

Chester County Water Resources Authority

Weekly Summary of Hydrologic Conditions – Week Ending 11/13/09

PRECIPITATION

Date	24-Hr Precip Forecast	24-Hr Forecast, inches	Year to Date Precip, inches	Year to Date Departure	365 Days Precip, inches	365 Days Departure
10/23/09	90%	1.58	39.80	2.70	50.40	4.90
10/30/09	70%	0.23	43.40	5.60	51.70	6.20
11/06/09	0%	0.00	43.70	5.10	51.90	6.40
11/13/09	100%	0.33	44.10	4.50	52.10	6.60

GROUNDWATER AND RESERVOIR LEVELS

Date	Well 10	Well 10, median	Chambers Lake level, elevation	Chambers Lake capacity, Mgals	Chambers Lake capacity, %	PADEP Drought Status
10/23/09	12.63	14.34	580.10	386.0	100%	Normal
10/30/09	10.20	14.37	580.29	392.2	102%	Normal
11/06/09	10.92	14.27	578.00	338.9	89%	Normal
11/13/09	11.51	14.21	577.87	335.00	87%	Normal

STREAM FLOWS









Date	Schuylkill River 01472000 Q _{7,10} 204.9 cfs	French Creek 01472157 8.8 cfs	East Valley Creek 01473169 10.7 cfs	Crum Creek 01475850 2.9 cfs	Chester Creek 01477000 13.08 cfs	Red Clay 01479820 3.0 cfs	White Clay Strickersville 01478245 n/a	White Clay Avondale 01478120 n/a	Elk Creek Forestville 01494850 n/a
10/23/09	1410	58	24	17	63	38	50	8.8	9.4
median	712	33	20	14	40	27	35		
10/30/09	5400	132	46	32	112	54	97	23	14
median	825	34	20	12	43	25	45		
11/06/09	1840	77	34	24	83	45	68	17	12
median	1110	46	21	14	46	26	48		
11/13/09	1310	68	29	24	92	50	77	11	13
median	974	46	21	12	49	30	44		

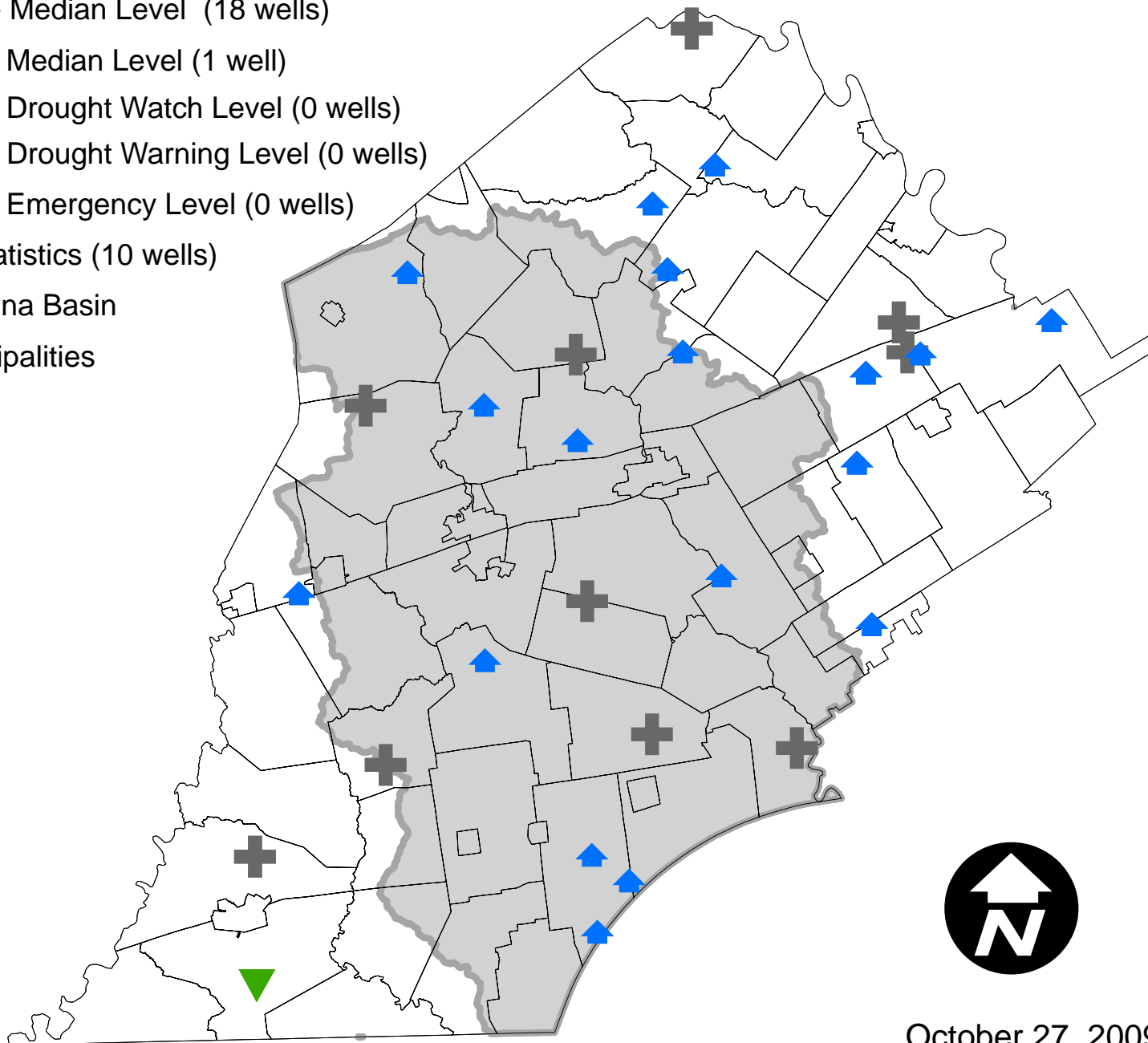
STREAM FLOWS – BRANDYWINE

Date	Honey Brook 01480300 Q _{7,10} 3.5 cfs	Birch Run 01480400 n/a	Coatesville 01480500 8.3 cfs	Modena 01480617 17.5 cfs	Broad Run 01480638 n/a	Below Marsh Creek 01480685 0.76 cfs	near D'Town 01480700 13.4 cfs	below D'Town 01480870 28.9 cfs	Chadds Ford 01481000 73 cfs
10/23/09	27	7.1	40	56	8.8	59	111	136	323
median	10	3.1	27	41	7.5	13	39	61	193
10/30/09	31	14	73	102	20	67	158	251	677
median	12	3.0	32	40	8.8	13	43	67	181
11/06/09	23	9.4	51	74	12	59	118	175	438
median	14	2.8	32	52	6.5	14	56	79	251
11/13/09	21	2.0	49	67	11	56	116	161	402
median	15	2.3	34	48	12	15	51	80	235

Chester County Observation Wells Status - October 2009

Measured October 20, 2009

-  Above Median Level (18 wells)
-  Below Median Level (1 well)
-  Below Drought Watch Level (0 wells)
-  Below Drought Warning Level (0 wells)
-  Below Emergency Level (0 wells)
-  No Statistics (10 wells)
-  Christina Basin
-  Municipalities



October 27, 2009

CHESTER COUNTY OBSERVATION WELL NETWORK - REPORT FOR OCTOBER 2009

Levels Indicated are Depth to Water Below Land Surface in Feet

WELL NO.	MUNICIPAL LOCATION	CURRENT MONTH		NET CHANGES		REFERENCE DATA to DETERMINE STATUS			
		DEPTH TO WATER (feet)	DROUGHT STATUS	FROM ONE MONTH AGO (1)	FROM ONE YEAR AGO (1)	DROUGHT EMERGENCY > 95%	DROUGHT WARNING > 90%	DROUGHT WATCH > 75%	BELOW MEDIAN 50%
CB-2	Honey Brook	8.25	Above Median	0.00	-2.64	12.89	12.42	11.23	10.24
CB-10	W. Marlborough	12.50	Above Median	-0.45	-2.09	15.55	15.39	15.10	14.44
12	W. Bradford	36.59	Above Median	0.20	-1.35	38.50	38.50	38.50	37.30
CB-38	New Garden	7.27	Above Median	0.71	-4.68	13.86	13.52	12.35	11.24
89	E. Whiteland	142.92	N/A	0.72	-1.01	Drought-trigger levels not determined			
210	Tredyffrin	20.42	Above Median	1.28	-3.50	26.24	25.99	25.10	23.83
254	E. Nottingham	23.85	Below Median	-0.03	-1.71	28.04	27.12	24.84	22.17
1201	W. Sadsbury	5.00	Above Median	-0.21	-1.14	7.08	7.05	6.65	6.22
CB-1229	Upper Uwchlan	36.21	Above Median	1.17	-4.02	42.26	41.69	40.87	39.86
CB-1247	W. Vincent	27.65	Above Median	-0.25	-1.95	33.96	33.89	32.47	31.30
1387	Thornbury	33.44	Above Median	0.21	-2.50	38.50	37.58	36.25	35.39
1571	E. Vincent	6.15	Above Median	-0.18	-2.55	11.11	10.82	10.51	9.95
1921	New Garden	42.26	Above Median	-0.41	-3.70	49.91	48.80	46.35	43.84
2273	W. Brandywine	-1.01	Above Median	-0.22	-3.81	4.29	3.96	2.65	1.29
2313	E. Whiteland	9.78	Above Median	-0.22	-4.02	15.68	14.73	12.57	11.22
2328	E. Nantmeal	1.22	Above Median	-0.05	-2.28	5.47	5.38	4.50	3.37
2456	E. Brandywine	18.65 *	Above Median	-0.07	-1.07	20.69	20.61	20.29	19.99
2457	E. Goshen	19.35	Above Median	-0.08	-3.29	23.17	22.96	22.60	22.09
2561	Charlestown	93.42	N/A	0.32	1.83	Drought-trigger levels not determined			
2584	E. Marlborough	19.40	N/A	-0.22	-3.08	Drought-trigger levels not determined			
2663	New Garden	9.69	Above Median	-0.18	-1.31	11.03	10.95	10.82	10.60
3289	Tredyffrin	22.04	Above Median	0.37	-2.46	30.95	30.32	26.06	24.51
5422	Londonderry	18.67	N/A	0.51	-3.48	Drought-trigger levels not determined			
6513	N. Coventry	14.64	N/A	-0.08	-2.62	Drought-trigger levels not determined			
6516	Pennsbury	0.38	N/A	0.00	-3.23	Drought-trigger levels not determined			
6517	W. Caln	62.85	N/A	0.22	-1.84	Drought-trigger levels not determined			
6518	Lower Oxford	21.25	N/A	1.21	-2.17	Drought-trigger levels not determined			
7007	Wallace	28.37 ^N	N/A	1.41	-5.32	Drought-trigger levels not determined			
7269	Newlin	8.86 ^N	N/A	-0.13	-0.97	Drought-trigger levels not determined			
MEAN CHANGES OF ALL WELLS				0.20	-2.38				

Wells were measured on October 20, 2009

CB = wells monitored for the Christina Basin Drought Management Plan

NR = no reading available

(1)"NET CHANGES": A (-) negative number indicates a decrease in the depth from the land surface to the water level in the well, or the level of water in the well has risen compared to the previous period.

* = a new Minimum Depth to water in the well for this month

** = new Maximum Depth to water in the well for this month

*** = well was dry at time of observation

^N = Not enough data to determine statistics

Wells CH 2273, CH 2328 and CH 6516 can have ground water flowing above the land surface (known as an artesian well); a (-) negative number under "DEPTH TO WATER" indicates water flowing above the land surface.

Reference Data Percentiles shown were revised as of September 1, 2007 to reflect updated statistical analysis performed by the U.S. Geological Survey (USGS Data Series 292, 2007).

SUMMARY

Number of wells below Median Level = 1 (0 of these are also below watch, warning or emergency levels)
 Number of wells below Drought Watch Level = 0 (0 of these are also below warning or emergency levels)
 Number of wells below Drought Warning Level = 0 (0 of these are also below emergency levels)
 Number of wells below Drought Emergency Level = 0

19 of the 29 wells have statistics

For additional information contact the Chester County Water Resources Authority at (610)344-5400.

**CHESTER COUNTY WATER RESOURCES AUTHORITY VOLUNTEER RAINFALL OBSERVER NETWORK
MONTHLY PRECIPITATION IN INCHES AS REPORTED FOR THE MONTH OF SEPTEMBER 2009**

I.D. = Insufficient Data		N.R. = No Report		NOTE: Monthly averages are reported only when there is 5 years or more data					
NO.	MUNI. LOCATION	WATERSHED	START	PRECIPITATION	AVG. FOR MONTH	YTD 2009	YTD 2008	YTD 2007	AVG.YTD
12	West Bradford Twp.	West Branch Brandywine	5/79	4.29	4.94	35.45	32.20	33.34	33.27
20	East Coventry Twp.	Schuylkill River	5/79	4.98	4.78	37.90	40.02	33.40	37.09
21	New Garden Twp.	Red Clay Creek	5/79	4.85	5.31	37.53	31.51	30.94	34.78
29	Penn Twp.	White Clay Creek	11/94	4.56	5.93	38.06	32.86	29.41	37.01
45	West Brandywine Twp.	West Branch Brandywine	6/79	3.99	4.70	35.06	32.49	33.02	34.66
50	West Chester Boro.	East Branch Brandywine	8/79	4.27	5.32	35.60	33.56	34.10	37.19
57	Honey Brook Twp.	East Branch Brandywine	11/81	2.35	4.31	ID	34.71	ID	32.38
58	Kennett Twp.	Main Stem Brandywine	1/82	5.06	5.44	41.65	ID	35.02	38.13
70	East Nottingham Twp.	Octoraro Creek	1/85	6.15	5.46	39.93	33.56	ID	34.75
76	Uwchlan Twp.	East Branch Brandywine	7/85	5.01	5.20	44.46	35.05	35.80	37.13
78	Willistown Twp.	Crum Creek	1/86	4.87	5.30	37.90	36.43	36.00	38.04
79	West Pikeland Twp.	Pickering Creek	5/89	5.02	5.37	42.04	36.58	33.93	36.12
83	London Britain Twp.	White Clay Creek	8/89	5.78	5.59	39.88	33.89	31.25	39.30
84	Westtown Twp.	Main Stem Brandywine	8/89	4.49	5.45	36.27	33.14	36.38	36.99
85	East Goshen Twp.	Ridley Creek	2/90	4.41	5.10	ID	42.82	36.80	33.42
92	West Caln Twp.	West Branch Brandywine	4/97	4.25	5.05	32.48	30.55	ID	36.00
103	Wallace Twp.	East Branch Brandywine	1/98	4.20	5.45	41.43	36.86	38.70	38.47
104	Elverson Boro.	French Creek	9/99	4.28	5.37	45.01	40.73	35.92	38.67
105	Upper Uwchlan Twp.	East Branch Brandywine	5/05	4.26	ID	38.93	33.03	33.82	ID
COUNTYWIDE AVERAGE				4.58	5.26	38.80	34.95	34.12	36.31
NATIONAL WEATHER SERVICE/NATIONAL CLIMATIC DATA CENTER 30 YEAR NORMALS (1971-2000)									
Chadds Ford (Delaware County)					5.11				36.78
Coatesville 2 W					4.55				37.69
Devault 1W					4.26				33.91
Glenmoore					4.42				37.43
Honey Brook 1S					4.24				33.98
Octorara Lake					4.79				34.66
Phoenixville 1E					4.32				33.68
West Chester 1W					4.75				36.67
AVERAGE					4.56				35.60

Date Prepared: 10/27/2009

For additional information please call the Chester County Water Resources Authority at (610) 344-5400

Note: Please be aware that these data are collected by our network volunteers. Our rainfall observation network is maintained to collect precipitation data that provide a relative index of rainfall across Chester County, and to provide early warning information during severe weather even Thus, the data have not been scientifically or statistically validated