

**SHELTER ISLAND WATER ADVISORY COMMITTEE –
May 13, 2025, Well Height data report DRAFT**

Summary/Conclusion - “TBD”

Discuss at next WAC meeting.

Discussion:

AQUIFER HEIGHT REPORTS

Section 1a - National Drought Monitoring:

Shelter Island has been removed from “Abnormally Dry” status to “Normal”, which means drought is not in progress or anticipated... Abnormally Dry or Moderate Drought conditions remain in effect in Nassau County, the lower Hudson Valley, northern New Jersey and Pennsylvania.

Section 1b – New York DEC Drought monitor.

The entire state is “Normal”.

Section 2 – Chart showing “ranking of monthly well heights by percentile of historic values.” *The chart is a graphic of the data for the Big Four feeder wells showing the percentile rank for the current month versus history for each month.*

The Percentile rank for the Big 4 wells remains well below median, slightly improved from last month.

Section 3 - Table of well readings compared to historic and median values.

“Well readings compared to the month’s Median for each well.”

The Big 4 wells are averaging about 10 inches below their median values, which is a minor improvement compared to the previous month.

Section 4 – Raw well height readings for the Big 4 wells

Raw well height graph is independent of the median history. It presents a direct comparison of aquifer heights. The raw values for three of the big 4 wells increased, a last-minute seasonal upcharge. The Goat Hill remained flat. The levels of all wells are close to the May well levels from May 2024.

PRECIPITATION REPORT

Rainfall for the previous 30 days

Precipitation from April 13 to May 13 was 4.55 inches, three quarters of precip fell May 5 to 13.

Note: Values are from the local “Weather Wunderground” Personal weather stations system. The table appended to this report shows the individual day precip.

<https://www.wunderground.com/dashboard/pws/KNYSHEL38> (identity of the other KNY sites are in the attached table.

Section 1a National Drought Monitoring

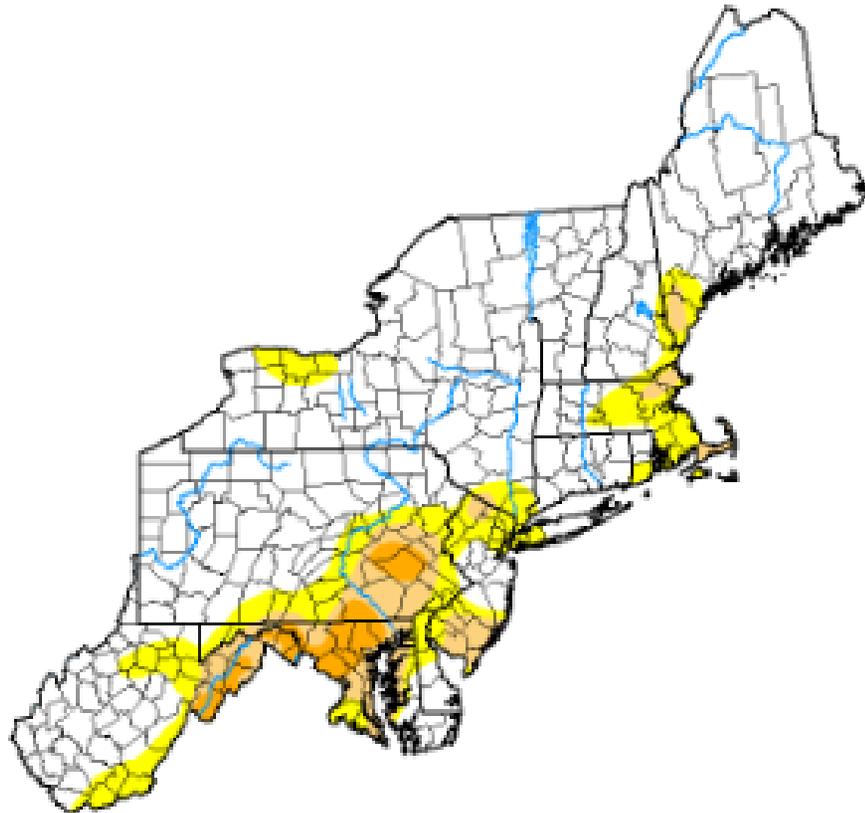
Shelter Island has been removed from the “Abnormally Dry” status to “Normal”, which means drought is not in progress or anticipated... The lower Hudson Valley, northern New Jersey and with pockets of Moderate Drought in New Jersey, Pennsylvania and Maryland.

U.S. Drought Monitor Northeast

May 13, 2025

(Released Thursday, May 15, 2025)

Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <http://droughtmonitor.unl.edu/About.aspx>

Author:

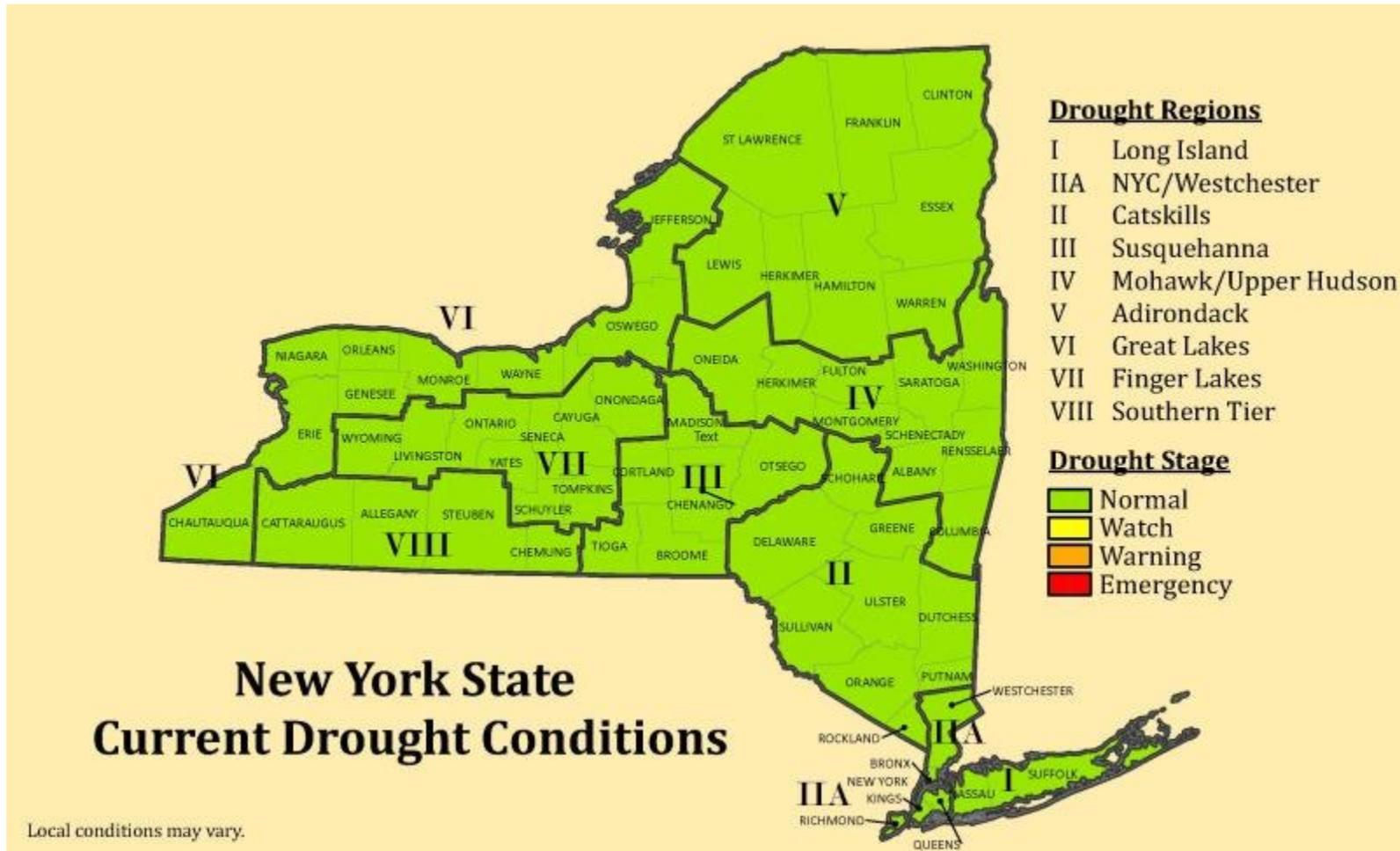
Rocky Bilotta
NCEI/NOAA



droughtmonitor.unl.edu

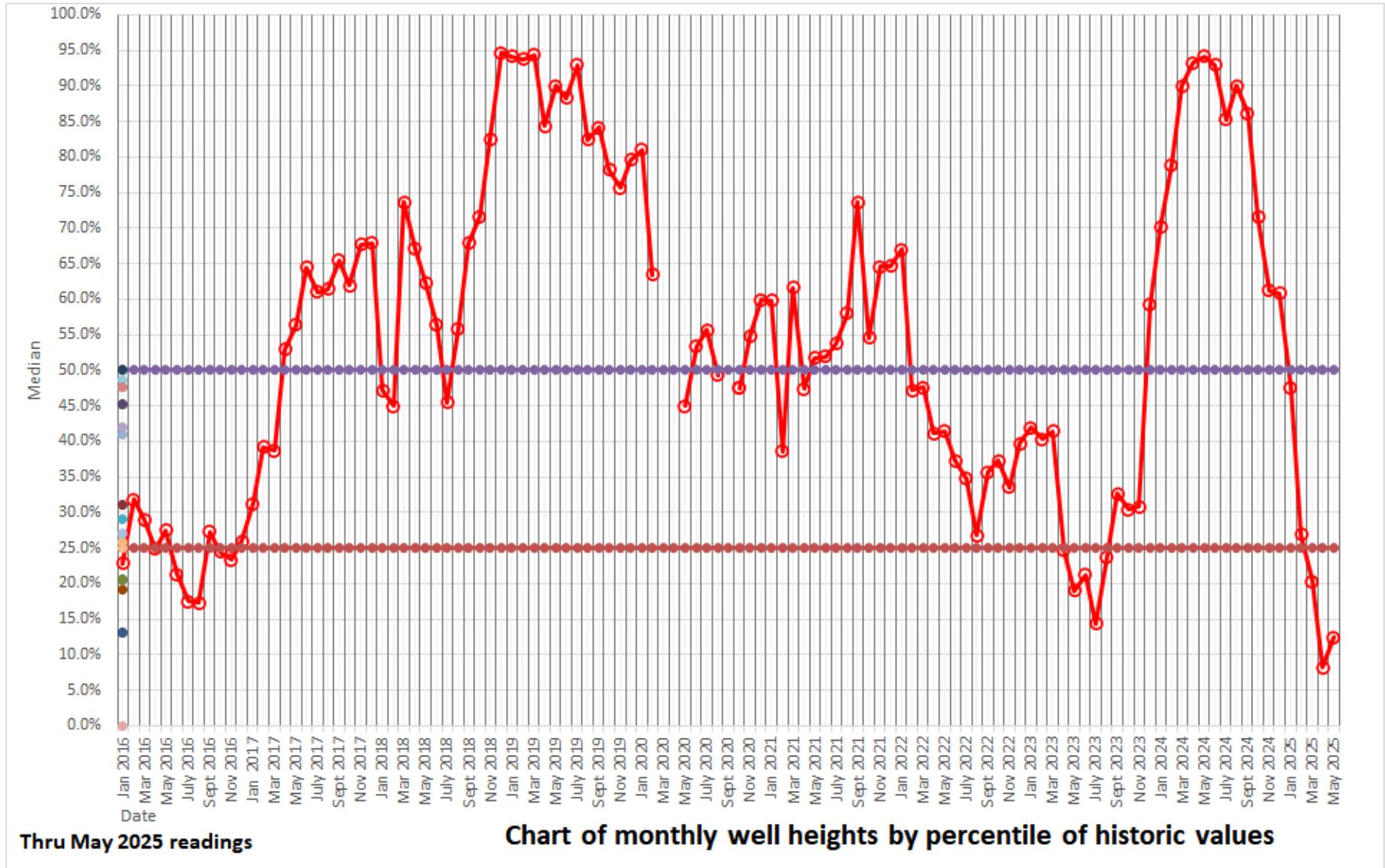
Section 1b – New York DEC Drought monitor

Since at least mid-April the New York DEC version of Drought stage remains with the entire state as “Normal”, which means drought is not in progress or anticipated. The date of issue is not known; this map was pulled from the DEC website on May 17.



Section 2. Ranking of monthly well heights by percentile of historic values.

The Percentile rank for the Big 4 wells remains well below median, slightly improved from last month.



Section 3 – Comparison showing aquifer height readings for the month compared to the median history

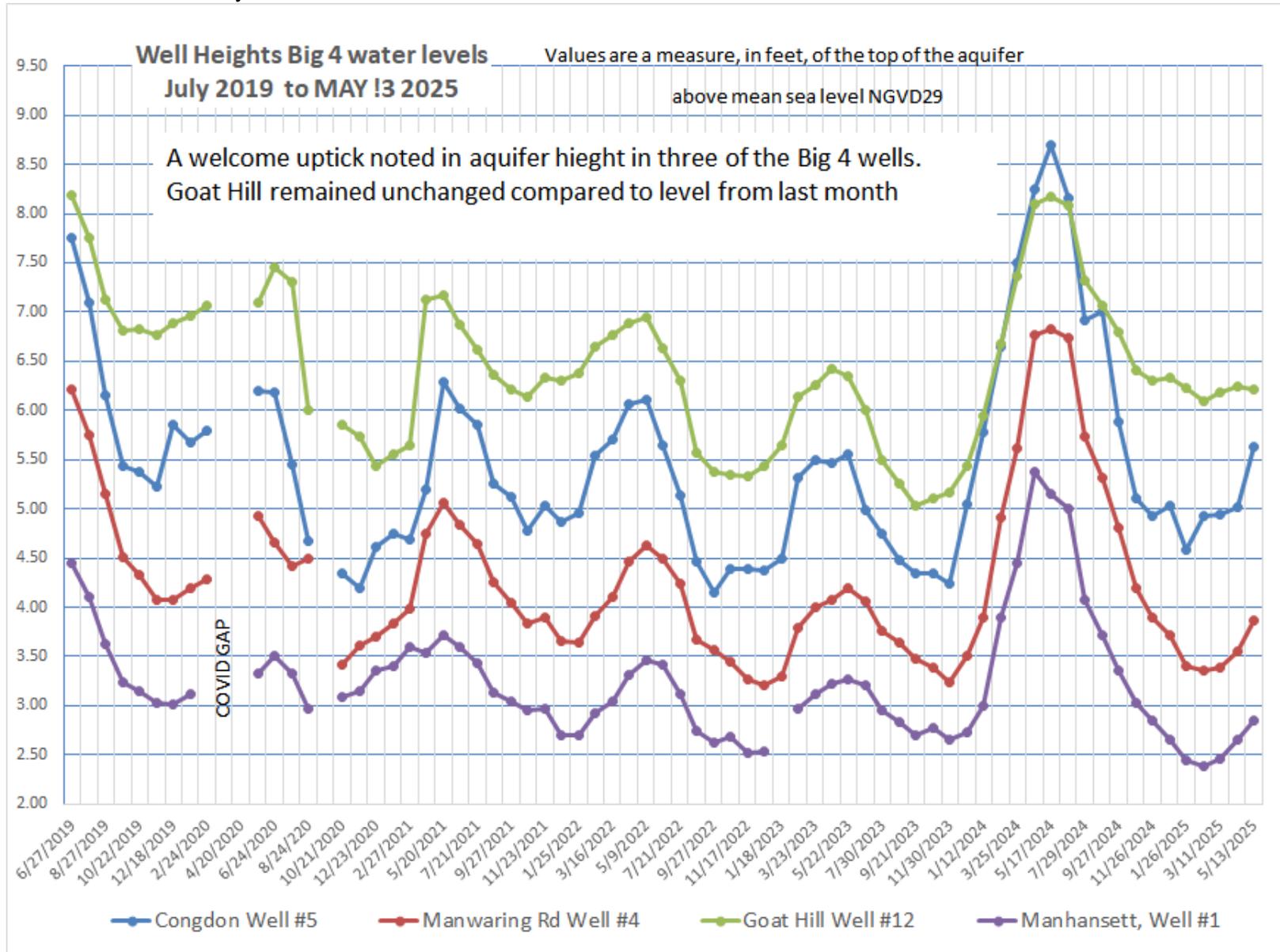
A slight improvement noted.

Well readings compared to the months Median for each well for:	Manhasset Well #1	Rocky Pt./Belvedere Well #2	Big Ram Island Well #3	Manwaring Rd Well #4	Congdon Well #5	Brander/Lilliput Well #6	Menantic Rd Well #7	Deer Park Lane Well #8	LITTLE RAM Well #9	DERING HARBOR Well #10	HAY BEACH Well #11	Goat Hill Well #12	Shorewood #13	White Birch #14 NADV 1929
May 2025	24	23	22	23	27	24	24	24	17	17	20	22	22	12
Median Value	3.77	2.22	1.60	4.93	6.24	2.20	1.85	3.83	1.45	2.00	2.59	6.95	1.77	1.68
Reading MAY 13 2025	2.85	1.97	1.68	3.87	5.63	2.55	1.59	3.82	1.50	1.98	2.34	6.21	1.76	1.84
Previous Month reading	2.66	2.05	1.92	3.55	5.01	2.15	2.12	4.44	1.87	2.09	2.25	6.24	1.74	1.95
Change from prev. month	0.19	(0.08)	(0.24)	0.32	0.62	0.40	(0.53)	(0.62)	(0.37)	(0.11)	0.09	(0.03)	0.02	(0.11)
	Big 4			Big 4	Big 4							Big 4		
					9.62									
					8.70	3.24								
	5.63	3.00	2.46	7.87	8.27	2.72	2.84	6.53						
	5.15	2.74	2.24	6.82	7.81	2.60	2.39	4.98				9.92	2.83	
current month value	4.71	2.69	2.13	6.41	7.80	2.55	2.31	4.69			3.79	8.34	2.27	
	4.68	2.57	1.90	6.37	7.36	2.55	2.27	4.64			3.61	8.17	2.16	
	4.59	2.49	1.88	6.26	7.33	2.45	2.24	4.34	2.39	2.87	3.31	7.87	2.12	
	4.46	2.38	1.87	6.02	6.81	2.45	2.19	4.32	2.25	2.5	3.08	7.83	2.00	
	3.96	2.37	1.74	5.58	6.73	2.31	2.17	4.29	1.94	2.36	2.98	7.68	1.91	
	3.95	2.33	1.71	5.29	6.67	2.29	2.14	4.19	1.84	2.29	2.85	7.18	1.90	2.10
	3.92	2.32	1.68	5.17	6.62	2.26	2.07	4.04	1.68	2.18	2.82	7.17	1.90	2.09
	3.92	2.30	1.63	5.16	6.34	2.24	2.02	4.01	1.62	2.13	2.69	7.09	1.83	1.84
	3.91	2.27	1.62	5.06	6.29	2.21	1.90	3.89	1.50	2.05	2.63	6.99	1.83	1.68
Median Value	3.83	2.22	1.57	4.93	6.24	2.18	1.87	3.83	1.45	2.00	2.60	6.95	1.77	1.68
	3.71	2.19	1.51	4.63	6.20	2.14	1.83	3.82	1.45	2.00	2.58	6.95	1.76	1.67
	3.46	2.13	1.47	4.57	6.11	2.14	1.81	3.75	1.39	1.98	2.58	6.92	1.75	1.55
	3.44	2.10	1.46	4.49	5.90	2.10	1.80	3.71	1.34	1.88	2.48	6.89	1.72	1.44
	3.38	2.06	1.44	4.32	5.68	2.10	1.77	3.68	1.25	1.86	2.46	6.76	1.64	1.36
	3.32	2.02	1.32	4.22	5.64	2.08	1.74	3.65	1.24	1.83	2.39	6.60	1.62	1.32
	3.27	1.98	1.32	4.19	5.63	2.08	1.64	3.62	1.23	1.82	2.39	6.38	1.60	
	3.24	1.97	1.29	4.10	5.61	1.96	1.59	3.54	1.04	1.76	2.34	6.35	1.47	
	3.21	1.96	1.28	4.03	5.55	1.85	1.58	3.38	0.95	1.67	2.34	6.25	1.42	
	3.08	1.91	1.12	3.87	5.55	1.83	1.51	3.37	0.90	1.65	2.34	6.21	1.39	
	3.00	1.80	1.11	3.62	5.45	1.75	1.51	3.36			2.06	5.71	1.39	
	2.85	1.52		2.76	5.40	1.65	1.47	3.27				4.95	1.33	
	2.00				5.05		1.33	2.73						
					4.34									
	Big 4			Big 4	Big 4							Big 4		
CURRENT MONTH ANALYSIS														
percentrank current read to historic range	4%	18%	62%	9%	27%	83%	22%	48%	63%	44%	5%	10%	48%	78%
Current month well reading compared to median (in feet)	(0.92)	(0.25)	0.08	(1.06)	(0.61)	0.36	(0.26)	(0.01)	0.05	(0.02)	(0.25)	(0.74)	(0.01)	0.17

Section 4 - "Raw" aquifer readings for the Big 4 wells.

Raw well height graph is independent of the median history. It presents a direct comparison of aquifer heights by month.

The raw values for three of the big 4 wells increased slightly, a last-minute seasonal upcharge. The Goat Hill remained flat. Levels are close to the May well levels from last May.



RAINFALL Measurement

site name	Shorewood	Brown Dog	Peppermill	Shelter island heights	
site #	KNYSHELT8	KNYSHELT35	KNYSHELT28	KNYSHELT38	
April 13 to May 13, 5.50 inches of precipitation					
Total	4.35	6.91	6.18	4.55	5.50
13	0.22	0.3	0.31	0.21	0.26
14					
15	0.02		0.02	0.03	
16					
17					
18					
19					
20					
21					
22	0.01		0.01	0.03	
23					
24					
25					
26	0.53	1.11	0.92	0.94	0.88
27					
28					
29					
30					
31					
1					
2	0.1		0.21	0.24	0.18
3					
4	0.03		0.05	0.06	
5	1.72	2.89	2.53	1.78	2.23
6	0.77	1.36	1.01	0.46	0.90
7		0.01	0.01		
8					
9	0.92	1.22	1.09	0.78	1.00
10	0.02	0.02	0.02	0.02	
11	0.01				
12					
13					

