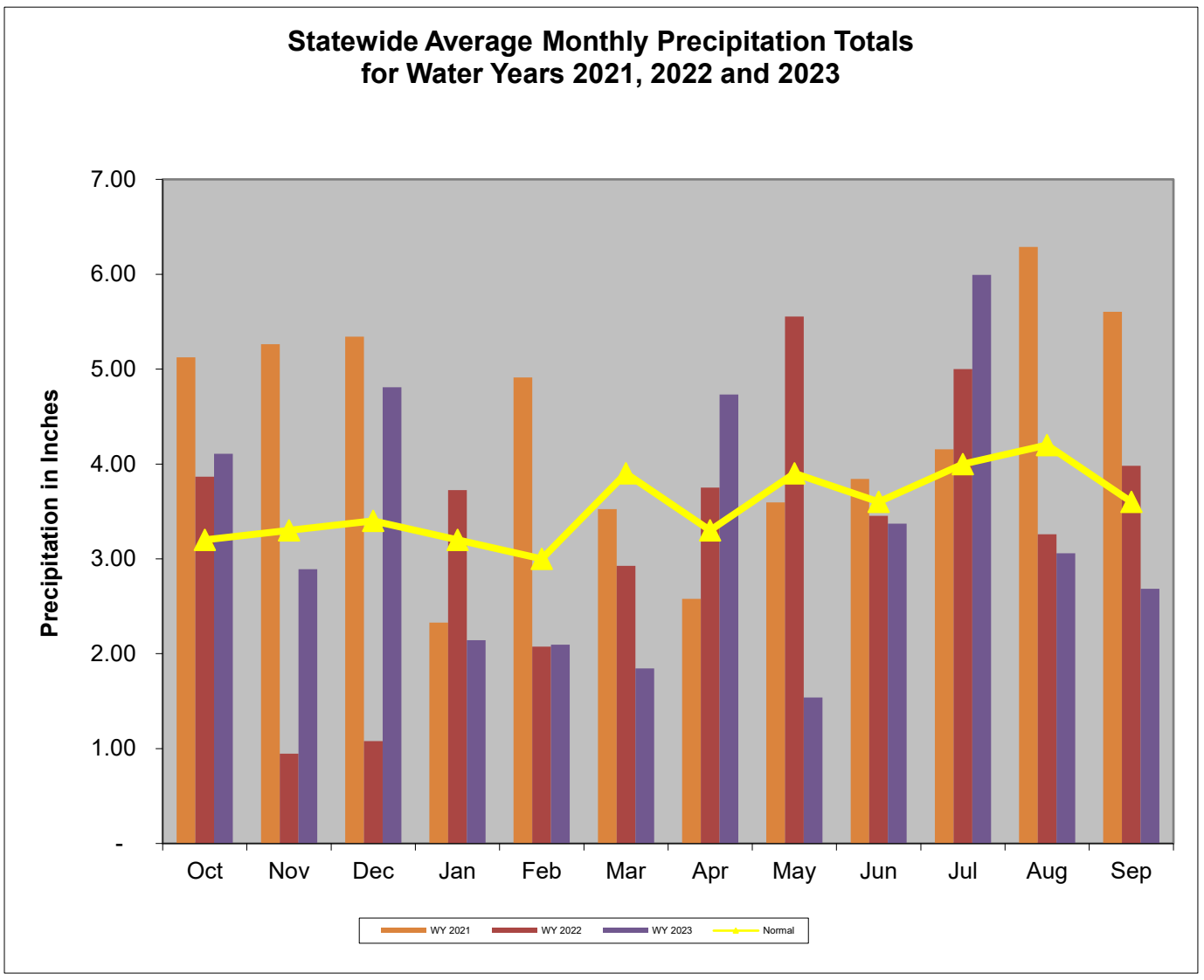
Overall Hydrologic Status for Maryland

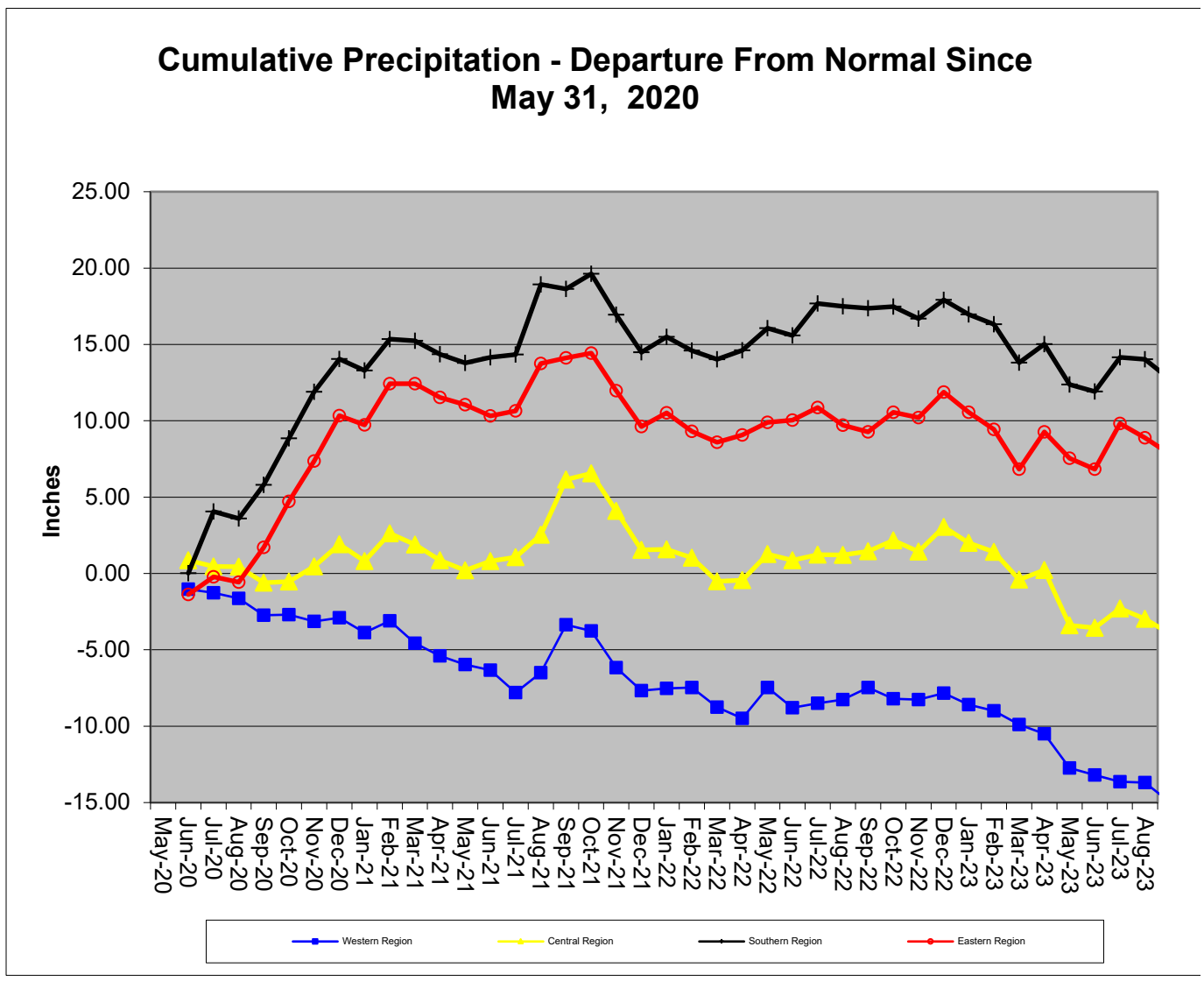
Summary of Hydrologic Indicators for 15-September 2023					
	Rainfall	**Stream Flow**	**Groundwater**	**Reservoirs**	Overall Status
Western	Watch	Normal	Warning	Normal	Watch
Central	Normal	Warning	Warning	Normal	Warning
Eastern	Normal	Normal	Normal		Normal
Southern	Normal		Normal		Normal

Notes: The WSSC Patuxent reservoirs have less then 120 days of water in storage. This is a result of dredging in the Tridelphia, which is scheduled to end by November 2023. Several Groundwater Gages are missing data for the mid-month evaluation.

Precipitation Indicators for Maryland Drought Regions September 15, 2023						
	WY to Date		Since Mar 31, 2023		Since Sept 30, 2022	
Regions	**Percent of Normal**	**Condition**	**Percent of Normal**	**Condition**	**Percent of Normal**	**Condition**
Western	82%	Watch	78%	Watch	82%	Watch
Central	88%	Normal	85%	Normal	88%	Normal
Eastern	97%	Normal	104%	Normal	97%	Normal
Southern	89%	Normal	95%	Normal	89%	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 15 September 2023 (WY 2023)

		Normal Rainfall, Actual Rainfall and Rainfall Departure from Normal in Inches															
		WY[1] To Date (Since September 30, 2022)				11.5 Months (Since September 30, 2022)				2.5 Months (Since June 30, 2023)				5.5 Months (Since March 31, 2023)			
	COUNTY	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%	Normal	Actual	Depart	%
WESTERN REGION	ALLEGANY	40.0	33.1	-6.9	83%	40.0	33.1	-6.9	83%	10.2	8.3	-1.9	81%	21.5	16.2	-5.3	75%
	GARRETT	46.3	40.0	-6.3	86%	46.3	40.0	-6.3	86%	12.3	11.1	-1.2	90%	25.6	22.6	-3.0	88%
	WASHINGTON	40.2	30.8	-9.4	77%	40.2	30.8	-9.4	77%	10.1	7.8	-2.3	77%	21.3	14.3	-7.0	67%
	Regional Average	42.2	34.6	-7.5	82%	42.2	34.6	-7.5	82%	10.9	9.1	-1.8	83%	22.8	17.7	-5.1	78%
CENTRAL REGION	BALTIMORE COUNTY	44.9	41.1	-3.8	92%	44.9	41.1	-3.8	92%	11.3	12.7	1.4	112%	23.3	21.5	-1.8	92%
	CARROLL	43.3	33.6	-9.7	78%	43.3	33.6	-9.7	78%	11.2	8.2	-3.0	73%	22.8	15.8	-7.0	69%
	CECIL	44.4	44.0	-0.4	99%	44.4	44.0	-0.4	99%	12.0	12.4	0.4	103%	23.6	23.8	0.2	101%
	FREDERICK	42.3	33.1	-9.2	78%	42.3	33.1	-9.2	78%	10.6	8.0	-2.6	75%	22.4	15.6	-6.8	70%
	HARFORD	45.6	44.0	-1.6	96%	45.6	44.0	-1.6	96%	12.2	12.7	0.5	104%	24.1	22.4	-1.7	93%
	HOWARD	44.1	36.8	-7.3	83%	44.1	36.8	-7.3	83%	11.0	11.0	0.0	100%	23.0	18.6	-4.4	81%
	MONTGOMERY	42.6	36.7	-5.9	86%	42.6	36.7	-5.9	86%	10.9	11.3	0.4	104%	22.6	19.1	-3.5	85%
	Regional Average	43.9	38.5	-5.4	88%	43.9	38.5	-5.4	88%	11.3	10.9	-0.4	96%	23.1	19.5	-3.6	85%
SOUTHERN REGION	ANNE ARUNDEL	42.6	40.2	-2.4	94%	42.6	40.2	-2.4	94%	11.6	14.1	2.5	122%	23.0	23.3	0.3	101%
	CALVERT	44.2	39.6	-4.6	90%	44.2	39.6	-4.6	90%	11.6	11.8	0.2	102%	23.4	22.8	-0.6	97%
	CHARLES	42.6	37.0	-5.6	87%	42.6	37.0	-5.6	87%	11.3	11.8	0.5	104%	22.5	20.2	-2.3	90%
	PRINCE GEORGES	42.1	37.7	-4.4	90%	42.1	37.7	-4.4	90%	11.0	13.6	2.6	124%	22.3	21.9	-0.4	98%
	ST MARYS	44.0	37.7	-6.3	86%	44.0	37.7	-6.3	86%	12.0	10.1	-1.9	84%	23.2	20.7	-2.5	89%
	Regional Average	43.1	38.4	-4.7	89%	43.1	38.4	-4.7	89%	11.5	12.3	0.8	107%	22.9	21.8	-1.1	95%
EASTERN REGION	CAROLINE	43.3	46.0	2.7	106%	43.3	46.0	2.7	106%	11.9	16.8	4.9	141%	23.2	27.8	4.6	120%
	DORCHESTER	43.7	43.2	-0.5	99%	43.7	43.2	-0.5	99%	12.0	14.0	2.0	117%	23.5	24.9	1.4	106%
	KENT	43.1	42.3	-0.8	98%	43.1	42.3	-0.8	98%	11.4	13.3	1.9	117%	22.8	24.0	1.2	105%
	QUEEN ANNES	42.8	43.2	0.4	101%	42.8	43.2	0.4	101%	11.3	14.1	2.8	125%	22.7	24.8	2.1	109%
	SOMERSET	43.1	41.3	-1.8	96%	43.1	41.3	-1.8	96%	12.6	10.7	-1.9	85%	23.0	22.7	-0.3	99%
	TALBOT	43.7	41.3	-2.4	95%	43.7	41.3	-2.4	95%	11.8	13.3	1.5	113%	23.3	23.6	0.3	101%
	WICOMICO	44.0	41.0	-3.0	93%	44.0	41.0	-3.0	93%	12.5	12.1	-0.4	97%	23.4	23.9	0.5	102%
	WORCESTER	44.4	38.0	-6.4	86%	44.4	38.0	-6.4	86%	12.7	9.7	-3.0	76%	23.1	21.0	-2.1	91%
	Regional Average	43.5	42.0	-1.5	97%	43.5	42.0	-1.5	97%	12.0	13.0	1.0	108%	23.1	24.1	1.0	104%
INDEPENDENT CITY OF BALTIMORE		44.6	40.7	-3.9	91%	44.6	40.7	-3.9	91%	11.3	12.7	1.4	112%	23.3	21.5	-1.8	92%
Statewide Average		43.4	39.3	-4.1	90%	43.4	39.3	-4.1	90%	11.5	11.7	0.2	102%	23.0	21.4	-1.7	93%

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

Stream Flow Status Based on Thirty Day Average for 2023 September 15

Region	Stream Gage Location	Notes	Status Based on 30 Day Average		
			30 Day Average (cfs)	Percentage	Status
Western	Youghiogheny (near Oakland)		74	50%-55%	Normal
Western	Savage River (near Barton)		5.4	35%-40%	Normal
Western	Wills Creek (near Cumberland)		31	20%-25%	Watch
Western	Marsh Run (at Grimes)		4.1	30%-35%	Normal
Central	Catoctin Creek (near Middletown)		3.0	5%-10%	Warning
Central	Monocacy (Jug Bridge near Frederick)		68	0%-5%	Emergency
Central	Patuxent (near Unity)		5.4	0%-5%	Emergency
Central	Deer Cr (at Rocks)		43.2	15%-20%	Watch
Eastern	Choptank (near Greensboro)		34.5	55%-60%	Normal
Eastern	Nassawango Creek (near Snow Hill)		10.8	45%-50%	Normal
	Susquehanna (at Marietta)		31,403	90%-95%	Normal
	Potomac (at Little Falls)(Adjusted)		1,721	5%-10%	Warning

Notes:

Ground Water Status for 15 September 2023				
Region	USGS Well ID	Well Level[1]	Status	
Western	GA Bc 1	12.90 [3]	Normal	Warning
	AL Ah 1	5.18 [2]	Normal	
	WA Be 2	35.38 [2]	Emergency	
	WA Bk 25	50.46 [3]	Emergency	
Central	BA Dc 444	41.92 [3]	Warning	Warning
	BA Ea 18	26.32 [2]	Emergency	
	HA Bd 31	11.64 [2]	Normal	
	HA Ca 23	7.52 [2]	Normal	
	MO Cc 14	39.59 [2]	Warning	
Eastern	QA Cg 69	4.32 [2]	Normal	Normal
	WI Cg 20	7.37 [2]	Normal	
	MC51-01	12.81 [3]	Normal	
	SO Cf 2	4.83 [3]	Normal	
Southern	CH Bg 12 (unconfined)	5.19 [3]	Normal	***Normal***
	AA Cc 40 (confined)	NA[2]	Unknown	
	CA Fd 54 (confined)	241.94	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 2023-9-18
[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.

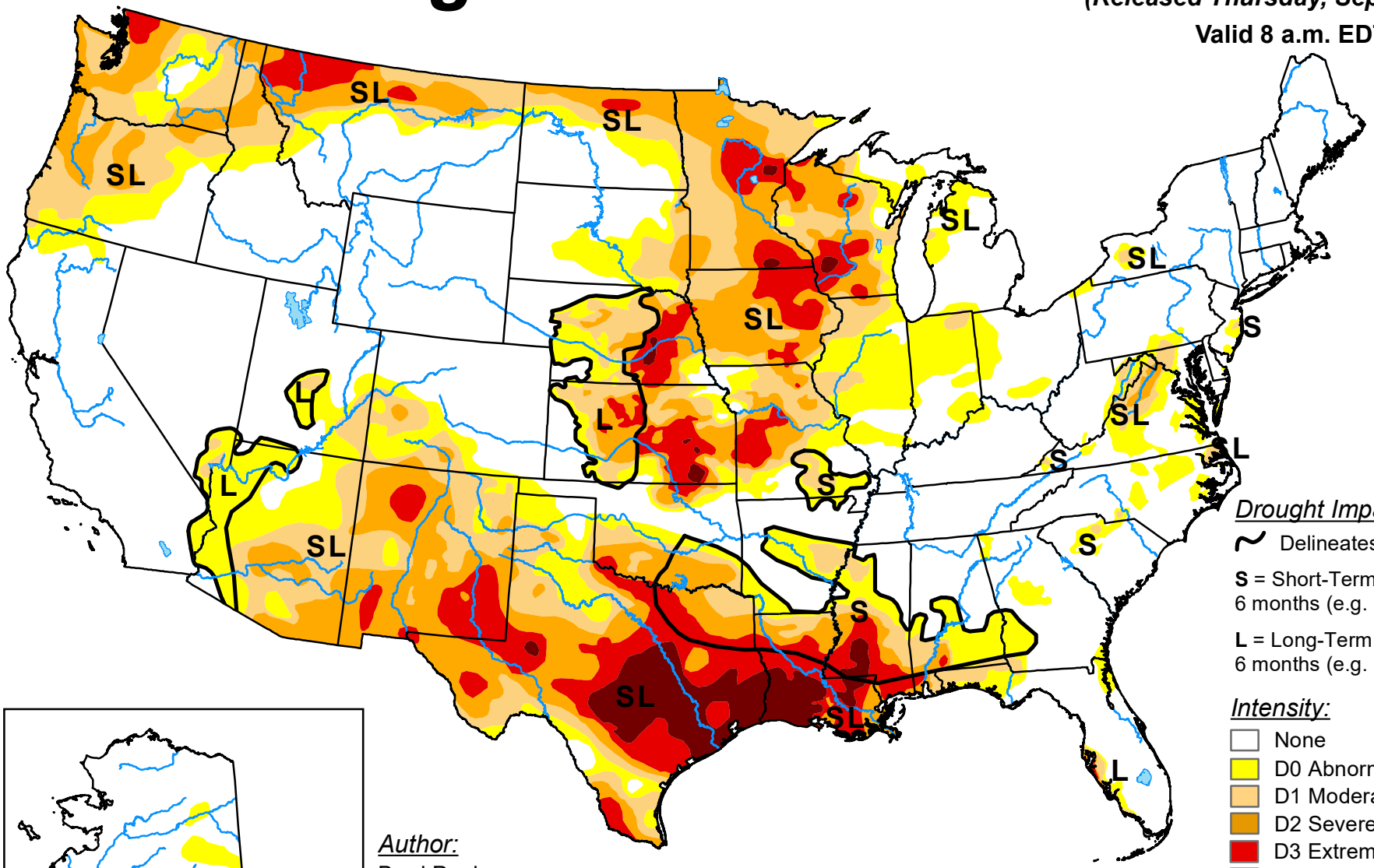
Selected ground water levels are available from USGS at:
http://md.water.usgs.gov/groundwater/
Data for other wells may be downloaded from:
USGS - NWIS Web Information for USA

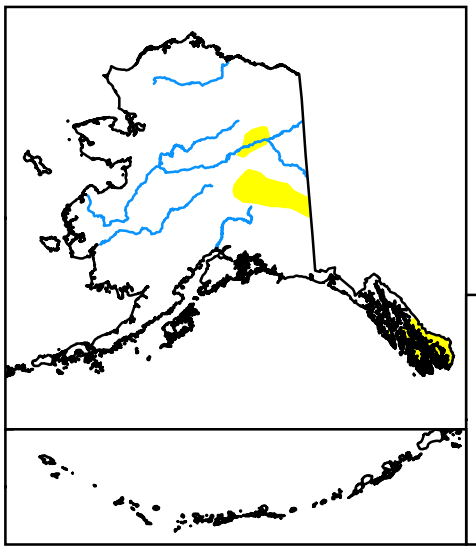
U.S. Drought Monitor

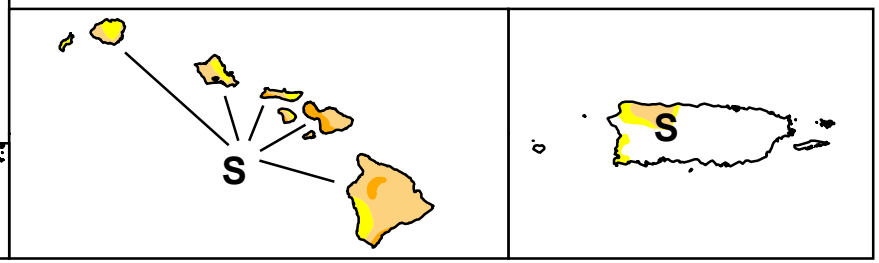
September 12, 2023

(Released Thursday, Sep. 14, 2023)

Valid 8 a.m. EDT







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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

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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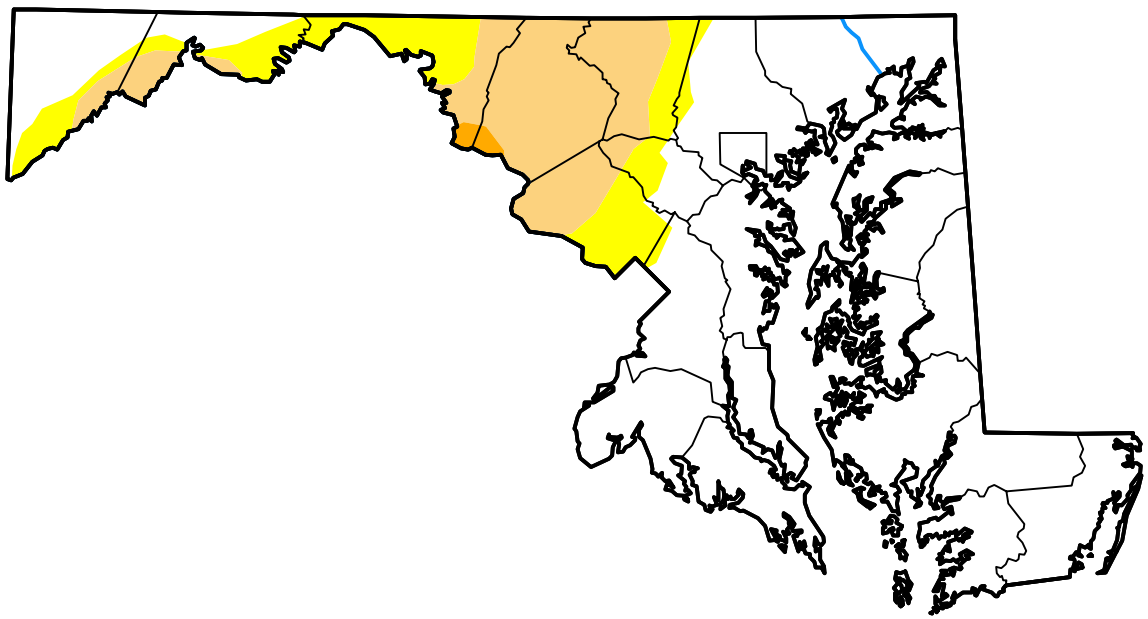
U.S. Drought Monitor

Maryland



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Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	72.46	27.54	16.49	0.50	0.00	0.00
Last Week *09-05-2023*	70.69	29.31	16.52	0.50	0.00	0.00
3 Months Ago *06-13-2023*	11.89	88.11	70.83	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 *09-13-2022*	72.39	27.61	6.79	0.00	0.00	0.00

Intensity:

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