 69	3.30	Normal	Normal
	WI Cg 20	5.90	Normal	
	MC51-01	13.80	Normal	
	SO Cf 2	3.48	Normal	
Southern	CH Bg 12 (unconfined)	3.34	Normal	***Normal***
	AA Cc 40 (confined)	NA[2]	Unknown	
	CA Fd 54 (confined)	237.80	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 2022-1-10
[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.

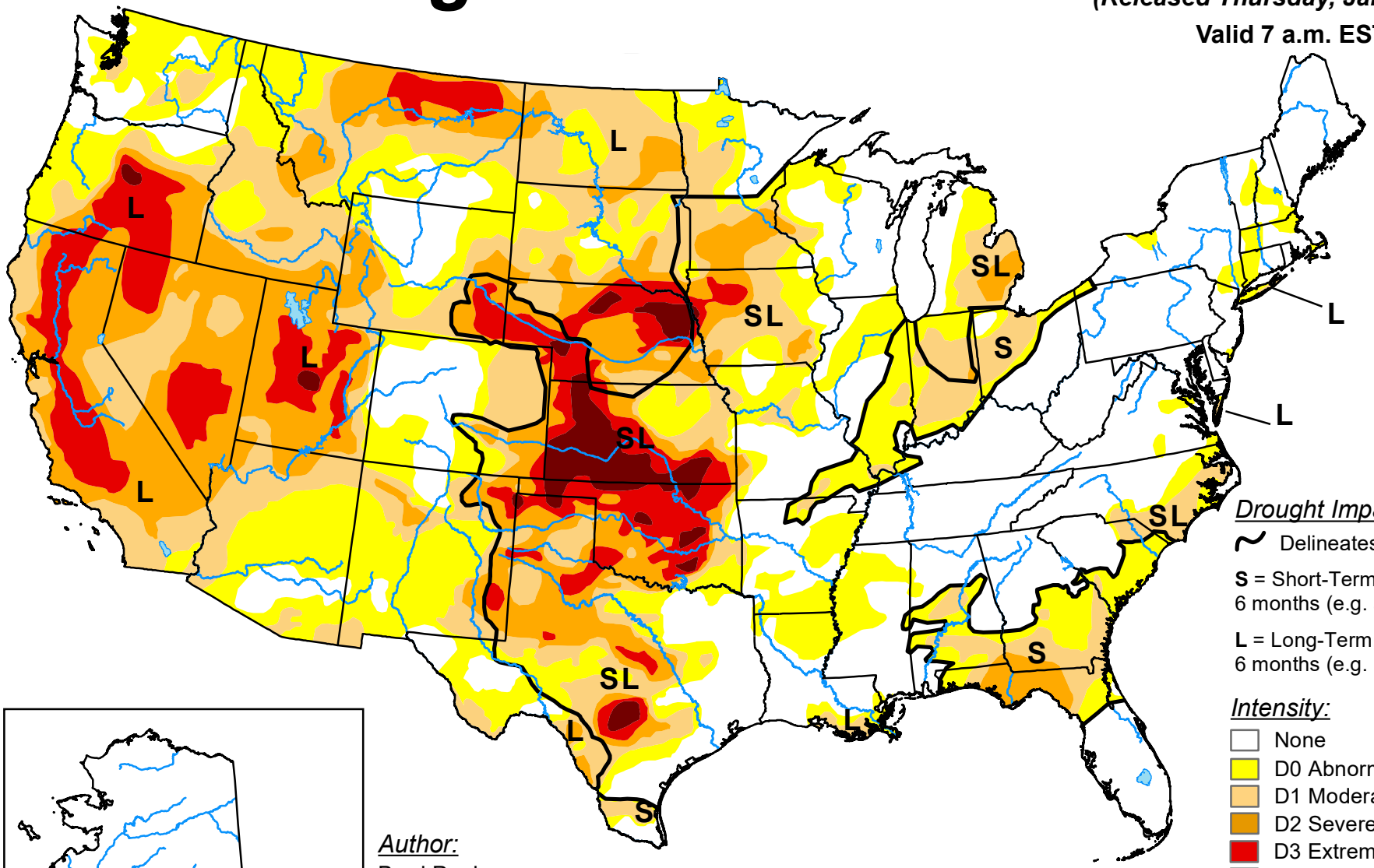
Selected ground water levels are available from USGS at:
http://md.water.usgs.gov/groundwater/
Data for other wells may be downloaded from:
USGS - NWIS Web Information for USA

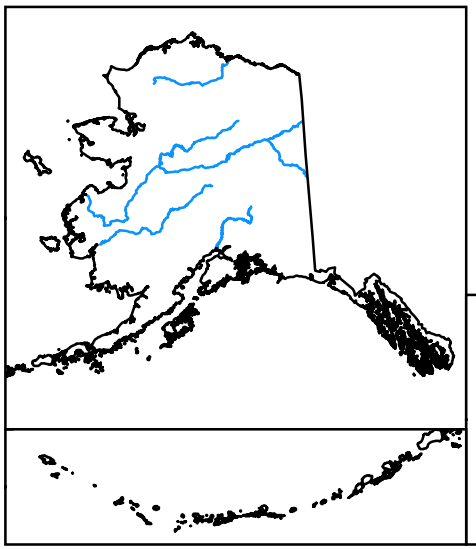
U.S. Drought Monitor

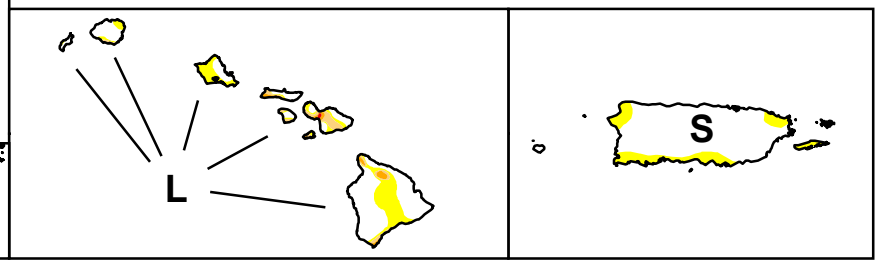
January 3, 2023

(Released Thursday, Jan. 5, 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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CPC/NOAA

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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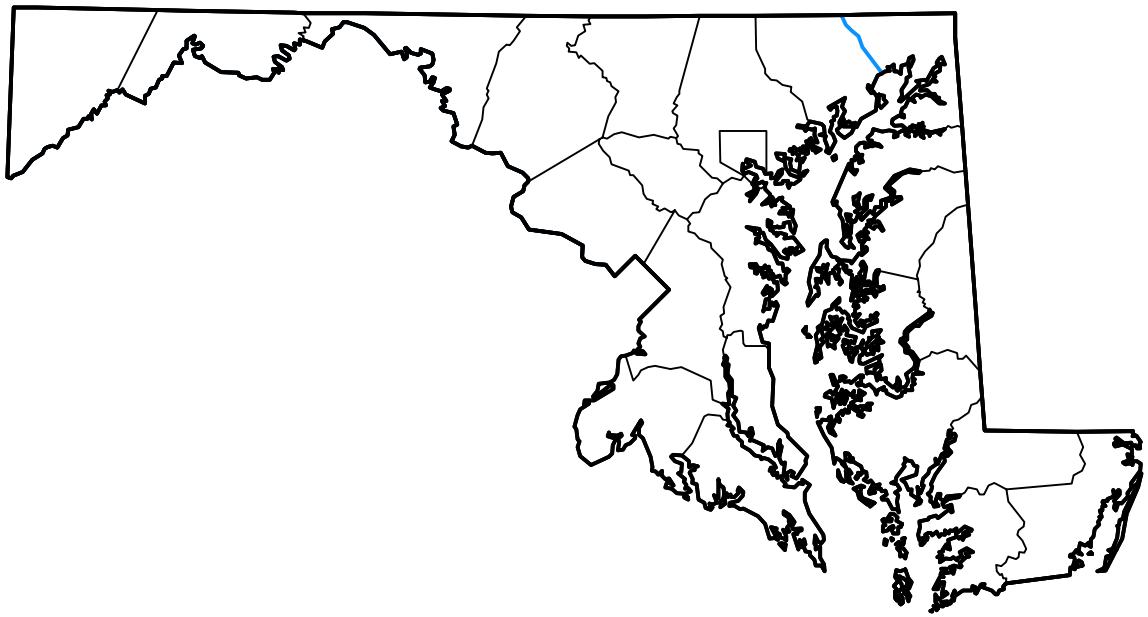
U.S. Drought Monitor

Maryland



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Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week *12-27-2022*	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago *10-04-2022*	93.24	6.76	0.00	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 *09-27-2022*	65.82	34.18	6.75	0.00	0.00	0.00
One Year Ago *01-04-2022*	55.15	44.85	0.00	0.00	0.00	0.00

Intensity:

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