## May 2025 Monthly Weather Summary

#### **Temperature Overview**

After a warm April, May cooled down slightly but the average temperature at all sites was at least slightly above normal. This was due mostly to the average low temperatures being a few degrees above normal, with the average high temperatures being less than a degree above normal or in Richmond's case, almost one degree below normal. The month started off with above normal temperatures May 1-19<sup>th</sup>, with a brief cooldown between roughly May 9-12<sup>th</sup>. Thereafter, the weather pattern shifted and below to well below normal average temperatures were recorded May 20-31<sup>st</sup>, with highs in the 60s to lower 70s (average high temperatures for this time of year fall between the upper 70s to lower 80s) and low temperatures in the 50s to lower 60s (average low temperatures for this time of year fall between the upper average temperatures, there were no temperature records (high or low) set during the month of May.

# May 2025 Monthly Weather Summary

#### **Precipitation Overview**

While temperatures did not stand out this month, rainfall did. All climate sites received above average rainfall, with Richmond receiving 6.5" (+2.50" above normal). Though there were a few impressive rain events, no climate site ranked in the top 10 wettest Mays. There were multiple events throughout the month that brought heavy downpours to the area, with dry periods only lasting 3-4 days at most when they did occur. An area of low pressure developed off the SC coast on 5/27 and lifted into eastern NC early on 5/28. This favored increased showers and isolated embedded thunderstorms across the forecast area. Richmond and Wallops were the only long-term climate sites to set any daily rainfall records during this event (and during the entire month) despite the high rainfall totals across the entire forecast area- Richmond's 2.00" on the 28th broke the previous record of 1.38" from 1917, and Wallop's 1.80" on the 28th broke their previous record of 0.69" from 2000.

Doing a quick glance at the Salisbury, Wallops, and Norfolk monthly climate shows that a trace of snowfall was recorded on 5/31. This was a day where hail was observed, and by convention, hail is measured as snowfall. The observers reported that they observed about 90 seconds of pea size to just smaller than penny size hail that day.

The following table on page 3 shows detailed temperature and precipitation statistics for May 2025 at many locations within the Wakefield CWA. On page 4 and 5, a summary for the spring (Mar-May) is included. Page 6 depicts daily average temperature departures at Richmond and Norfolk for May, followed by May precipitation maps (page 7), with daily records set during the month at our 4 main long-term sites on the last page.

#### Tabular Summary of Data for Selected Climate Sites (May):

May 2025 Temperature Summary Data *also on other dates All Normals are 1991-2020																			
	Avg	Avg Max Avg Min		Avg T	emp	Daily Highs						Daily Mins						Remarks	
Site	(°	-)	(°	F)	(°F)		Warmest (°F)			Coldest (°F)			Warmest (°F)			Coldest (°F)			
	Actual	Dep	Actual	Dep	Actual	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep	
Richmond	77.0	-0.8	57.0	1.3	67.0	0.3	91	16th	-1	63	21st	3	68	2nd	-1	45	10th	3	
Norfolk	77.3	-0.1	62.3	3.2	69.8	1.5	91	16th	-1	66	<b>2</b> 7th	7	70	18th	-1	53	26th	6	
Salisbury	74.7	0.3	55.7	2.5	65.2	1.4	88	16th	-2	57	21st	0	67	*17th	0	43	25th	6	
Wallops Island	74.2	1.5	58.6	3.1	66.4	2.3	86	17th	-2	60	21st	2	70	17th	3	48	10th	6	
Elizabeth City	78.8	0.8	61.2	2.8	70.0	1.8	89	16th	-2	65	26th	3	69	*17th	-2	47	24th	3	
Ashland, VA	76.1	-0.4	56.9	2.2	66.5	0.9	87	16th	-2	65	28th	6	68	2nd	0	45	10th	6	
Louisa, VA	77.3	1.3	55.2	3.2	66.3	2.3	87	16th	-3	61	28th	1	66	2nd	0	39	10th	5	
Wakefield, VA	78.4	-0.2	56.5	1.8	67.5	0.9	92	16th	1	63	21st	3	67	3rd	-1	44	10th	5	
Williamsburg, VA	77.1	-0.1	58.6	1.6	67.9	0.8	90	16th	-1	62	21st	1	68	*3rd	-1	48	10th	6	
Edenton, NC	79.1	-0.2	62.8	3.4	71.0	1.6	87	1st	-3	67	27th	3	75	17th	5	50	*24th	6	
			_				-			_								0	
ſ	May 2	2025	Pred	cipita	ation a	& Sn	owfa	all Su	umm	ary I	Data		*also	on othe	er dates	- A	II Norn	nals are	e 1991-2020
	Total	Pre	# Pre	Days	# Pre	Days	Grea	atest	Total	Snow	# Snov	w Days	# Snov	w Days		Grea	atest		Remarks
Site	(in	.)	(≥0.	01")	(≥0.1	0")	ri)	n.)	(iı	1.)	(≥0	.1")	(≥1.	.0")	(ir	1.)	ri)	n.)	
	Actual	Dep	Actual	Dep	Actual	Dep	Act	Date	Act	Dep	Act	Dep	Act	Dep	Daily	Date	Storm	Date	
Richmond	6.50	2.50	14	3	10	3	2.00	<b>28th</b>											
Norfolk	5.35	1.57	13	2	8	1	1.32	21st	т										Hail on 31st
Salisbury	4.20	0.47	14	2	10	3	0.95	21st	т										Hail on 31st
Wallops Island	5.12	1.92	13	2	10	4	1.80	28th	т										Hail on 31st
Elizabeth City	3.24	-0.44	15	4	10	3	0.62	4th											
Ashland, VA	8.43	4.19	14	4	11	4	1.98	13th											
Louisa, VA	7.27	3.30	13	1	10	2	1.84	28th											
Wakefield, VA	7.43	3.28	16	5	12	5	2.05	14th											
Williamsburg, VA	7.23	3.34	13	2	10	3	1.92	13th											
Edenton, NC	4.10	0.38	13	4	8	1	0.88	4th											

\* "Dep"= Departure from the 30-year normals (1991-2020). Temperature departures are shaded orange for 1 F or more warmer than average (dark red for 4 F or greater anomalies) and blue for 1 F or more cooler than average (dark blue for 4 F or more below normal). Similarly, precipitation departures are shaded green for 0.50" or more wetter than average (dark green for 2.00" or more) and tan for 0.50" or more drier than average (dark brown for 2.00" or more drier). Snowfall departures are shaded purple for 1" or more above average and tan for 1" or more below average. \*\*Rankings in Remark section are included for Co-op sites where a complete period of record is of sufficient duration. N/A in Remarks section indicates sites with a shorter period of record, leading to rankings being of less significance

# Spring (Mar-May) 2025 Weather Summary

#### **Temperature & Precipitation Overview**

- Average temperatures for spring 2025 were well above normal, making for quite a warm season overall.
- All long-term climate sites except for SBY (ranked 11th warmest) fell within the top 10 warmest springs on record with rankings as follows: RIC-9<sup>th</sup> warmest, ORF-2nd warmest, and ECG-3rd warmest. Wallops Island, with a substantially shorter period of record ranked as 2<sup>nd</sup> warmest.
- The long-term CO-OP sites located in Ashland, Louisa, Williamsburg, and Edenton all were ranked in the top 5 warmest springs on record. This is all despite a cool end to the spring season and below normal temperatures that closed out May.
- **Precipitation** for spring of 2025 was a mixed bag, with most of Virginia and Maryland experiencing above normal amounts, while extreme southeast Virginia and northeast North Carolina were a bit drier than average. For the long-term climate sites, Richmond and Wallops Island were more than 3.00" wetter than normal, enough to rank as the 9<sup>th</sup> wettest at Wallops since record began there in the 1960s. Meanwhile, Norfolk saw a slight deficit at -1.21" and Elizabeth City, NC recorded almost 3" less than normal. The greatest departure above average was at Wakefield (+4.39"), enough to make this the 6<sup>th</sup> wettest spring (though the reliable period of record only dates back into the 1990s). Elsewhere, among the CO-OP stations, all were wetter than normal except at Edenton, NC where a 1.71" deficit was observed.

#### Tabular Summary of Data for Selected Climate Sites for Spring (Mar/Apr/May):

Spring (Mar-Apr-May) 2025 Temperature Summary Data * also on other dates All Normals are 1991-2020																			
Avg Max Avg Min			Avg T	emp		Daily Highs						Daily Mins					Remarks		
Site	(°F) (		(°	F)	(°F)		Warmest (°F)		(ºF)	Coldest (°F)		(ºF)	Warmest (°F)		Coldest (°F)				
	Actual	Dep	Actual	Dep	Actual	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep	
Richmond	72.0	2.7	49.1	2.6	60.6	2.8	91	5/16	-1	43	3/2	4	68	5/2	-1	23	3/3	1	9th Warmest
Norfolk	72.5	3.3	54.0	3.8	63.3	3.6	91	*5/16	-1	42	3/2	2	70	5/18	-1	27	3/3	0	2nd Warmest
Salisbury	68.2	2.9	45.9	1.7	57.1	2.4	88	5/16	-2	36	3/2	0	67	*5/17	0	17	3/3	-2	
Wallops Island	67.2	3.4	49.2	3.1	58.2	3.2	86	*5/17	-2	38	3/2	1	70	5/17	3	20	3/3	-2	**2nd Warmest
Elizabeth City	73.9	3.9	52.9	3.5	63.4	3.7	90	4/6	-1	45	3/2	2	70	4/4	-1	25	3/3	0	3rd Warmest
Ashland, VA	72.0	2.8	49.7	4.5	60.9	3.7	87	*5/16	-2	49	3/3	10	69	4/4	1	17	3/3	-2	**3rd Warmest
Louisa, VA	72.9	4.9	47.3	4.9	60.1	4.9	87	*5/16	-3	50	3/3	11	68	4/4	2	18	3/3	4	**2nd Warmest
Wakefield, VA	73.6	3.2	48.2	3.0	60.9	3.1	92	5/16	1	44	3/2	4	67	*5/3	-1	19	3/3	0	N/A
Williamsburg, VA	71.8	2.8	50.1	2.4	61.0	2.6	90	5/16	-1	42	3/2	1	68	*5/3	-1	22	3/3	-1	**4th Warmest
Edenton, NC	73.5	2.0	54.2	3.7	63.9	2.9	87	5/1	-3	50	3/3	6	75	5/17	5	26	3/3	0	**3rd Warmest
			_						_										
S	Spring (Mar-A				<b>/lay) 2025 Pr</b>			tatio	n Su	Summary Data			* also on other da			tes All Normals a		rmals a	re 1991-2020
	Tota	l Pre	# Pre	Days	# Pre	Days	Grea	atest	Total	Snow	# Sno	w Days	# Snov	w Days		Grea	atest		Remarks
Site	(ir	ı.)	(≥0.	01")	(≥0.1	0")	ii)	n.)	(ir	ı.)	(≥0	.1")	(≥1.	.0")	(ir	ı.)	(ir	n.)	
	Actual	Dep	Actual	Dep	Actual	Dep	Act	Date	Act	Dep	Act	Dep	Act	Dep	Daily	Date	Storm	Date	
Richmond	14.36	3.18	31	-1	20	0	2.69	3/5	0.0	-1.1									
Norfolk	9.63	-1.21	28	-4	16	-4	1.54	4/7	т	-0.4									
Salisbury	14.00	2.68	31	-3	22	1	2.04	3/16	т	-1.0									
Wallops Island	13.36	3.13	28	-4	21	2	2.17	3/5	т	-0.7									**9th Wettest
Elizabeth City	7.52	-2.91	27	-4	17	-3	1.54	4/7	0.0	N/A									
Ashland, VA	14.07	2 63	26	-4	23	2	1 98	5/13	0.0	-1 8									

\* "Dep"= Departure from the 30-year normals (1991-2020). Temperature departures are shaded orange for 1 F or more warmer than average (dark red for 4 F or greater anomalies) and blue for 1 F or more cooler than average (dark blue for 4 F or more below normal). Similarly, precipitation departures are shaded green for 1.00" or more wetter than average (dark green for 4.00" or more) and tan for 1.00" or more drier than average (dark brown for 4.00" or more drier). Snowfall departures are shaded purple for 1" or more above average and tan for 1" or more below average. \*\*Rankings in Remark section are included for Co-op sites where a complete period of record is of sufficient duration. N/A in Remarks section indicates sites with a shorter period of record, leading to rankings being of less significance

-1.5

-0.4

-0.5

-0.2

13.12 2.07

16.39 4.26

15.90 3.78

9.31 -1.71

Louisa, VA

Wakefield, VA

Edenton, NC

Williamsburg, VA

27

32

34

24

-6

0

2

-2

21

21

22

14

0 1.84

1 1.99

-1 2.05

-6 1.75

5/28

5/14

4/11

3/17

0.0

0.0

0.0

0.0

## Daily Average Temperature Departures at Richmond & Norfolk, VA (May)



Figure 2: Daily Average Temperature Departures at RIC and ORF

### **Regional Precipitation Maps: May 2025**



*Figure 3: Total Precipitation* for the month is shown in the map on the left. *Departure* from the 30-year normals (1991-2020) is shown on the map on the right.

## Daily Records for Long Term Sites (May):

Norfolk, VA Records (Period of Record 152 yrs./1874-2025)	*tie
Record Highs: none set. Daily Snowfall: none set.	
Record Low Maximums: none set.	
Record Lows: none set.	
Record High Minimums: none set.	
Daily Precipitation: none set.	
Richmond, VA Daily Records (Period of Record 129 yrs./1897-2025)	*tie
Record Highs: none set. Daily Snowfall: none set.	
Record Low Maximums: none set.	
Record Lows: none set.	
Record High Minimums: none set.	
Daily Precipitation: 2.00" (28th).	
Salisbury, MD Daily Records (Period of Record 119 yrs./1907-2025)	*tie
Record Highs: none set. Daily Snowfall: none set.	
Record Low Maximums: none set.	
Record Lows: none set.	
Record High Minimums: none set.	
Daily Precipitation: none set.	

Elizabeth City, NC Daily	Records (Period of Record 92 yrs./1934-2025)	*tie
Record Highs: none set.	Daily Snowfall: none set.	
Record Low Maximums: none set.		
Record Lows: none set.		
<b>Record High Minimums: none set.</b>		
Daily Precipitation: none set.		