

Chester County Water Resources Authority

Weekly Summary of Hydrologic Conditions – Period Ending 05/11/2012

PRECIPITATION (Average Annual Precipitation for Chester County according to NOAA Historic Data is 45.53 inches)

Date	24-Hr Precip Forecast	24-Hr Forecast, inches	Year to Date Precip, inches	Year to Date Departure	90/365 Days Precip, inches	90/365 Days Departure
04/20/12	70%	0.04	6.10	-6.80	4.30/52.20	-6.30/6.80
04/27/12	60%	0.04	8.60	-5.10	5.80/54.10	-4.90/8.70
05/04/12	60%	0.10	9.20	-5.40	6.40/53.50	-4.50/8.10
05/11/12	4%	0.00	10.20	-5.30	7.20/54.40	-3.90/9.00

GROUNDWATER AND RESERVOIR LEVELS

Date	Well 10	Well 10, median	Chambers Lake level, elevation	Chambers Lake capacity, Mgals	Chambers Lake capacity, %	PADEP Drought Status
04/20/12	11.91	11.28	579.91	380.8	100%	Normal
04/27/12	11.59	11.39	580.08	386.0	100%	Normal
05/04/12	11.85	12.10	580.11	386.0	100%	Normal
05/11/12	12.04	11.54	580.16	387.5	101%	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
04/20/12	674	43	20	12	55	28	51	10	6.6
median	2,230	94	34	24	92	38	91	18	14
04/27/12	1,040	68	25	15	73	31	64	12	8.4
median	2,100	100	34	23	91	36	84	15	12
05/04/12	1,230	66	24	14	62	29	59	11	7.8
median	2,080	84	32	20	89	35	82	23	19
05/11/12	1,970	51	22	13	67	28	53	11	6.6
median	1,780	85	31	21	80	37	69	14	10

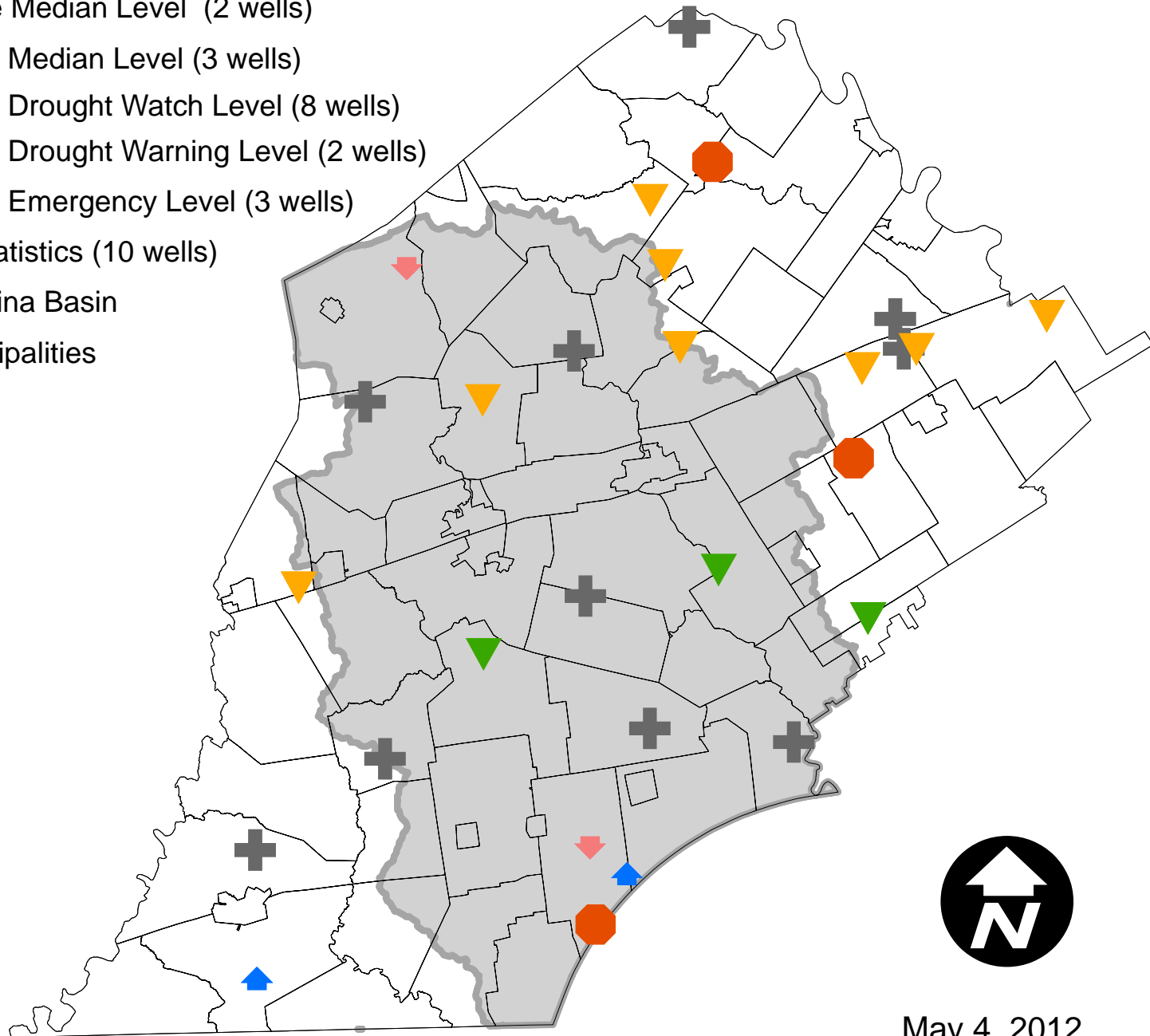
STREAM FLOWS – BRANDYWINE

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
04/20/12	13	4.1	35	48	5.9	7.4	41	70	245
median	21	6.9	57	80	13	36	90	150	450
04/27/12	16	5.6	49	57	7.4	27	70	114	323
median	21	7.9	62	86	12	31	98	151	450
05/04/12	9.6	4.9	49	56	5.9	21	62	91	303
median	20	7.0	64	80	12	31	87	135	468
05/11/12	5.2	5.2	44	54	5.9	16	57	76	285
median	19	5.3	56	76	9.4	22	85	144	465

Chester County Observation Wells Status - April 2012

Measured April 19 & 20, 2012

-  Above Median Level (2 wells)
-  Below Median Level (3 wells)
-  Below Drought Watch Level (8 wells)
-  Below Drought Warning Level (2 wells)
-  Below Emergency Level (3 wells)
-  No Statistics (10 wells)
-  Christina Basin
-  Municipalities



May 4, 2012

CHESTER COUNTY OBSERVATION WELL NETWORK - REPORT FOR APRIL 2012

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	9.65	Warning	0.67	4.60	9.89	9.39	8.52	8.01
CB-10	W. Marlborough	11.89	Below Median	0.97	2.03	14.05	13.40	12.38	11.58
12	W. Bradford	35.33	Below Median	1.30	2.90	38.50	38.11	36.25	33.57
CB-38	New Garden	8.72	Warning	1.25	5.22	11.54	8.60	7.70	6.03
89	E. Whiteland	139.77	N/A	1.26	2.39	Drought-trigger levels not determined			
210	Tredyffrin	21.65	Watch	1.03	4.47	23.10	22.17	20.01	18.84
254	E. Nottingham	20.71	Above Median	0.45	-1.24	26.43	25.30	24.04	21.00
1201	W. Sadsbury	5.54	Watch	0.40	1.62	6.35	5.83	5.35	4.72
CB-1229	Upper Uwchlan	37.05	Watch	1.15	5.77	40.29	38.64	36.23	34.33
CB-1247	W. Vincent	29.31	Watch	0.74	3.24	32.60	31.15	28.80	27.77
1387	Thornbury	33.38	Below Median	1.05	3.29	36.37	35.07	33.94	32.29
1571	E. Vincent	7.46 **	Emergency	0.91	2.08	7.01	6.64	6.06	5.77
1921	New Garden	39.65	Above Median	0.69	-1.03	47.29	46.73	44.11	42.11
2273	W. Brandywine	-0.76	Watch	0.27	0.29	2.37	1.05	-0.91	-2.02
2313	E. Whiteland	7.90	Watch	1.60	3.64	10.66	9.32	6.10	4.14
2328	E. Nantmeal	2.37	Watch	0.57	1.72	3.80	2.58	1.96	1.62
2457	E. Goshen	20.19	Emergency	1.31	6.56	19.78	19.48	18.12	16.83
2561	Charlestown	91.75	N/A	1.31	6.01	Drought-trigger levels not determined			
2584	E. Marlborough	20.29	N/A	1.17	3.99	Drought-trigger levels not determined			
2663	New Garden	10.71	Emergency	0.22	1.09	10.71	10.61	10.14	9.90
3289	Tredyffrin	21.26	Watch	0.84	8.49	22.09	21.65	20.35	18.69
5422	Londonderry	18.97	N/A	0.81	3.81	Drought-trigger levels not determined			
6513	N. Coventry	16.83	N/A	1.08	3.86	Drought-trigger levels not determined			
6516	Pennsbury	-0.02	N/A	-0.03	0.09	Drought-trigger levels not determined			
6517	W. Caln	57.20	N/A	0.31	-3.47	Drought-trigger levels not determined			
6518	Lower Oxford	22.28	N/A	0.96	3.05	Drought-trigger levels not determined			
7007	Wallace	29.27 ^N	N/A	1.23	^Z 4.46	Drought-trigger levels not determined			
7269	Newlin	9.23 ^N	N/A	1.81	1.21	Drought-trigger levels not determined			
MEAN CHANGES OF ALL WELLS				0.87	2.92				

Wells were measured on April 19 & 20, 2012

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 = 16 (13 of these are also below watch, warning or emergency levels)

Number of wells below Drought Watch Level = 13 (5 of these are also below warning or emergency levels)

Number of wells below Drought Warning Level = 5 (3 of these are also below emergency levels)

Number of wells below Drought Emergency Level = 3

18 of the 28 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 MARCH 2012**

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 2012	YTD 2011	YTD 2010	AVG.YTD
12	West Bradford Twp.	West Branch Brandywine	5/79	2.27	4.04	6.26	12.60	12.71	9.47
20	East Coventry Twp.	Schuylkill River	5/79	2.22	4.09	6.05	12.13	13.10	10.44
21	New Garden Twp.	Red Clay Creek	5/79	1.91	4.05	5.56	11.86	12.83	9.56
29	Penn Twp.	White Clay Creek	11/94	NR	4.61	ID	12.53	13.71	11.15
45	West Brandywine Twp.	West Branch Brandywine	6/79	0.84	3.59	4.90	11.53	11.22	9.26
50	West Chester Boro.	East Branch Brandywine	8/79	0.68	4.39	5.84	14.18	14.22	11.05
57	Honey Brook Twp.	East Branch Brandywine	11/81	1.33	3.50	3.71	11.21	8.23	8.29
58	Kennett Twp.	Main Stem Brandywine	1/82	2.12	4.51	6.19	ID	ID	10.84
70	East Nottingham Twp.	Octoraro Creek	1/85	1.81	3.91	4.86	10.77	10.58	9.66
76	Uwchlan Twp.	East Branch Brandywine	7/85	1.01	4.09	5.68	11.93	13.21	10.26
78	Willistown Twp.	Crum Creek	1/86	1.54	4.35	5.64	11.61	15.09	11.06
79	West Pikeland Twp.	Pickering Creek	5/89	2.02	4.25	6.90	13.02	15.70	10.61
83	London Britain Twp.	White Clay Creek	8/89	1.12	4.95	6.47	13.22	16.59	12.04
84	Westtown Twp.	Main Stem Brandywine	8/89	0.94	4.82	6.11	13.73	15.75	11.52
85	East Goshen Twp.	Ridley Creek	2/90	0.69	4.32	5.51	13.69	19.23	11.47
92	West Caln Twp.	West Branch Brandywine	4/97	1.63	3.69	6.23	12.90	ID	9.38
103	Wallace Twp.	East Branch Brandywine	1/98	0.93	3.86	6.38	13.69	14.69	10.61
104	Elverson Boro.	French Creek	9/99	2.59	4.16	6.06	13.12	11.61	9.90
105	Upper Uwchlan Twp.	East Branch Brandywine	5/05	1.97	3.33	5.52	11.72	13.16	8.76
106	East Pikeland Twp.	French Creek	10/09	1.59	ID	5.25	12.30	12.35	ID
COUNTYWIDE AVERAGE				1.54	4.13	5.74	12.51	13.55	10.28
NATIONAL WEATHER SERVICE/NATIONAL CLIMATIC DATA CENTER 30 YEAR NORMALS (1971-2000)									
Chadds Ford (Delaware County)					4.07				11.13
Coatesville 2 W					4.52				12.37
Devault 1W					3.55				10.14
Glenmoore					4.14				11.44
Honey Brook 1S					3.58				9.50
Octorara Lake					3.99				10.87
Phoenixville 1E					4.00				10.28
West Chester 1W					4.07				11.07
AVERAGE					3.99				10.85
NOAA HISTORIC AVERAGE (1931-PRESENT)					3.96				10.20
NOAA HISTORIC MONTHLY MINIMUM					0.73	YEAR	2006		
NOAA HISTORIC MONTHLY MAXIMUM					7.55	YEAR	1993		
CCWRA VOLUNTEER NETWORK HISTORIC MONTHLY MINIMUM					0.78	YEAR	2006		
CCWRA VOLUNTEER NETWORK HISTORIC MONTHLY MAXIMUM					7.52	YEAR	1993		

Date Prepared: 4/27/2012

For additional information please call the Chester County Water Resources Authority at (610) 344-5401

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 events. Thus, the data have not been scientifically or statistically validated.