

RHODE ISLAND DROUGHT MANAGEMENT: Regional Drought Analysis through December 31, 2007

Statewide Current Conditions Nov. 16, 2007	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation 6 months cumulative in Eastern, Southern * New Shoreham regions	#3 Groundwater Below normal for 4 months 8 dry observation wells	#4 Streamflow Below normal for last 5 months	Reservoirs Scituate – 66% Aquidneck Island – 45% Jamestown Cumberland -50% Woonsocket- Pawtucket -
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RHODE ISLAND DROUGHT INDICES AND PHASES Prepared for the Drought Steering Committee Meeting January 10, 2008

Drought Phase	Palmer Drought Index+	Crop Moisture Index*	Precipitation +	Ground Water** +	Streamflow +	Reservoirs**
Normal	-1.0 to -1.99	0.0 to -1.0 Slightly Dry	1 month below normal	1 month below normal	2 consecutive months below normal	Reservoir levels at or near normal for the time of year
Advisory	-2.0 to -2.99	-1.0 to -1.9 Abnormally Dry	2 month cumulative below 65% of normal	At least 2 out of 3 months below normal	3 consecutive months below normal	Small index Reservoirs below normal
Watch	-3.0 to 3.99	-2.0 to -2.9 Excessively Dry	1 of the following criteria met: 3 month cum. < 65% or 6 month cum. < 70% or 12 month cum. < 70%	4-5 consecutive months below normal	At least 4 out of 5 consecutive months below normal	Medium index Reservoirs below normal
Warning	-4.0 and below	> -2.9 Severely Dry	2 out of 3 of the above criteria met: 3 month cum. < 65% and 6 month cum. < 65% or 6 month cum. < 65% and 12 month cum. < 65% or 3 month cum. < 65% and 12 month cum. < 65%	6-7 consecutive months below normal Observation wells recording monthly record lows	At least 6 out of 7 consecutive months below normal	Large index reservoirs below normal
Emergency	-4.0 and below	> -2.9 Severely Dry	Same criteria as Warning And Previous month was Warning or Emergency	>7months below normal Observation wells recording monthly record lows	>7 months below normal	Continuation of previous month's conditions

+ Major Hydrologic Indicators (#1, #2, #3 & #4)

** Local triggers from the water supply system management plans will also be considered in assessing drought phases on a regional basis. The Water Resources Board will review local plans and work with suppliers to coordinate regarding drought phases and to collect, review and report surface reservoir and ground water data.

Normal is defined as the statistical average of the data for the period of record. Percentages for precipitation are relative to normal.

Eastern Region Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation 6 months cumulative Eastern region	#3 Groundwater Below normal for 5 months	#4 Streamflow Below normal for last 5 months	Reservoirs
			1 Month 4.46" 102% 2 Month 7.28" 80% 3 Month 9.76" 76% 6 Month 43.58" 89%	19-RI-TIW 274 - 22-RI-POW 551 - 24-RI-LTW 142 – WATCH (Blank – insufficient info)	No Stream Gage info	Aquidneck Island – 45% Jamestown - Unknown Watson Reservoir

Southern Region Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation 6 months cumulative Southern region	#3 Groundwater Below normal for 4 months 8 dry observation wells	#4 Streamflow Below normal for last 5 months	Reservoirs
			1 Month 4.78" 103% 2 Month 8.45" 87% 3 Month 10.81" 80% 6 Month 17.63" 70%	18-RI-EXW 158 Dry 20-RI-EXW-6 Warning 21-RI-EXW-238 Warning 23-RI-EXW-475 Warning 25-RI-EXW-554 Warning 26-RI-HOW-67 Warning 27-RI-NKW-255 Watch 28-RI-EXW-278 Dry 29-RI-RIW-417 Warning 30-RI-SNW-6 Warning 31-RI-RIW-785 Watch 32-RI-CHW-587 Watch-Oct* 33-RI-CHW-586 Watch-Nov 34-RI-CHW-18 Warning 35-RI-WEW-522 Warning 37-RI-SNW-1198 Warning 39-RI-RIW-600 Warning (* = No data for the month)	08 -01117000 Emergency 09-01117350 Warning 10-01117420 11-01117468 Warning 12-01117500 Warning 13-01117800 Warning 14-01118500 Warning 21-01117430 25-01117370 Warning 26-01118000 28-01116850 (Blank – Insufficient data)	No surface water storage

New Shoreham Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation 6 months cumulative New Shoreham region	#3 Groundwater	#4 Streamflow	Reservoirs
			1 Month 4.78" 103% 2 Month 8.45" 87% 3 Month 10.81" 80% 6 Month 17.63" 70%	New Shoreham 258 New Low	Insufficient data	Insufficient information

Central West Region Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation	#3 Groundwater	#4 Streamflow	Reservoirs
			1 Month 5.56" 120% 2 Month 8.80" 91% 3 Month 11.72" 83% 6 Month 19.55" 75%	13-RI-COW 342 Warning 16-RI-WGW-181 Watch 17-RI-WGW 206 Warning 38-RI-COW-466	17-01115630 18-01115670 19-01115770 20-01115800 27-01115833 (Blank - Insufficient data)	No surface water storage

Central East Region Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation	#3 Groundwater Below normal for 4 months	#4 Streamflow Below normal for last 5 months	Reservoirs
			1 Month 4.63" 112% 2 Month 7.43" 87% 3 Month 9.24" 76% 6 Month 16.83" 74%	9-RI-PRW 48* 11-RI-CRW 439* 14-RI-WCW-59 Warning 15-RI-COW 411 Watch (Blank – Insufficient data)	01-01109403 Warning 06-01116000 Warning 07-01116500 Warning 15-01114000 Emergency	Pawtucket Reservoirs

North East Region Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation	#3 Groundwater	#4 Streamflow	Reservoirs
			1 Month 6.31" 141% 2 Month 9.18" 100% 3 Month 11.60" 87% 6 Month 18.90" 75%	01-RI-NSW 21 Watch 05-RI-CUW 265 Watch 08-RI-UW-84 Warning	02-01111500 Warning 03-01112500 Warning 04-01114500 Warning 16-01113895 23-01113696 (Blank – insufficient data)	Woonsocket Reservoirs

North West Region Current Conditions	#1 Palmer -1.00 to -1.99 Near Normal	Crop Moisture +2.00 to +2.90 Wet	#2 Precipitation	#3 Groundwater	#4 Streamflow	Reservoirs
			1 Month 9.24" 96% 2 Month 8.45" 87% 3 Month 12.65" 87% 6 Month 21.62" 80%	02-RI-BUW 396 03-RI-BUW 187 Emergency 04-RI-BUW 397 06-RI-BUW 395 07-RI-BUW 398 10-RI-FOW-40 Watch 12-RI-FOW 290	05-01115187 Warning 22-01111300 Warning 24-01115098 (Blank – insufficient data)	Scituate Reservoir 66% of capacity