

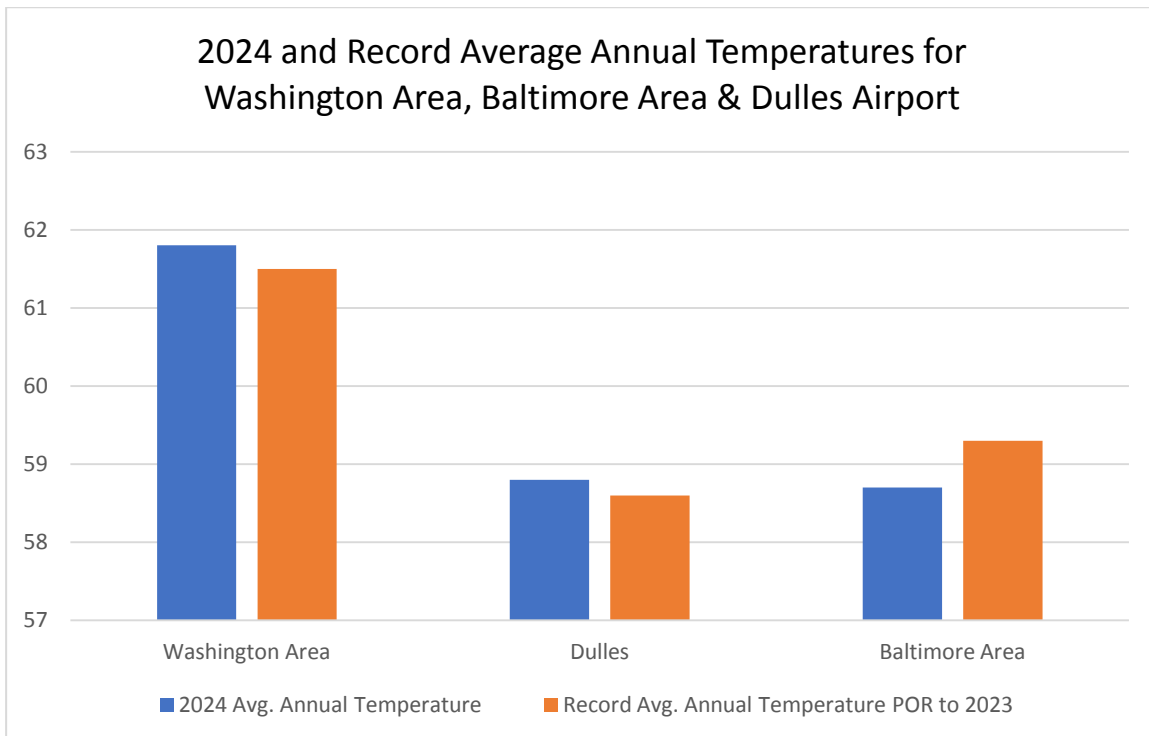


# PRESTO



PREcipitation Summary and Temperature Observations  
for the Washington, DC and Baltimore, MD Area

## YEAR 2024: Very Warm & Dry; Possibly The Warmest Year on Record for Washington Area & Dulles Airport



Although the data is preliminary, DCA observed the warmest average annual temperature for the Washington Area and Dulles observed its warmest average annual temperature on record in 2024. BWI tied for the 3<sup>rd</sup> warmest average annual temperature on record for the Baltimore Area.

### 2024 Highlights

#### JANUARY

- 6<sup>th</sup> & 9<sup>th</sup> – Daily rainfall records at IAD (0.97 inches on the 6<sup>th</sup>), Daily rainfall records at BWI, DCA, IAD, and Martinsburg of 2.62, 2.24, 1.76, and 1.84 inches, respectively
- 15<sup>th</sup> & 19<sup>th</sup> – Daily snowfall records of 4.1 inches at BWI and IAD. Daily snowfall record at IAD (19<sup>th</sup>) of 4.9 inches. Storm total snowfall of 21.5 inches (19<sup>th</sup>) in McHenry (Garret Co.), MD
- 26<sup>th</sup> – Daily and monthly record high temperatures set at DCA and IAD of 80F and 79F, respectively

## FEBRUARY 2024

- ◆ 17<sup>th</sup> – 1 to 4-inch snowfall across most of the area
- ◆ 26<sup>th</sup> – IAD ties a record high of 69°F
- ◆ 28<sup>th</sup> – Strong wind gusts across the area, including a 60 mph gust in Petersburg, WV and a 59 mph gust at IAD; BWI and DCA had 51 mph and 50 mph gusts, respectively

## MARCH

- ◆ 11<sup>th</sup> – Strong non-thunderstorm wind gust of 66 mph near Sabillasville, MD
- ◆ 20<sup>th</sup> – 68 mph wind gust near Wintergreen, VA and 63 mph gusts near Deer Run, WV and Blue Mountain, VA
- ◆ 29<sup>th</sup> – 71 mph wind gust in Wintergreen, VA
- ◆ 30<sup>th</sup> – Strong winds in the Chesapeake Bay: 63 mph gust at Highland Beach and 62 mph gust at Saunders Point
- ◆ 31<sup>st</sup> – 1-inch hail in Tyro (Nelson County), VA

## APRIL

- ◆ 3<sup>rd</sup> – Thunderstorm wind damage and flooding across much of the area; 59 mph gusts at Bay Bridge and Patuxent River, MD
- ◆ 11<sup>th</sup> – 70 mph wind gust in Wintergreen, VA and 66 mph gust near Greenwood, VA
- ◆ 15<sup>th</sup> – 1.5-inch diameter hail in Westover (Fairfax Co.), VA; strong thunderstorm winds over the eastern shore and marine areas, including 63 mph gusts near Dahlgren, VA, Swan Point, MD, and Cuckold Creek, MD
- ◆ 22<sup>nd</sup> & 23<sup>rd</sup> – Frost and freezing temperatures in areas west and north of metros, including a 28°F low in Martinsburg, WV
- ◆ 29<sup>th</sup> – Record high temperatures at IAD (91°F) and BWI (92°F)

## MAY

- ◆ 2<sup>nd</sup> – Record highs at DCA and IAD (91°F), BWI tied record high (90°F)
- ◆ 11<sup>th</sup> – Two EF-1 tornadoes (estimated winds 90 mph for both) near Friendsville (Garrett Co.), MD
- ◆ 22<sup>nd</sup> – Record high tied at IAD (91°F)
- ◆ 23<sup>rd</sup> – 1.5 inch hail near IAD and Strasburg, VA
- ◆ 26<sup>th</sup> & 27<sup>th</sup> – Thunderstorm winds caused **1 fatality** near Norwood (Nelson Co.), VA; EF-1 tornado in Rixeyville (Culpeper Co.), VA; (27<sup>th</sup>) EF1 tornado near Cordova (Nelson Co.), VA **injured 5 people**
- ◆ 29<sup>th</sup> – Hail up to 1.25 inches in diameter fell across eastern WV and western MD

## JUNE

- ◆ 5<sup>th</sup> – Tornado outbreak across WV, VA and MD, ([Summary from NWS](#))
- ◆ 22<sup>nd</sup> – Record high temperatures at IAD (100°F) and BWI (101°F), and a record high minimum at IAD (75°F)
- ◆ 23<sup>rd</sup> – Record highs at DCA, BWI and IAD (99°F, 98°F and 98°F, respectively), and a record high minimum at BWI (81°F); thunderstorm wind damage also occurred across western and central MD
- ◆ 26<sup>th</sup> – Record highs at BWI and IAD (99°F for each); and thunderstorm wind damage also occurred in many locations, with gusts to 70 mph in Point Lookout (St. Mary's Co.), MD and 65 mph in Shepherdstown (Jefferson Co.), WV
- ◆ 30<sup>th</sup> – Thunderstorm wind damage and large hail in eastern MD including a 56 mph wind gust at Patuxent River NAS (St. Mary's Co.), MD and 1.25" diameter hail in Bryantown, (Charles Co.), MD

## JULY 2024

- ◆ 6<sup>th</sup> – Record high minimum temperatures at BWI (81°F) and IAD (76°F)
- ◆ 14<sup>th</sup> - 16<sup>th</sup> – Record highs each day at DCA (101°F, 102°F and 104°F), and at BWI (101°F (tied), 102°F, and 104°F (tied)), and on the 14<sup>th</sup> and 15<sup>th</sup> at IAD (98°F (tied) and 99°F)
- ◆ 14<sup>th</sup> - 17<sup>th</sup> – Thunderstorm wind damage around the metros and eastward, 68 mph wind gust recorded at Saunders Point Light (14<sup>th</sup>); widespread thunderstorm wind damage including a 62 mph gust in Hampstead (Carroll Co.), MD (15<sup>th</sup>); and a 61 mph gust in Spotswood (Augusta Co.), VA (17<sup>th</sup>)
- ◆ 29<sup>th</sup> & 31<sup>st</sup> – Thunderstorm wind gusts to 63 mph offshore of Aberdeen Proving Ground (Harford Co.), MD (29<sup>th</sup>); and a 61 mph gust at Andrews AFB (Prince George's Co.), MD (31<sup>st</sup>)

## AUGUST

- ◆ 1<sup>st</sup> – BWI sets a record high of 101°F
- ◆ 2<sup>nd</sup> – BWI ties record at 100°F; 78 mph (BWI marine) wind gust 7 miles southeast of Aberdeen Proving Ground, MD
- ◆ 7<sup>th</sup> & 8<sup>th</sup> – IAD ties a record high of 96°F (6<sup>th</sup>); Remnants of Hurricane Debby: Martinsburg, WV sets daily rainfall records with 2.43" (7<sup>th</sup>) and 3.41" (8<sup>th</sup>); IAD sets a daily rainfall record with 1.39" (8<sup>th</sup>); three tornadoes spawned across western VA and eastern WV, ([Summary from the NWS](#))
- ◆ 22<sup>nd</sup> – IAD sets a record low (49°F)
- ◆ 28<sup>th</sup> – Record highs set at IAD (99°F) and DCA (101°F)
- ◆ 29<sup>th</sup> – IAD sets a daily rainfall record (1.92"); hail up to 2.50" in diameter in Countryside (Loudoun Co.), VA

## SEPTEMBER

- ◆ 8<sup>th</sup> - 9<sup>th</sup> – Record lows tied at Baltimore (46°F, 8<sup>th</sup>) and Martinsburg (40°F, 9<sup>th</sup>)
- ◆ 25<sup>th</sup> - 30<sup>th</sup> – Widespread river and urban flooding across central and western VA, including several road closures, primarily from the remnants of Hurricane Helene; Storm totals of 5-10" were common south and west of Culpepper, VA, with several 11-15" reports in western Albemarle County, VA

## OCTOBER

- ◆ 16<sup>th</sup> - 21<sup>st</sup> – Most areas outside of Washington DC observed the first frost/freeze of the season during the period with many areas observing frost each morning
- ◆ 31<sup>st</sup> – Record highs at IAD and Martinsburg, WV (83°F)

## NOVEMBER

- ◆ 6<sup>th</sup> & 7<sup>th</sup> – Record highs at DCA (83°F, 6<sup>th</sup> and 84°F, 7<sup>th</sup>), BWI (81°F, 6<sup>th</sup>) and IAD (83°F, 6<sup>th</sup> and 81°F, 7<sup>th</sup>)
- ◆ 10<sup>th</sup> – First measurable rainfall at Washington, Baltimore and IAD in 38 days (**record-longest dry period at all 3 stations**)
- ◆ 11<sup>th</sup> – DCA tied record high (78°F)
- ◆ 30<sup>th</sup> – DCA observes first freeze of the season (30°F)

## DECEMBER

- ◆ 5<sup>th</sup> – Strong wind gusts over much of the area including 68 mph in Sabillasville (Frederick Co.), MD and 65 mph in Spotswood (Augusta Co.), VA; 7.5 inches of snow in Seneca Rocks (Pendleton Co.), WV
- ◆ 11<sup>th</sup> – Strong wind gusts including 64 mph in Wintergreen, VA and 60 mph in Sabillasville, MD; IAD set a daily rainfall record (1.51")
- ◆ 17<sup>th</sup> – DCA set a record high (65°F)
- ◆ 31<sup>st</sup> – A line of thunderstorms (unusual for the time of year) pushed across the metros through late afternoon/early evening hours and produced strong winds and hail up to 1.00" in diameter in Garrisonville (Stafford Co.), VA, and a 49 mph marine wind gust 5 miles southeast of Cape St. Claire, MD

## 2024 Summary

**Temperatures:** Although the data is preliminary, 2024 was the warmest year on record (based on monthly average temperature) for the Washington Area and Dulles (IAD). BWI observed the 3<sup>rd</sup> warmest year on record in the Baltimore Area. Almost every month was well above normal in temperature except September, October and December.

The first quarter of the year was well above average in monthly temperature, especially February. Dulles observed its 4<sup>th</sup> warmest February on record while DCA tied for the 7<sup>th</sup> warmest and BWI had the 20<sup>th</sup> warmest. There were not many records however, with the only one occurring at IAD on February 26<sup>th</sup> with a record high of 69°F. The monthly anomalies for March were all greater than 4°F.

April, May and June continued the warm trends for the year, especially June. IAD and BWI set record highs on April 29<sup>th</sup> of 91°F and 92°F respectively. On May 2<sup>nd</sup>, DCA and IAD set record highs of 91°F and BWI tied a record with 90°F. June was the 2<sup>nd</sup> warmest June on record for both the Washington Area (+3.4°F), and IAD (+4.1°F) and the 5<sup>th</sup> warmest for the Baltimore area (+4.0°F). The end of June was extremely hot. On June 22<sup>nd</sup>, there were record high temperatures at IAD (100°F) and BWI (101°F), and a record high minimum at IAD (75°F). On June 23<sup>rd</sup>, more record highs occurred at DCA, BWI and IAD (99°F, 98°F and 98°F, respectively), and a record high minimum at BWI (81°F); and on the 26<sup>th</sup>, there were record highs at BWI and IAD (99°F for each).

July continued a very hot summer. It was the 2<sup>nd</sup> warmest July on record for the Baltimore Area (+3.9°F), 3<sup>rd</sup> warmest at Dulles (+3.6°F) and 4<sup>th</sup> warmest on record for the Washington Area (+2.7°F). On July 6<sup>th</sup>, record high minimum temperatures occurred at BWI (81°F) and IAD (76°F). Between July 14 and 16<sup>th</sup>, record highs occurred at DCA each day (101°F, 102°F and 104°F), BWI (101°F (tied), 102°F, and 104°F (tied)), and on the 14<sup>th</sup> and 15<sup>th</sup> at IAD (98°F (tied) and 99°F). August began to cool a little but still ended up a little above normal. On August 1<sup>st</sup>, BWI set a record high of 101°F and on the 2<sup>nd</sup>, IAD set a record high of 101°F, while BWI tied record at 100°F. IAD tied a record high of 96°F on the 6<sup>th</sup>. In a rare occurrence for the year, IAD set a record low of 49°F on the 22<sup>nd</sup>. Record highs returned on the 28<sup>th</sup>; IAD (99°F) and DCA (101°F). September ended providing some relief from the heat and monthly temperatures were very close to normal. On August 8<sup>th</sup> and 9<sup>th</sup>, record lows were tied at Baltimore (46°F, 8<sup>th</sup>) and Martinsburg (40°F, 9<sup>th</sup>).

October had the first negative monthly temperature anomaly for the year at BWI but IAD and DCA were slightly above normal. Between the 16<sup>th</sup> and 21<sup>st</sup>, Most areas outside of Washington DC observed the first frost/freeze of the season during the period with many areas observing frost each morning. By the end of the month, extreme warmth returned with record high temperatures of 83°F at IAD and Martinsburg, WV on the 31<sup>st</sup>. November was well above well above normal with monthly temperature anomalies of +5.3°F at DCA, +5.0°F at IAD and +3.8°F at BWI; DCA had the warmest November on record for the Washington Area while Dulles had its 3<sup>rd</sup> warmest November on record; Baltimore had its 14<sup>th</sup> warmest November on record. The 6<sup>th</sup> and 7<sup>th</sup> saw record highs at DCA (83°F, 6<sup>th</sup> and 84°F, 7<sup>th</sup>), BWI (81°F, 6<sup>th</sup>) and IAD (83°F, 6<sup>th</sup> and 81°F, 7<sup>th</sup>). By the end of the month, temperatures cooled a little and DCA observed its first freeze of the year on the 30<sup>th</sup> (30°F). Temperatures in December cooled to near average but DCA did observe a record high on the 17<sup>th</sup> of 65°F.

**Precipitation:** Precipitation in 2024 can be best described as disjointed. It was characterized by long periods of no precipitation and drought followed by very heavy precipitation concentrated in a few weeks, which alleviated drought conditions. All three stations set records for the longest dry streak without any precipitation (38 days) between October 2<sup>nd</sup> and November 10<sup>th</sup>. Each station ended the year being between 4 and 9 inches below normal (IAD, 8.97") and in Moderate Drought conditions according to the US Drought Monitor.

The year started off wet in January across the entire area with well above normal precipitation values. The 3.69 inches of precipitation at BWI was the 5<sup>th</sup> wettest on record; the 3.06 inches at IAD was the 3<sup>rd</sup> wettest, and 3.02 inches at DCA was the 6<sup>th</sup> wettest. Snowfall was a little above normal for the month for the first time in a few years. February was dry with only a little snowfall. March was once again wet ending up above normal.

April was above normal for areas west of the metros but the metro areas were generally below normal by an inch or so. May was near average in most places with negative anomalies in IAD and BWI of around an inch or less. June began a very dry stretch. It was the 2<sup>nd</sup> driest June on record at IAD (-3.61"), 4<sup>th</sup> driest for the Washington Area (-3.21"), while BWI (-2.58") recorded its driest June since 2017.

July continued the dryness of June. It was the driest July since 1983 and the 11<sup>th</sup> (tied) driest July in Baltimore's 154-year record (-3.07"), Dulles was 1.49" below normal while Washington finished the month 0.49" above normal. August flipped a switch and was a very wet month due to the remnants of Hurricane Debby. It was the record wettest August at Martinsburg, WV (11.04"); BWI had a monthly anomaly of +2.13"; IAD recorded a +1.60" anomaly; DCA had a +1.33" anomaly. September returned to dry conditions; BWI's -2.41" anomaly led the way, while DCA followed with -1.62", and IAD was 0.67" below normal. The remnants of Hurricane Helene dumped very heavy rainfall in the southern parts of the area during the last week of the month but the metros and northward did not get much rain from Helene's remnants.

October was probably the driest month of the year with no measurable rainfall between the 2<sup>nd</sup> and the end of the month. Dulles had its 3<sup>rd</sup> driest October on record and BWI had its 8<sup>th</sup> driest; the monthly anomalies were BWI -3.58", IAD -3.52" and DCA -2.18". November continued the dry conditions and by the end of the month, many areas were in severe drought conditions. Precipitation picked up some in December and all 3 stations finished the month with slightly below or near normal. There was very little snowfall in and around the metros. DCA finished the year with 8 inches of snowfall and IAD and BWI finished with 11.3 inches (almost all occurred in January).

**Severe Weather:** The spring featured several strong straight-line wind events. Some of the strongest recorded wind gusts were 71 mph in Wintergreen, VA during March and a 70-mph gust at Wintergreen in April.

May was an unusually busy month for severe weather. Two rare EF1 tornadoes occurred in the mountainous regions of far northwestern MD near Friendsville (Garrett Co.) on May 11<sup>th</sup>. Later in May, thunderstorm winds caused a fatality near Norwood (Nelson Co.), VA. Also, during May, there was an EF-1 Tornado in Rixeyville (Culpeper Co.), VA and EF1 tornado near Cordova (Nelson Co.), VA which injured 5 people. Hail up to 1.25" in diameter fell across eastern WV and western MD near the end of May.

More tornadoes occurred on June 5<sup>th</sup> ([Summary from NWS](#)), and on August 8<sup>th</sup> from the remnants of Hurricane Debby ([Summary from the NWS](#)). Click on the links for summaries of each event from the NWS.

Strong thunderstorms with widespread wind damage around the metros and eastward occurred in July: a 68 mph wind gust was recorded at Saunders Point Light on the 14<sup>th</sup>; widespread thunderstorm wind damage including a 62 mph gust in Hampstead (Carroll Co.), MD (15<sup>th</sup>) and a 61 mph gust in Spotswood (Augusta Co.), VA (17<sup>th</sup>).

From September 25<sup>th</sup>-30<sup>th</sup>, flooding was the severe weather highlight as widespread river and urban flooding occurred across central and western VA, forcing several road closures. The flooding was primarily a result from the remnants of Hurricane Helene. Storm totals of 5-10" were common south and west of Culpepper, VA, with several 11-15" reports in western Albemarle County, VA.

## YEAR 2024 Statistics:

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	Av Max	Av Min	Avg T	Nml T	ΔNml	Max	Min	Total	Normal	ΔNml	Snowfall
National (DCA)	70.2	53.3	61.8 <sup>^</sup>	59.3	+2.5	104 <sup>**</sup> /7-16	16/1-17	37.57	41.82	-4.25	8.0
Baltimore (BWI)	68.8	48.5	58.7	56.2	+2.5	104/7-16	12/1-17	37.00	45.00	-8.00	11.3
Dulles (IAD)	69.5	48.1	58.8 <sup>^</sup>	55.7	+3.1	101 <sup>**</sup> /8-2*	7/1-22	34.27	43.24	-8.97	11.3

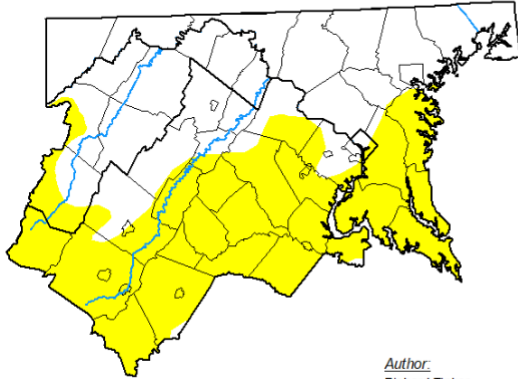
\*Latest of more than one occurrence

\*\*Daily Record

<sup>^</sup>ALL-TIME RECORD HIGH

**U.S. Drought Monitor**  
**Baltimore, MD/**  
**Washington, DC WFO**

**June 11, 2024**  
 (Released Thursday, Jun. 13, 2024)  
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	52.18	47.82	0.00	0.00	0.00	0.00
Last Week 06-04-2024	94.85	5.15	0.00	0.00	0.00	0.00
3 Months Ago 03-12-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	30.93	69.07	32.89	8.96	0.00	0.00
Start of Water Year 09-26-2023	29.91	70.09	39.52	13.18	0.00	0.00
One Year Ago 06-13-2023	0.00	100.00	78.87	0.00	0.00	0.00

**Intensity:**  
 None (White), D0 Abnormally Dry (Yellow), D1 Moderate Drought (Orange), D2 Severe Drought (Dark Orange), D3 Extreme Drought (Red), D4 Exceptional Drought (Dark Red).  
 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>

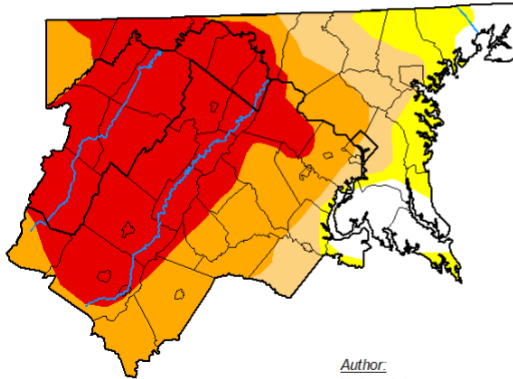
**Author:**  
 Richard Tinker  
 CPC/NOAA/NWS/NCEP



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

**U.S. Drought Monitor**  
**Baltimore, MD/**  
**Washington, DC WFO**

**July 30, 2024**  
 (Released Thursday, Aug. 1, 2024)  
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.33	92.67	83.94	72.16	44.82	0.00
Last Week 07-23-2024	7.37	92.63	83.12	65.96	40.56	0.00
3 Months Ago 04-30-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	30.93	69.07	32.89	8.96	0.00	0.00
Start of Water Year 09-26-2023	29.91	70.09	39.52	13.18	0.00	0.00
One Year Ago 08-01-2023	47.31	52.69	19.95	6.06	0.00	0.00

**Intensity:**  
 None (White), D0 Abnormally Dry (Yellow), D1 Moderate Drought (Orange), D2 Severe Drought (Dark Orange), D3 Extreme Drought (Red), D4 Exceptional Drought (Dark Red).  
 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>

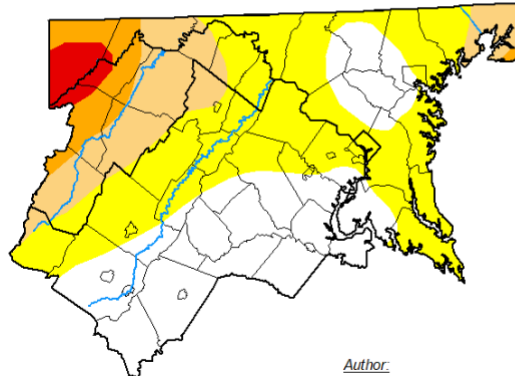
**Author:**  
 Lindsay Johnson  
 National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

**U.S. Drought Monitor**  
**Baltimore, MD/**  
**Washington, DC WFO**

**October 15, 2024**  
 (Released Thursday, Oct. 17, 2024)  
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.14	65.86	23.34	8.67	2.91	0.00
Last Week 10-08-2024	34.14	65.86	26.64	8.48	2.91	0.00
3 Months Ago 07-16-2024	7.32	92.68	89.18	65.96	35.69	0.00
Start of Calendar Year 01-02-2024	30.93	69.07	32.89	8.96	0.00	0.00
Start of Water Year 10-01-2024	35.46	64.54	30.65	13.02	2.98	0.00
One Year Ago 10-17-2023	32.41	67.59	39.31	20.36	0.00	0.00

**Intensity:**  
 None (White), D0 Abnormally Dry (Yellow), D1 Moderate Drought (Orange), D2 Severe Drought (Dark Orange), D3 Extreme Drought (Red), D4 Exceptional Drought (Dark Red).  
 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>

**Author:**  
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[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

A glance at 2024's changing Drought Intensity levels across the local region from **June 11<sup>th</sup>** to **July 30<sup>th</sup>** to **October 15<sup>th</sup>**