

September 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 September 2025
Includes CoCoRaHS data
Includes StageIV Data

RI 1-Month Sep 2025

Drought Region	Rainfall	Departure	Percent	Normal
Central East	6.34	2.23	154	4.11
Central West	5.44	1.18	128	4.26
Eastern	3.30	-0.47	88	3.77
New Shoreham	1.59	-1.81	47	3.40
North East	4.84	0.74	118	4.10
North West	4.51	0.34	108	4.17
Southern	4.25	0.27	107	3.98

RI 2-Month Aug 25-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	9.63	1.69	121	7.94
Central West	8.46	0.15	102	8.31
Eastern	6.27	-1.14	85	7.41
New Shoreham	2.86	-3.87	42	6.73
North East	7.81	-0.25	97	8.06
North West	7.54	-0.83	90	8.37
Southern	6.83	-1.06	87	7.89

RI 3-Month Jul 25-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	13.20	1.96	117	11.24
Central West	11.40	-0.43	96	11.83
Eastern	8.98	-1.57	85	10.55
New Shoreham	3.81	-5.73	40	9.54
North East	11.82	0.20	102	11.62

North West	11.76	-0.30	98	12.06
Southern	9.21	-1.91	83	11.12

RI 4-Month Jun 25-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	14.82	-0.52	97	15.34
Central West	13.09	-2.88	82	15.97
Eastern	10.27	-4.03	72	14.30
New Shoreham	4.96	-8.01	38	12.97
North East	14.15	-1.74	89	15.89
North West	14.26	-2.16	87	16.42
Southern	10.35	-4.66	69	15.01

RI 5-Month May 25-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	23.25	4.45	124	18.80
Central West	21.24	1.72	109	19.52
Eastern	18.49	0.81	105	17.68
New Shoreham	11.27	-4.96	69	16.23
North East	22.62	3.18	116	19.44
North West	22.60	2.58	113	20.02
Southern	18.44	-0.09	100	18.53

RI 6-Month Apr 25-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	26.85	3.37	114	23.48
Central West	24.79	0.71	103	24.08
Eastern	22.30	0.02	100	22.28
New Shoreham	14.06	-6.61	68	20.67
North East	26.49	2.41	110	24.08
North West	26.69	2.03	108	24.66
Southern	22.10	-1.07	95	23.17

RI 7-Month Mar 25-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	31.63	3.05	111	28.58
Central West	29.88	0.87	103	29.01
Eastern	26.35	-1.22	96	27.57
New Shoreham	16.91	-8.85	66	25.76

North East	31.67	2.73	109	28.94
North West	31.33	1.80	106	29.53
Southern	26.93	-1.45	95	28.38

RI 12-Month Oct 24-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	48.78	-1.39	97	50.17
Central West	46.87	-3.44	93	50.31
Eastern	41.84	-7.04	86	48.88
New Shoreham	27.75	-19.01	59	46.76
North East	48.55	-2.25	96	50.80
North West	47.11	-4.37	92	51.48
Southern	44.30	-5.61	89	49.91

RI 24-Month Oct 23-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	115.60	15.14	115	100.46
Central West	117.03	16.29	116	100.74
Eastern	98.78	0.89	101	97.89
New Shoreham	76.12	-17.52	81	93.64
North East	112.35	10.63	110	101.72
North West	112.33	9.25	109	103.08
Southern	107.35	7.40	107	99.95

RI 36-Month Oct 22-Sep25

Drought Region	Rainfall	Departure	Percent	Normal
Central East	178.19	27.56	118	150.63
Central West	180.04	28.99	119	151.05
Eastern	153.67	6.90	105	146.77
New Shoreham	125.58	-14.82	89	140.40
North East	176.61	24.09	116	152.52
North West	177.47	22.91	115	154.56
Southern	164.39	14.53	110	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.