

August 2025 Massachusetts Precipitation

National Weather Service Offices
Boston/Norton MA, Albany NY, Upton NY

Preliminary Precipitation Data (inches) by County

Precipitation Data through August 2025
Includes CoCoRaHS data
Includes StageIV Data

MA 1-Month Aug 2025

County	Rainfall	Departure	Percent	Normal
Barnstable	1.91	-1.58	55	3.49
Berkshire	3.02	-1.62	65	4.64
Bristol	2.90	-0.90	76	3.80
Dukes	3.07	-0.51	86	3.58
Essex	3.01	-0.41	88	3.42
Franklin	2.48	-1.96	56	4.44
Hampden	3.91	-0.48	89	4.39
Hampshire	3.13	-1.28	71	4.41
Middlesex	3.01	-0.78	79	3.79
Nantucket	1.09	-2.11	34	3.20
Norfolk	2.73	-1.08	72	3.81
Plymouth	2.40	-1.37	64	3.77
Suffolk	2.63	-0.98	73	3.61
Worcester	3.34	-0.85	80	4.19

MA 2-Month Jul 25-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	4.05	-2.23	64	6.28
Berkshire	6.22	-3.05	67	9.27
Bristol	6.10	-1.05	85	7.15
Dukes	5.57	-0.76	88	6.33
Essex	4.87	-2.13	70	7.00
Franklin	4.42	-4.35	50	8.77
Hampden	7.67	-0.96	89	8.63
Hampshire	6.85	-1.87	79	8.72
Middlesex	5.39	-2.12	72	7.51
Nantucket	1.93	-3.80	34	5.73
Norfolk	7.61	0.26	104	7.35
Plymouth	5.96	-1.14	84	7.10

Suffolk	6.18	-0.98	86	7.16
Worcester	6.28	-1.86	77	8.14

MA 3-Month Jun 25-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	5.63	-4.12	58	9.75
Berkshire	9.59	-4.55	68	14.14
Bristol	7.41	-3.76	66	11.17
Dukes	7.41	-2.28	76	9.69
Essex	6.65	-4.55	59	11.20
Franklin	8.58	-4.95	63	13.53
Hampden	10.84	-2.40	82	13.24
Hampshire	10.52	-2.86	79	13.38
Middlesex	7.48	-4.20	64	11.68
Nantucket	2.32	-6.37	27	8.69
Norfolk	9.57	-1.96	83	11.53
Plymouth	7.45	-3.52	68	10.97
Suffolk	7.94	-3.28	71	11.22
Worcester	8.77	-3.67	70	12.44

MA 4-Month May 25-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	10.59	-2.59	80	13.18
Berkshire	16.72	-1.52	92	18.24
Bristol	14.73	0.02	100	14.71
Dukes	13.72	0.55	104	13.17
Essex	13.20	-1.69	89	14.89
Franklin	17.82	0.31	102	17.51
Hampden	19.27	2.16	113	17.11
Hampshire	19.75	2.42	114	17.33
Middlesex	15.00	-0.29	98	15.29
Nantucket	5.31	-6.64	44	11.95
Norfolk	17.50	2.37	116	15.13
Plymouth	15.39	0.82	106	14.57
Suffolk	15.34	0.55	104	14.79
Worcester	17.43	1.37	109	16.06

MA 5-Month Apr 25-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	15.25	-2.17	88	17.42
Berkshire	21.03	-1.12	95	22.15
Bristol	18.31	-1.03	95	19.34
Dukes	17.95	0.48	103	17.47
Essex	17.22	-1.86	90	19.08

Franklin	22.08	0.55	103	21.53
Hampden	23.28	2.04	110	21.24
Hampshire	23.90	2.55	112	21.35
Middlesex	18.95	-0.51	97	19.46
Nantucket	8.78	-7.43	54	16.21
Norfolk	21.28	1.67	109	19.61
Plymouth	19.26	0.09	100	19.17
Suffolk	19.02	-0.11	99	19.13
Worcester	21.92	1.76	109	20.16

MA 6-Month Mar 25-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	19.30	-2.92	87	22.22
Berkshire	24.33	-1.69	94	26.02
Bristol	22.52	-2.08	92	24.60
Dukes	22.26	-0.22	99	22.48
Essex	20.90	-2.82	88	23.72
Franklin	25.88	0.42	102	25.46
Hampden	26.99	1.71	107	25.28
Hampshire	27.61	2.35	109	25.26
Middlesex	22.57	-1.29	95	23.86
Nantucket	11.68	-9.40	55	21.08
Norfolk	25.94	1.54	106	24.40
Plymouth	23.22	-1.30	95	24.52
Suffolk	23.35	-0.50	98	23.85
Worcester	25.87	1.49	106	24.38

MA 7-Month Feb 25-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	22.75	-3.05	88	25.80
Berkshire	27.38	-1.67	94	29.05
Bristol	26.17	-1.97	93	28.14
Dukes	25.60	-0.40	98	26.00
Essex	24.88	-2.22	92	27.10
Franklin	29.42	0.82	103	28.60
Hampden	30.46	2.10	107	28.36
Hampshire	31.07	2.73	110	28.34
Middlesex	26.69	-0.40	99	27.09
Nantucket	14.33	-10.31	58	24.64
Norfolk	29.90	2.16	108	27.74
Plymouth	27.04	-1.12	96	28.16
Suffolk	27.41	0.19	101	27.22
Worcester	29.78	2.24	108	27.54

MA 12-Month Sep 24-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	40.05	-7.69	84	47.74
Berkshire	39.28	-11.52	77	50.80
Bristol	41.48	-9.26	82	50.74
Dukes	40.63	-7.20	85	47.83
Essex	37.16	-10.84	77	48.00
Franklin	40.26	-9.97	80	50.23
Hampden	39.79	-10.00	80	49.79
Hampshire	41.09	-8.67	83	49.76
Middlesex	38.94	-8.89	81	47.83
Nantucket	26.23	-20.14	57	46.37
Norfolk	44.19	-5.41	89	49.60
Plymouth	43.50	-7.50	85	51.00
Suffolk	41.22	-7.35	85	48.57
Worcester	40.93	-7.47	85	48.40

MA 24-Month Sep 23-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	86.71	-8.89	91	95.60
Berkshire	95.03	-6.68	93	101.71
Bristol	102.56	0.95	101	101.61
Dukes	92.21	-3.57	96	95.78
Essex	88.40	-7.72	92	96.12
Franklin	99.73	-0.84	99	100.57
Hampden	101.09	1.40	101	99.69
Hampshire	101.56	1.93	102	99.63
Middlesex	95.03	-0.75	99	95.78
Nantucket	60.25	-32.61	65	92.86
Norfolk	105.25	5.93	106	99.32
Plymouth	101.82	-0.31	100	102.13
Suffolk	94.94	-2.32	98	97.26
Worcester	101.85	4.94	105	96.91

MA 36-Month Sep 22-Aug25

County	Rainfall	Departure	Percent	Normal
Barnstable	141.01	-2.33	98	143.34
Berkshire	153.75	1.24	101	152.51
Bristol	159.42	7.07	105	152.35
Dukes	141.12	-2.49	98	143.61
Essex	147.41	3.29	102	144.12
Franklin	160.00	9.20	106	150.80
Hampden	159.38	9.90	107	149.48
Hampshire	162.14	12.75	109	149.39
Middlesex	156.58	12.97	109	143.61

Nantucket	98.07	-41.16	70	139.23
Norfolk	164.36	15.44	110	148.92
Plymouth	158.14	5.01	103	153.13
Suffolk	151.93	6.10	104	145.83
Worcester	163.85	18.54	113	145.31

How This Report Was Generated

Monthly precipitation totals by County are derived through a blend of observational data and gridded analysis techniques. Precipitation observations from multiple regional networks—including the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS), the National Weather Service Cooperative Observer Program (COOP), and Automated Surface Observing Systems (ASOS)—are first quality-controlled and then interpolated to two separate grids using distinct methodologies:

- Barnes Interpolation, a smoothing technique that accounts for the spatial distribution of observations
- Inverse Distance Weighting (IDW), which estimates values based on proximity to known observations

These two interpolated grids are then combined with NOAA’s Stage IV precipitation analysis, a radar- and gauge-based dataset produced operationally by the National Weather Service. The three grids are averaged to produce a final observed precipitation field.

Using this gridded product, spatial averaging is performed over each County polygon to compute region-specific monthly totals through geographic information system (GIS) techniques.

Monthly precipitation normals (long-term averages) for each County are sourced directly from the NOAA Stage IV climatology dataset.

Note: COOP and ASOS stations are official National Weather Service observation networks. CoCoRaHS is a volunteer-driven network that provides high-resolution, local-scale precipitation reports.