

RHODE ISLAND DROUGHT MANAGEMENT

Regional Drought Analysis through February, 2008

Statewide Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation 3 months above normal	#3 Groundwater – 29 gauges Below Normal 5 months – 2 gauges 6 months – 5 gauges 7 months – 2 gauges 8 months – 15 gauges 9 months - 1 gauge No data – 4 gauges	#4 Streamflow – 17 gauges Normal – 13 gauges Pawtuxet River – Warning Chipuxet River – Emergency Pawcatuck River – Warning Peepatoad Brook – No data	Reservoirs Scituate – 104% Aquidneck Island – 95% Jamestown – 95% Cumberland - 95% Woonsocket - 100% Pawtucket – 102% (up from 65%)
---	---	--	--	--	--	---

RHODE ISLAND DROUGHT INDICES AND PHASES

Prepared for the Drought Steering Committee Meeting
April 3, 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 +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation 6 months cumulative Eastern Region – 82% Up from 62%	#3 Groundwater Below normal for 5 months	#4 Streamflow Below normal for last 5 months	Reservoirs Aquidneck Island - 95% Jamestown – 95%
--	---	--	---	--	--	--

Southern Region Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation 6 months cumulative Southern Region 82% Up from 65%	#3 Groundwater Improvements noted in most wells Well 255 – decreased from “Warning” to “Emergency”	#4 Streamflow 7350 – Chipuxet River – Remains at Emergency 7500 - Pawcatuck River – Improved from Emergency	Reservoirs
---	---	--	--	---	--	-------------------

New Shoreham Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation 6 months cumulative New Shoreham Region – 82% Up from 65%	#3 Groundwater	#4 Streamflow	Reservoirs
--	---	--	--	-----------------------	----------------------	-------------------

Central West Region Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation Central West Region – 92%	#3 Groundwater	#4 Streamflow	Reservoirs
---	---	--	--	-----------------------	----------------------	-------------------

Central East Region Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation Central East Region – 92% Up from 66%	#3 Groundwater Below normal for 5-8 months	#4 Streamflow 6500 - Pawtuxet Remains at Warning	Reservoirs
---	---	--	---	--	---	-------------------

North East Region Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation Northeast Region – 104% Up from 72%	#3 Groundwater	#4 Streamflow	Reservoirs Woonsocket Reservoirs – 100%
---	---	--	---	-----------------------	----------------------	--

North West Region Current Conditions	#1 Palmer +2.00 to +2.99 Unusual Moist Spell	Crop Moisture +1.00 to +1.99 Abnormally Moist	#2 Precipitation Northwest Region – 103% Up from 77%	#3 Groundwater	#4 Streamflow	Reservoirs Scituate Reservoir 104% of capacity
---	---	--	---	-----------------------	----------------------	---