

**SHELTER ISLAND WATER ADVISORY COMMITTEE –
JUNE 2024, Height data report DRAFT**

Summary/Conclusion - “Normal”

Well levels look good, but the drawdown has started The WAC recommends that Islanders should continue to follow normal *voluntary water conservation measures*.

Discussion:

Section 1A and 1B - National Drought Monitoring and Outlook Forecasting:

Shelter Island is currently not in and is not forecast to return to drought conditions.

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 Big 4 wells remain over 90th percentile – good start!

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

Table “Well readings compared to the month’s Median for each well.” Current month readings compared to the month history for each well in the month. Summer drawdown has started, although the levels are good.

Section 4 - “Comparison of the size of the change in current well readings compared to the historic Median change for that month.” *Table showing the current month’s change in well height from previous and comparison to change history.*

Summer drawdown has started, moderate drop this month.. Wells are at a good starting level

Section 5 – 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 rapid increase calmed down this month, but levels remain high. A good starting place for the summer drawdown.

Rainfall Status: Ken Reports:

Ken’s report through the end of May.

Precipitation Report – Through June 1						
Year	2024	2023	2022	2021	2020	2019
This Month	6.37	1.82	2.75	5.41	2.58	5.09
Year to date	29.7	17.00	17.46	18.70	15.81	22.31

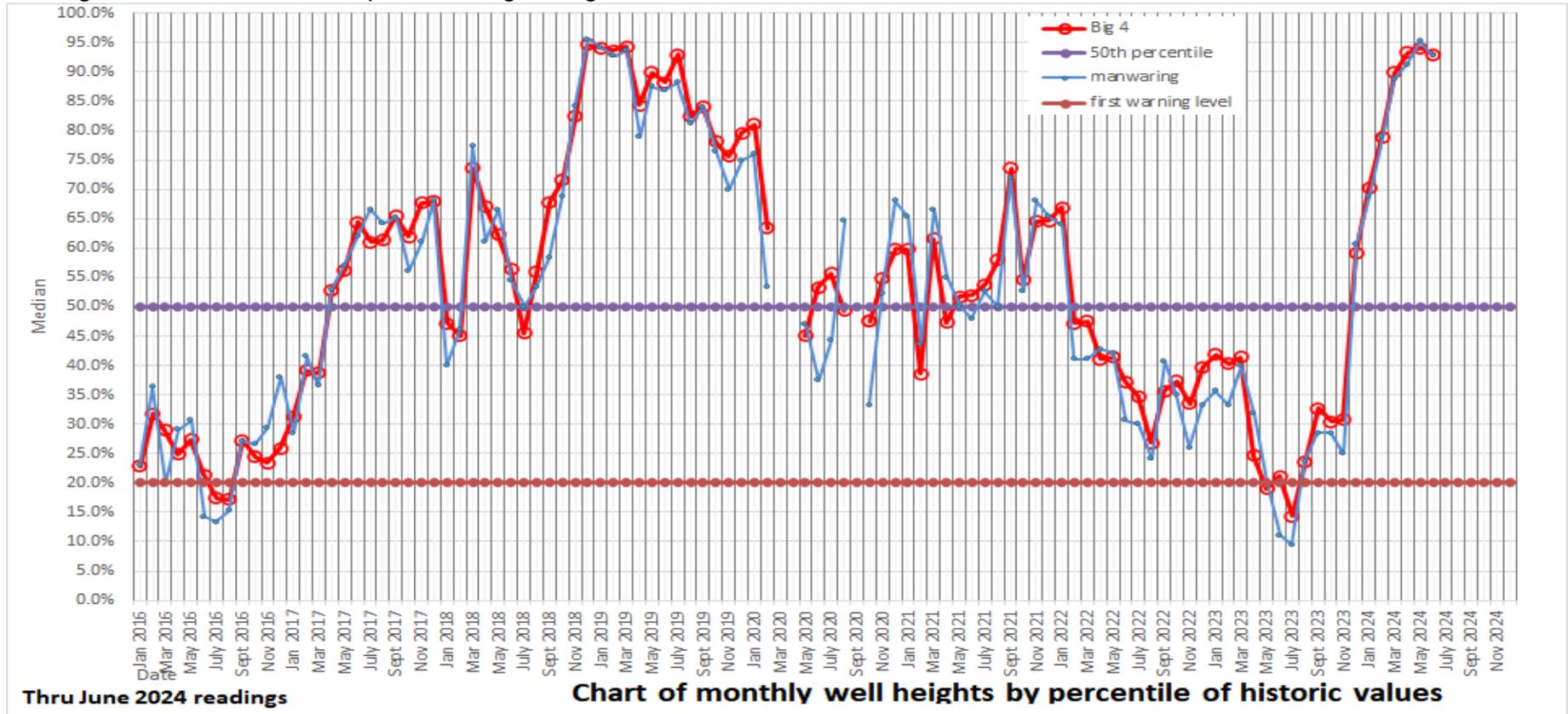
Shelter Island Water Advisory Committee issue date June 17, 2024.

Section 1 National Drought Monitoring

The regional drought monitoring and forecast for Shelter Island is we are currently not in and not forecast to return to drought conditions.

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

The Big 4 wells remain over 90th percentile – good start!



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

Summer drawdown has started, although the levels are good.

	Manhansett, Well #1	Rocky Point Ave/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 Well #13
Median Value	3.59	2.13	1.67	4.83	6.13	1.95	1.87	3.56	1.50	2.02	2.64	6.73	1.71
Reading JUNE 12 2024	5.00	2.83	1.94	6.74	8.15	2.72	2.18	4.80	1.64	2.57	3.62	8.08	2.30
Previous Month reading	5.15	3	2.46	6.82	8.7	3.24	2.84	6.53	2.39	2.87	3.79	8.17	2.83
Change from prev. month	(0.15)	(0.17)	(0.52)	(0.08)	(0.55)	(0.52)	(0.66)	(1.73)	(0.75)	(0.30)	(0.17)	(0.09)	(0.53)
	Big 4			Big 4	Big 4							Big 4	
					8.73								
					8.44								
	5.00				8.31								
	4.9				8.15								
	4.86				8.08								
	4.86				7.95								
	4.85				7.75								
	4.45	3.61		7.7	7.37	4.72							
	4.35	2.83		7.14	7.31	2.9		6.22					
	4.34	2.62		6.74	6.96	2.83		5.05					
	4.14	2.52		6.52	6.83	2.72		4.80			3.62		
	4.11	2.5		6.21	6.79	2.44	2.46	4.4			3.23		
	4.1	2.38	2.08	6.08	6.78	2.37	2.42	4.33			3.22	9.46	2.30
	3.98	2.31	2.02	5.68	6.68	2.23	2.32	4.09			2.99	8.18	2.21
	3.92	2.3	1.98	5.61	6.66	2.17	2.3	4.06		2.57	2.91	8.08	2.06
	3.9	2.29	1.96	5.58	6.62	2.08	2.18	4.05	1.91	2.4	2.87	7.56	1.95
	3.78	2.27	1.94	5.37	6.57	2.05	2.05	3.99	1.74	2.38	2.87	7.46	1.82
	3.77	2.2	1.83	5.25	6.45	2.04	2.05	3.81	1.73	2.2	2.75	7.29	1.79
	3.72	2.16	1.77	5.12	6.38	2.04	1.95	3.78	1.64	2.14	2.69	7.26	1.76
	3.68	2.14	1.74	5	6.32	2.02	1.94	3.78	1.63	2.12	2.67	6.87	1.74
	3.61	2.14	1.74	4.98	6.3	1.97	1.92	3.76	1.54	2.05	2.65	6.81	1.74
Median Value	3.59	2.13	1.67	4.83	6.13	1.95	1.87	3.56	1.5	2.02	2.64	6.73	1.71
	3.51	2.12	1.67	4.74	6.02	1.92	1.85	3.48	1.45	1.96	2.61	6.59	1.6
	3.41	2.07	1.61	4.66	5.97	1.86	1.8	3.47	1.39	1.94	2.57	6.55	1.58
	3.39	2.04	1.57	4.65	5.95	1.85	1.73	3.46	1.37	1.91	2.55	6.47	1.55
	3.33	1.95	1.54	4.49	5.81	1.83	1.72	3.45	1.32	1.87	2.55	6.42	1.52
	3.21	1.91	1.52	4.49	5.65	1.79	1.71	3.35	1.18	1.79	2.51	6.07	1.49
	3.2	1.89	1.5	4.38	5.54	1.78	1.52	3.35	1.17	1.72	2.33	6	1.47
	3.19	1.87	1.49	4.26	5.43	1.68	1.51	3.3		1.63	2.3	5.37	1.37
	3.16	1.86	1.47	4.18	5.38	1.63	1.37	3.22			2.3	5.27	1.35
	3.11	1.82	1.42	4.17	5.23	1.6	1.29	3.19			2.25	5.16	1.26
	3.1	1.77	1.4	4.16	5.13	1.59	1.16	3.1			2.23		
	3.08	1.64	1.3	4.06	5.13	1.57		3.03			2.19		
	2.92	1.61		3.63	5.02	1.45		3					
current month value	2.81	1.57		3.07	4.98	1.41		2.93					
	2.78	1.57		2.84	4.96	1.35							
	2.7				4.95								
	2.49				4.82								
	2.3				4.57								
	2.23				4.47								
	2.13				4.24								
	2.08				4.15								
	Big 4			Big 4	Big 4							Big 4	
CURRENT MONTH ANALYSIS													
percentrank current read to historic range	98%	96%	80%	93%	93%	89%	80%	92%	75%	100%	100%	89%	100%

Section 4 - "Comparison of the size of the change in current well readings compared to the historic Median change for that month."

Table showing the current month's change in well height from previous and comparison to change history.

The shallower wells had much stronger gains, while two of the big 4 wells had change below their historic medians. This may be due to the time it takes for the May 15-16 rain event to percolate down to the aquifer.

June 2024 SIZE OF CHANGE FROM PREVIOUS MONTH														
Values in Feet	Manhansett, Well #1	Rocky Point Ave/Belvedere Well #2	Big Ram Island Well #3	Manwaring Rd Well #4	Congdon Well #5	Brander/Liliput 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 Well #13	
Well #	1	2	3	4	5	6	7	8	9	10	11	12	13	
Change v previous	(0.15)	(0.17)	(0.52)	(0.08)	(0.55)	(0.52)	(0.66)	(1.73)	(0.75)	(0.30)	(0.17)	(0.09)	(0.53)	
Med Change	(0.09)	(0.09)	0.10	(0.08)	(0.20)	(0.23)	(0.02)	(0.33)	0.04	(0.02)	(0.03)	(0.20)	(0.13)	
	Big 4			Big 4	Big 4							Big 4		
	0.30					1.00		0.63						
	0.19	0.46	1.61	1.29	0.77	0.45	0.84	0.36				0.37		
Gain in well heights (good) >>>>	0.18	0.37	0.73	0.34	0.23	0.23	0.52	0.20			0.30	0.21	0.67	
	0.18	0.25	0.49	0.31	0.17	0.13	0.32	0.16			0.27	0.09	0.23	
	0.17	0.20	0.46	0.25	(0.02)	0.07	0.21	0.08	0.68	0.53	0.25	(0.09)	0.15	
	0.12	0.09	0.45	0.20	(0.05)	0.01	0.18	(0.05)	0.47	0.52	0.24	(0.11)	0.10	
	0.09	0.08	0.41	0.14	(0.05)	(0.16)	0.16	(0.19)	0.46	0.11	0.18	(0.12)	0.08	
	0.08	0.07	0.19	0.09	(0.05)	(0.16)	0.10	(0.23)	0.30	0.09	0.12	(0.16)	(0.02)	
	0.03	(0.03)	0.18	0.06	(0.11)	(0.18)	0.05	(0.24)	0.27	0.08	0.07	(0.18)	(0.06)	
	(0.02)	(0.03)	0.18	0.01	(0.13)	(0.19)	0.04	(0.26)	0.07	0.02	0.02	(0.18)	(0.07)	
	(0.05)	(0.05)	0.16	0.00	(0.14)	(0.22)	0.04	(0.29)	0.05	0.01	0.02	(0.18)	(0.09)	
	MEDIAN	(0.06)	(0.07)	0.12	(0.08)	(0.17)	(0.23)	0.00	(0.33)	0.04	(0.02)	(0.03)	(0.21)	(0.13)
	(0.12)	(0.11)	0.08	(0.13)	(0.22)	(0.27)	(0.04)	(0.33)	(0.10)	(0.04)	(0.08)	(0.26)	(0.13)	
	(0.14)	(0.13)	0.08	(0.14)	(0.23)	(0.28)	(0.09)	(0.34)	(0.14)	(0.06)	(0.11)	(0.30)	(0.14)	
<<<< Loss in well height (bad)	(0.15)	(0.17)	0.05	(0.16)	(0.27)	(0.31)	(0.10)	(0.35)	(0.21)	(0.09)	(0.13)	(0.34)	(0.16)	
	(0.22)	(0.18)	(0.04)	(0.23)	(0.43)	(0.35)	(0.12)	(0.35)	(0.22)	(0.12)	(0.15)	(0.35)	(0.17)	
	(0.23)	(0.19)	(0.07)	(0.28)	(0.46)	(0.37)	(0.15)	(0.36)	(0.50)	(0.24)	(0.15)	(0.36)	(0.23)	
	(0.24)	(0.22)	(0.17)	(0.29)	(0.55)	(0.40)	(0.15)	(0.38)	(0.75)	(0.30)	(0.17)	(0.46)	(0.24)	
	(0.26)	(0.24)	(0.32)	(0.31)	(0.57)	(0.41)	(0.29)	(0.41)	(0.80)	(0.34)	(0.17)	(0.54)	(0.28)	
	(0.30)	(0.30)	(0.38)	(0.41)	(0.71)	(0.45)	(0.48)	(0.45)			(0.23)	(0.61)	(0.41)	
	(0.35)	(0.34)	(0.41)	(0.58)	(0.85)	(0.47)	(0.61)	(0.53)			(0.39)	(1.91)	(0.42)	
	(0.45)	(0.36)	(0.50)	(0.73)	(0.89)	(0.49)	(0.66)	(0.65)					(0.48)	
	(0.78)	(0.38)	(0.52)		(1.43)	(0.52)	(0.94)	(1.73)						(0.53)
	(1.11)													
			Big 4	Big 4								Big 4		

The blue shaded boxes are the changes in well height from the PREVIOUS to THIS month. Higher (positive) values reflect a GAIN in well height level

Section 5 - "Raw" aquifer readings for the Big 4 wells.

Summer drawdown has started, moderate drop this month.. Wells are at a good starting level

