August 2025 Rhode Island Precipitation

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

Preliminary Precipitation Data (inches) by Drought Region

Precipitation Data through August 2025
Includes CoCoRaHS data
Includes StageIV Data

RI 1-Month Aug 2025

Drought Region	Rainfall	Departure	Percent	Normal
Central East	3.28	-0.55	86	3.83
Central West	2.99	-1.06	74	4.05
Eastern	2.97	-0.67	82	3.64
New Shoreham	1.27	-2.06	38	3.33
North East	2.97	-0.99	75	3.96
North West	3.00	-1.20	71	4.20
Southern	2.57	-1.34	66	3.91

RI 2-Month Jul 25-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	6.85	-0.28	96	7.13
Central West	5.93	-1.64	78	7.57
Eastern	5.68	-1.10	84	6.78
New Shoreham	2.22	-3.92	36	6.14
North East	6.98	-0.54	93	7.52
North West	7.22	-0.67	92	7.89
Southern	4.95	-2.19	69	7.14

RI 3-Month Jun 25-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	8.47	-2.76	75	11.23
Central West	7.62	-4.09	65	11.71
Eastern	6.97	-3.56	66	10.53
New Shoreham	3.37	-6.20	35	9.57
North East	9.31	-2.48	79	11.79
North West	9.72	-2.53	79	12.25
Southern	6.09	-4.94	55	11.03

RI 4-Month May 25-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	16.90	2.21	115	14.69
Central West	15.77	0.51	103	15.26
Eastern	15.19	1.28	109	13.91
New Shoreham	9.68	-3.15	75	12.83
North East	17.78	2.44	116	15.34
North West	18.06	2.21	114	15.85
Southern	14.18	-0.37	97	14.55

RI 5-Month Apr 25-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	20.50	1.13	106	19.37
Central West	19.32	-0.50	97	19.82
Eastern	19.00	0.49	103	18.51
New Shoreham	12.47	-4.80	72	17.27
North East	21.65	1.67	108	19.98
North West	22.15	1.66	108	20.49
Southern	17.84	-1.35	93	19.19

RI 6-Month Mar 25-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	25.28	0.81	103	24.47
Central West	24.41	-0.34	99	24.75
Eastern	23.05	-0.75	97	23.80
New Shoreham	15.32	-7.04	69	22.36
North East	26.83	1.99	108	24.84
North West	26.79	1.43	106	25.36
Southern	22.67	-1.73	93	24.40

RI 7-Month Feb 25-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	29.22	1.31	105	27.91
Central West	28.08	-0.01	100	28.09
Eastern	26.79	-0.53	98	27.32
New Shoreham	18.08	-7.73	70	25.81
North East	30.88	2.61	109	28.27
North West	30.54	1.74	106	28.80

Southern	26.43	-1.42	95	27.85

RI 12-Month Sep 24-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	44.46	-5.71	89	50.17
Central West	43.08	-7.23	86	50.31
Eastern	41.60	-7.28	85	48.88
New Shoreham	26.87	-19.89	57	46.76
North East	45.62	-5.18	90	50.80
North West	44.40	-7.08	86	51.48
Southern	41.97	-7.94	84	49.91

RI 24-Month Sep 23-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	117.34	16.88	117	100.46
Central West	119.76	19.02	119	100.74
Eastern	101.74	3.85	104	97.89
New Shoreham	80.78	-12.86	86	93.64
North East	118.82	17.10	117	101.72
North West	118.04	14.96	115	103.08
Southern	109.20	9.25	109	99.95

RI 36-Month Sep 22-Aug25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	179.44	28.81	119	150.63
Central West	182.16	31.11	121	151.05
Eastern	155.94	9.17	106	146.77
New Shoreham	128.79	-11.61	92	140.40
North East	180.18	27.66	118	152.52
North West	181.51	26.95	117	154.56
Southern	166.55	16.69	111	149.86

How This Report Was Generated

Monthly precipitation totals by Drought Region 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 Drought Region polygon to compute region-specific monthly totals through geographic information system (GIS) techniques.

Monthly precipitation normals (long-term averages) for each Drought Region 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.