July 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 July 2025
Includes CoCoRaHS data
Includes StageIV Data

RI 1-Month Jul 2025

Drought Region	Rainfall	Departure	Percent	Normal
Central East	3.57	0.27	108	3.30
Central West	2.94	-0.58	84	3.52
Eastern	2.71	-0.43	86	3.14
New Shoreham	0.95	-1.86	34	2.81
North East	4.01	0.45	113	3.56
North West	4.22	0.53	114	3.69
Southern	2.38	-0.85	74	3.23

RI 2-Month Jun 25-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	5.19	-2.21	70	7.40
Central West	4.63	-3.03	60	7.66
Eastern	4.00	-2.89	58	6.89
New Shoreham	2.10	-4.14	34	6.24
North East	6.34	-1.49	81	7.83
North West	6.72	-1.33	83	8.05
Southern	3.52	-3.60	49	7.12

RI 3-Month May 25-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	13.62	2.76	125	10.86
Central West	12.78	1.57	114	11.21
Eastern	12.22	1.95	119	10.27
New Shoreham	8.41	-1.09	89	9.50
North East	14.81	3.43	130	11.38
North West	15.06	3.41	129	11.65
Southern	11.61	0.97	109	10.64

RI 4-Month Apr 25-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	17.22	1.68	111	15.54
Central West	16.33	0.56	104	15.77
Eastern	16.03	1.16	108	14.87
New Shoreham	11.20	-2.74	80	13.94
North East	18.68	2.66	117	16.02
North West	19.15	2.86	118	16.29
Southern	15.27	-0.01	100	15.28

RI 5-Month Mar 25-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	22.00	1.36	107	20.64
Central West	21.42	0.72	103	20.70
Eastern	20.08	-0.08	100	20.16
New Shoreham	14.05	-4.98	74	19.03
North East	23.86	2.98	114	20.88
North West	23.79	2.63	112	21.16
Southern	20.10	-0.39	98	20.49

RI 6-Month Feb 25-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	25.94	1.86	108	24.08
Central West	25.09	1.05	104	24.04
Eastern	23.82	0.14	101	23.68
New Shoreham	16.81	-5.67	75	22.48
North East	27.91	3.60	115	24.31
North West	27.54	2.94	112	24.60
Southern	23.86	-0.08	100	23.94

RI 7-Month Jan 25-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	27.82	-0.40	99	28.22
Central West	26.94	-1.14	96	28.08
Eastern	25.61	-2.19	92	27.80
New Shoreham	17.89	-8.62	67	26.51
North East	29.86	1.43	105	28.43
North West	29.39	0.65	102	28.74

Southern	25.54	-2.48	91	28.02

RI 12-Month Aug 24-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	45.82	-4.35	91	50.17
Central West	44.54	-5.77	89	50.31
Eastern	42.85	-6.03	88	48.88
New Shoreham	30.76	-16.00	66	46.76
North East	46.60	-4.20	92	50.80
North West	45.55	-5.93	88	51.48
Southern	45.18	-4.73	91	49.91

RI 24-Month Aug 23-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	118.38	17.92	118	100.46
Central West	121.16	20.42	120	100.74
Eastern	103.61	5.72	106	97.89
New Shoreham	84.24	-9.40	90	93.64
North East	120.26	18.54	118	101.72
North West	119.46	16.38	116	103.08
Southern	111.25	11.30	111	99.95

RI 36-Month Aug 22-Jul25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	179.04	28.41	119	150.63
Central West	182.14	31.09	121	151.05
Eastern	155.37	8.60	106	146.77
New Shoreham	129.22	-11.18	92	140.40
North East	180.85	28.33	119	152.52
North West	182.41	27.85	118	154.56
Southern	166.73	16.87	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.