### **DROUGHT MONITORING TASK FORCE**

Drought Status Report July 25, 2006

An unusual number of frontal passages have traversed the Commonwealth since mid-June resulting in significant widespread rainfall events that have virtually eliminated all regional drought impacts. Statewide precipitation for the current water year (beginning October 1, 2005) is in the normal range (99% of long term average) and statewide precipitation since January 1, 2006 is also in the normal range (94% of long term average). The only drought evaluation regions in the Commonwealth that continues to have below normal precipitation are the Middle James (84% of long term average) and the James-York (80% of long term average). Generally precipitation that exceeds 85% of long term average is considered to be in the normal range. Appendix A contains precipitation tables for periods going back to the beginning of the current water year. The long-range monthly climatological outlook calls for equal chances of below average, average, and above average precipitation and temperatures through August of 2006. The long- range seasonal outlook calls for equal chances of below average, average, and above average precipitation and temperatures through October 2006

The latest NOAA drought monitor indicates normal moisture conditions throughout the Commonwealth and is included as Appendix B. Appendix C contains information from the national drought monitor with only Virginia displayed. The NOAA seasonal drought outlook through October 2006 does not indicate the potential for any increase in drought intensity in the Commonwealth. The seasonal drought outlook is included as Appendix D.

Seven day average stream flows in the Commonwealth are currently in the normal range but will decline with extended periods of below normal precipitation. Ground water levels are normal or above normal in 15 of the 19 real-time drought monitoring wells across the Commonwealth. The remaining 4 wells are located in the Piedmont physiographic province and are below normal ground water levels. Levels of large reservoirs such as Lake Moomaw, Smith Mountain Lake, Kerr Reservoir, and Philpott Reservoir are normal to above normal.

The Virginia Department of Health has not reported any impacts to public water supplies

The Department of Game and Inland Fisheries has not reported any impacts to public boat ramps or DGIF lakes.

While recent precipitation has mitigated drought impacts in most areas of Virginia the Virginia Drought Monitoring Task Force will continue to monitor moisture conditions throughout the Commonwealth. The monthly drought reports will be suspended until drought impacts return.

Detailed reports from the State Climatologist and the Virginia Department of Agriculture and Consumer Services follow.

### **Report of the State Climatologist**

With the Bermuda High exerting less control than is generally expected during this time of the year, Virginia has experienced an unusually large number of frontal passages since mid-June. Though generally weak, they have helped to initiate widespread thunderstorm activity throughout this period. In mid-July, tropical storm Beryl helped import additional tropical moisture into the Commonwealth.

These rains, particularly those in the latter part of June, have erased post-March precipitation deficits throughout the Commonwealth. An extremely dry March still causes minor year-to-date deficits to show up in almost all areas.

It is important to note that, even in regions which show substantial precipitation gains for the month of July, there are some imbedded local areas which have received notably less than the regional average. Overall, however, the rainfall has proven to be much more consistent and widespread than would have been expected for a normal summer in Virginia.

### Virginia Department of Agriculture and Consumer Services

### Overview

The week ending July 16, 2006, was very warm and humid throughout the Commonwealth. Soil moisture continues to remain satisfactory. The abundance of rain has many farmers concerned that several insects and diseases will begin infecting crops; consequently, scouting crops was a large activity during the week. Other activities this week included spraying soybeans, bush hogging, doing repairs around the farm, and spraying sweet corn.

For the week ending July 16, 2006, topsoil moisture was adequate or in surplus in 92% of fields, which was an improvement from 48% from a month ago for the week ending June 18, 2006.

#### Crop Conditions

The peanut crop looks good with most areas having rain, which creates vine growth. Peanuts normally do not need excess rain fall, but do need rains during the pegging stages to soften the ground so the pegs can go into the ground properly. The normal time for pegging is from now until the beginning of August.

Corn is reported to be doing well across the state and many vegetable crops are reported to be strong also. Wheat, potato, and tomato yields are doing well. Tobacco farmers are continuing topping and the crop as a whole is looking excellent. The planting of soybeans is coming to a close as rain showers hindered some double-crop planting.

#### Livestock Conditions

Producers in some areas in western Virginia are starting to sell trailer load lots of grazing cattle, as pasture is still short. Producers are also selling fall calves, which is earlier than usual. In the Livestock Marketing Services officially graded sales, more than 55% of the calves weigh less than 600 pounds. Prices are declining as the current and futures markets both are lower. However, a bigger negative impact is likely, due to the higher fuel cost to move Virginia cattle to the mid-west feedlots and also the higher temperatures increase the stress and health of cattle being transported long distances.

# **APPENDIX A**

### Precipitation departures by Drought Evaluation Region.

### PRELIMINARY PRECIPITATION SUMMARY

Prepared: 7/24/06

	DROUGHT		JUL 1, 2006	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	4.33	3.32	1.01	130%
2	New River	2.87	2.81	0.06	102%
3	Roanoke	4.19	3.26	0.93	129%
4	Upper James	4.33	3.00	1.33	144%
5	Middle James	3.52	3.27	0.25	108%
6	Shenandoah	3.37	2.79	0.58	121%
7	Northern Virginia	2.59	2.79	-0.20	93%
8	Northern Piedmont	2.89	3.26	-0.38	88%
9	Chowan	7.22	3.35	3.87	216%
10	Northern Coastal Plain	2.31	3.30	-1.00	70%
11	York-James	2.47	3.78	-1.31	65%
12	Southeast Virginia	2.66	3.76	-1.10	71%
13	Eastern Shore	3.23	2.97	0.26	109%
	Statewide	3.81	3.22	0.59	118%

	DROUGHT		JUN 1, 2006	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	10.02	7.46	2.56	134%
2	New River	9.48	6.66	2.82	142%
3	Roanoke	11.12	7.15	3.98	156%
4	Upper James	11.03	6.71	4.33	164%
5	Middle James	9.92	6.78	3.14	146%
6	Shenandoah	9.93	6.49	3.44	153%
7	Northern Virginia	11.67	6.66	5.01	175%
8	Northern Piedmont	8.68	7.27	1.42	119%
9	Chowan	14.22	7.00	7.22	203%
10	Northern Coastal Plain	9.32	6.86	2.46	136%
11	York-James	7.99	7.19	0.79	111%
12	Southeast Virginia	12.75	7.37	5.38	173%
13	Eastern Shore	11.25	5.94	5.30	189%
	Statewide	10.59	7.01	3.58	151%

1Big Sandy13.5412.291.261102New River12.0210.871.151113Roanoke13.1911.481.711154Upper James12.5110.991.521145Middle James12.3111.021.291126Shenandoah11.5910.341.251127Northern Virginia14.0911.003.091288Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100		DROUGHT		MAY 1, 2006	- JUL 23, 2006	
2New River12.0210.871.151113Roanoke13.1911.481.711154Upper James12.5110.991.521145Middle James12.3111.021.291126Shenandoah11.5910.341.251127Northern Virginia14.0911.003.091288Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100		REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
3 Roanoke 13.19 11.48 1.71 115   4 Upper James 12.51 10.99 1.52 114   5 Middle James 12.31 11.02 1.29 112   6 Shenandoah 11.59 10.34 1.25 112   7 Northern Virginia 14.09 11.00 3.09 128   8 Northern Piedmont 11.11 11.49 -0.38 97   9 Chowan 17.44 11.09 6.35 157   10 Northern Coastal Plain 12.32 11.02 1.30 112   11 York-James 11.42 11.46 -0.04 100	1	Big Sandy	13.54	12.29	1.26	110%
4Upper James12.5110.991.521145Middle James12.3111.021.291126Shenandoah11.5910.341.251127Northern Virginia14.0911.003.091288Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	2	New River	12.02	10.87	1.15	111%
5Middle James12.3111.021.291126Shenandoah11.5910.341.251127Northern Virginia14.0911.003.091288Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	3	Roanoke	13.19	11.48	1.71	115%
6Shenandoah11.5910.341.251127Northern Virginia14.0911.003.091288Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	4	Upper James	12.51	10.99	1.52	114%
7Northern Virginia14.0911.003.091288Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	5	Middle James	12.31	11.02	1.29	112%
8Northern Piedmont11.1111.49-0.38979Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	6	Shenandoah	11.59	10.34	1.25	112%
9Chowan17.4411.096.3515710Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	7	Northern Virginia	14.09	11.00	3.09	128%
10Northern Coastal Plain12.3211.021.3011211York-James11.4211.46-0.04100	8	Northern Piedmont	11.11	11.49	-0.38	97%
11 York-James 11.42 11.46 -0.04 100	9	Chowan	17.44	11.09	6.35	157%
	10	Northern Coastal Plain	12.32	11.02	1.30	112%
	11	York-James	11.42	11.46	-0.04	100%
12 Southeast Virginia 16.23 11.23 5.00 145	12	Southeast Virginia	16.23	11.23	5.00	145%
13 Eastern Shore 13.75 9.46 4.29 145	13	Eastern Shore	13.75	9.46	4.29	145%
Statewide 13.12 11.27 1.85 116		Statewide	13.12	11.27	1.85	116%

	DROUGHT		APR 1, 2006	- JUL 23, 2006	
_	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	19.91	16.04	3.86	124%
2	New River	15.88	14.42	1.46	110%
3	Roanoke	16.06	15.29	0.78	105%
4	Upper James	16.07	14.39	1.68	112%
5	Middle James	15.17	14.37	0.81	106%
6	Shenandoah	14.14	13.26	0.88	107%
7	Northern Virginia	18.20	14.30	3.90	127%
8	Northern Piedmont	15.08	14.77	0.31	102%
9	Chowan	21.47	14.51	6.96	148%
10	Northern Coastal Plain	17.06	14.11	2.95	121%
11	York-James	15.05	14.76	0.29	102%
12	Southeast Virginia	20.03	14.48	5.55	138%
13	Eastern Shore	17.75	12.38	5.37	143%
	Statewide	16.90	14.69	2.21	115%

	DROUGHT		MAR 1, 2006	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	22.14	20.29	1.85	109%
2	New River	16.80	18.09	-1.30	93%
3	Roanoke	16.68	19.55	-2.87	85%
4	Upper James	16.93	18.18	-1.25	93%
5	Middle James	15.57	18.42	-2.86	84%
6	Shenandoah	14.54	16.45	-1.91	88%
7	Northern Virginia	18.66	17.95	0.71	104%
8	Northern Piedmont	15.46	18.58	-3.13	83%
9	Chowan	21.84	18.88	2.96	116%
10	Northern Coastal Plain	17.58	18.39	-0.81	96%
11	York-James	15.49	19.44	-3.95	80%
12	Southeast Virginia	20.48	18.68	1.80	110%
13	Eastern Shore	18.18	16.69	1.49	109%
	Statewide	17.64	18.73	-1.09	94%

	DROUGHT		FEB 1, 2006	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	24.03	23.87	0.16	101%
2	New River	18.10	21.03	-2.93	86%
3	Roanoke	18.25	22.86	-4.61	80%
4	Upper James	18.15	21.03	-2.88	86%
5	Middle James	17.27	21.55	-4.28	80%
6	Shenandoah	17.13	18.86	-1.73	91%
7	Northern Virginia	21.13	20.62	0.51	102%
8	Northern Piedmont	17.32	21.55	-4.23	80%
9	Chowan	23.16	22.05	1.11	105%
10	Northern Coastal Plain	19.40	21.53	-2.13	90%
11	York-James	16.44	22.97	-6.53	72%
12	Southeast Virginia	21.58	22.18	-0.60	97%
13	Eastern Shore	19.15	19.88	-0.73	96%
	Statewide	19.28	21.86	-2.58	88%

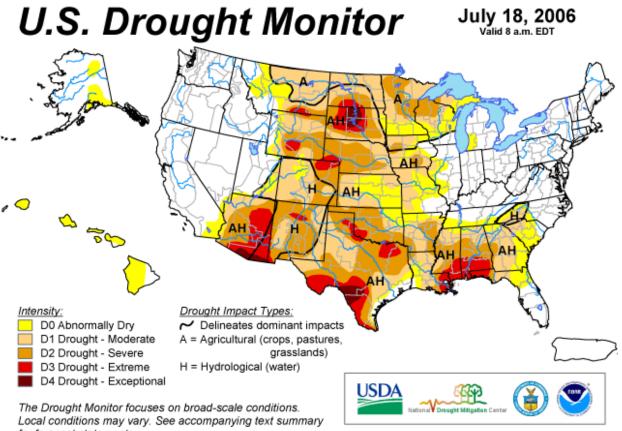
	DROUGHT		JAN 1, 2006	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	27.29	27.60	-0.31	99%
2	New River	21.17	24.24	-3.07	87%
3	Roanoke	21.23	26.78	-5.55	79%
4	Upper James	21.27	24.30	-3.04	87%
5	Middle James	20.18	25.21	-5.03	80%
6	Shenandoah	19.65	21.72	-2.07	90%
7	Northern Virginia	23.95	23.90	0.05	100%
8	Northern Piedmont	19.90	25.07	-5.17	79%
9	Chowan	25.50	26.16	-0.66	97%
10	Northern Coastal Plain	22.56	25.28	-2.72	89%
11	York-James	20.52	27.10	-6.58	76%
12	Southeast Virginia	24.95	26.34	-1.40	95%
13	Eastern Shore	21.84	23.44	-1.60	93%
	Statewide	22.33	25.50	-3.17	88%

	DROUGHT		DEC 1, 2005	- JUL 23, 2006	
_	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	30.62	31.24	-0.63	98%
2	New River	23.57	26.94	-3.38	87%
3	Roanoke	24.80	30.03	-5.23	83%
4	Upper James	23.86	27.25	-3.39	88%
5	Middle James	24.31	28.38	-4.07	86%
6	Shenandoah	21.22	24.31	-3.09	87%
7	Northern Virginia	26.57	26.99	-0.42	98%
8	Northern Piedmont	23.04	28.35	-5.31	81%
9	Chowan	31.18	29.18	2.00	107%
10	Northern Coastal Plain	26.93	28.56	-1.63	94%
11	York-James	24.61	30.49	-5.88	81%
12	Southeast Virginia	29.00	29.52	-0.52	98%
13	Eastern Shore	25.75	26.68	-0.93	97%
	Statewide	25.80	28.62	-2.82	90%

	DROUGHT		NOV 1, 2005	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	33.58	34.53	-0.95	97%
2	New River	27.30	29.98	-2.68	91%
3	Roanoke	28.74	33.39	-4.65	86%
4	Upper James	28.97	30.61	-1.64	95%
5	Middle James	27.77	31.89	-4.12	87%
6	Shenandoah	25.92	27.35	-1.43	95%
7	Northern Virginia	29.50	30.40	-0.90	97%
8	Northern Piedmont	26.72	32.15	-5.42	83%
9	Chowan	34.77	32.30	2.48	108%
10	Northern Coastal Plain	30.46	31.69	-1.23	96%
11	York-James	27.76	33.86	-6.10	82%
12	Southeast Virginia	32.79	32.59	0.20	101%
13	Eastern Shore	28.33	29.63	-1.30	96%
	Statewide	29.40	31.85	-2.45	92%

	DROUGHT		OCT 1, 2005	- JUL 23, 2006	
	REGION	OBSERVED	NORMAL	DEPARTURE	% OF NORM.
1	Big Sandy	35.64	37.41	-1.78	95%
2	New River	31.32	33.15	-1.83	94%
3	Roanoke	35.01	37.10	-2.10	94%
4	Upper James	33.96	33.86	0.10	100%
5	Middle James	34.21	35.73	-1.52	96%
6	Shenandoah	30.97	30.54	0.43	101%
7	Northern Virginia	38.14	33.88	4.26	113%
8	Northern Piedmont	35.07	36.14	-1.07	97%
9	Chowan	39.24	35.88	3.37	109%
10	Northern Coastal Plain	37.27	35.20	2.07	106%
11	York-James	34.26	37.39	-3.13	92%
12	Southeast Virginia	39.46	36.25	3.21	109%
13	Eastern Shore	34.27	32.84	1.43	104%
	Statewide	34.87	35.35	-0.48	99%

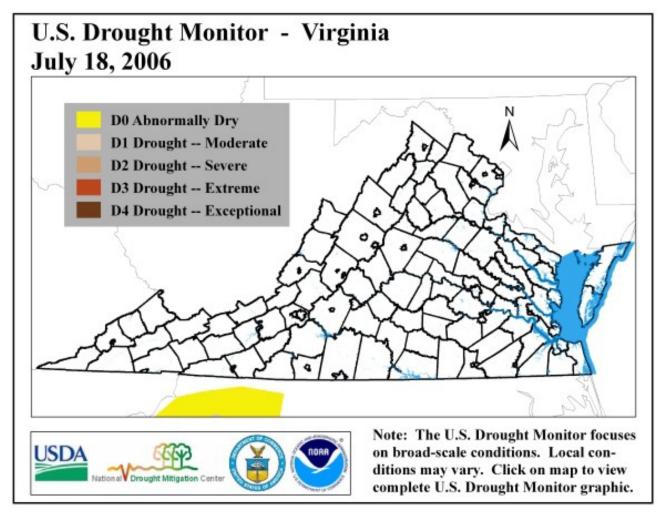
# **APPENDIX B**



for forecast statements. http://drought.unl.edu/dm

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# **APPENDIX C**



# **APPENDIX D**

